

“Marine Biodiversity and Support of Coastal Fisheries in the Coral Triangle” Project

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

February 2021



Funded by
the European Union



Wildlife
Conservation
Society

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Acronyms and Abbreviations

AMAN	<i>Aliansi Masyarakat Adat Nusantara</i> (<i>national NGO</i> (The Alliance of Indigenous Peoples of the Archipelago) (Indonesia)
AMDAL	<i>Analisa Mengenai Dampak Lingkungan</i> (Environmental Impact Assessment) (Indonesia)
Bappenas	National Development Planning Agency (Indonesia)
Bappeda	Local Planning Agency (at Provincial level) (Indonesia)
BKSDA	<i>Balai Konservasi Sumber Daya Alam</i> (Natural Resources Conservation Agency)
BMZ	German Federal Ministry for Economic Cooperation and Development
BP	Bank Procedures
CBD	Convention on Biological Diversity
CCRF	Code of Conduct for Responsible Fisheries (CCRF)
CFA	Conservation Finance Alliance
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO ₂	Carbon dioxide
CPP	Community Participation Plan
CTI	Coral Triangle Initiative
DENR	Department of Environment and Natural Resources (Philippines)
Diklat	Education and Training Centre (Indonesia)
EIA	Environmental Impact Assessment
ECC	Environmental Clearance Certificate

EDF	Environmental Defense Fund
EEZ	Exclusive Economic Zone
EHS	Environment, Health and Safety
ESCOP	Environmental and Social Code of Practice
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
ETP	Endangered Threatened and Protected
EU	European Union
FAO	Food and Agriculture Organisation (United Nations)
FARMC	Municipal Fisheries and Aquatic Resources Management Council (Philippines)
FC	Financial Cooperation
FGD	Focus Group Discussion
FPIC	Free, Prior and Informed Consent
GIIP	Good International Industry Practice
GoI	Government of Indonesia
GRM	Grievance Redress Mechanism
IDH	Sustainable Trade Initiative
IFC	International Finance Corporation
IPLC	Indigenous peoples and local communities
IPP	Indigenous Peoples Plan

IPPF	Indigenous Peoples Planning Framework
KfW	German Development Bank
KeMenDes	Ministry for Villages (Indonesia)
LO	International Labour Organisation
LRP	Livelihood Restitution Plan
M&E	Monitoring and Evaluation
MMAF	Ministry of Marine Affairs and Fisheries (Indonesia)
MoEF	Ministry of Environment and Forestry (Indonesia)
MPA	Marine Protected Area
NGO	Non-governmental Organisation
NRM	Natural Resources Management
OP	Operational Policy (of the World Bank)
PCR	Physical Cultural Resources
PF	Process Framework
Pokmaswas	Community-based Compliance Monitoring Groups (Indonesia)
PSMA	Port State Measure Agreement, (Agreement to Prevent, Deter, and Eliminate Illegal, Unregulated, and Unreported Fishing)
RAP	Resettlement Action Plan
REDD	Reducing Emissions from Deforestation and Degradation
RFMOs	Regional Fisheries Management Organisations
SEP	Stakeholder Engagement Plan
Siswasmas	<i>Sistem Pengawasan berbasis Masyarakat</i> (Community-based Surveillance System) (Indonesia)

SPPL	<i>Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup</i> (Statement Letter of Ability in Environmental Management and Monitoring) (Indonesia)
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land
WCS	Wildlife Conservation Society
WTP	Wildlife Trade and Policy Program (Indonesia)
UKL/UPL	<i>Upaya Pengelolaan Lingkungan/Upaya Pemantauan Lingkungan</i> (Environmental Management Plan) (Indonesia)
UN	United Nations
US	United States
VAP	Village Activity Plan
VGSSF	Voluntary Guidelines for Small-scale Fisheries
VMS	Vessel monitoring systems

Executive Summary

The Wildlife Conservation Society (WCS) is implementing the project entitled “Marine Biodiversity and Support of Coastal Fisheries in the Coral Triangle” from 2020 – 2026, with funding from the European Union and supervision by the German development bank (KfW). The project will work in the Philippines and the Indonesian provinces of North Sulawesi and North Maluku, as part of a wider Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF).

The Environmental and Social Management Framework (ESMF) is intended as a reference document for all involved in implementation, those affected, or any party interested in the Project for its duration. The ESMF sets out the requirements and steps to screen, assess, manage and monitor the mitigation measures of potential environmental and social impacts of the Project, and for the handling of Project consultation processes and grievances. The objective of the ESMF is to support the assessment of risks and potential impacts resulting from the proposed Project activities by setting out the principles, guidelines, and procedures to assess, avoid, reduce, mitigate, and/or offset potential adverse environmental and social impacts and to enhance positive Project impacts and opportunities. It is prepared in parallel with an Indigenous Peoples Planning Framework (IPPF) and Process Framework (PF), to guide further planning for key areas of impact management. Periodic revision of the ESMF or other instruments may occur if there are significant changes to Project scope, to be agreed with KfW and disclosed on WCS website.

All projects supported by KfW must comply with KfW’s Sustainability Guideline (2019), which, for financial cooperation projects with public entities, World Bank’s Environmental and Social Standards (ESS) apply. The Project also follows World Bank Group General and sector-specific EHS Guidelines as well as the Human Rights Guideline of the German Federal Ministry for Economic Cooperation and Development (BMZ), the UN Basic Principles and Guidelines on Development-based Evictions and Displacements, and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT). However, as the Project is implemented in parallel to the “Marine Biodiversity and Coastal Livelihoods in Sulawesi/Coral Triangle Project” funded by the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (ICI) the Project is required to comply with International Finance Corporation (IFC) Performance Standards instead of the World Bank ESS, although on some aspects relevant requirements of the ESS are also adhered to.

Project Outcome, Design and Activities

Based on the EU Action program : to support the sustainable management of ecosystems and watersheds to improve livelihoods of local communities depending upon these environments, the expected Outcome of this Project is to: Contribute to the conservation of Coral Triangle’s biologically diverse marine ecosystems and important fisheries through the creation and improvement of selected marine protected areas (MPAs) and MPA networks, improved management of some commercially and ecologically

important (particularly small-scale fisheries), improved management linked to selected terrestrial ecosystems, underpinned by sustainable finance models.

The Project will have activities in the provinces of North Maluku (Indonesia), North Sulawesi (Indonesia, Philippines, with lessons shared throughout the Coral Triangle. The Project design consists of four Outputs and relevant Work Packages under each that will contribute to improve fisheries management, the establishment and expansion of MPAs, and national and provincial policies that are influenced by applied science and monitoring:

Output 1: Improve management of selected coastal fisheries and MPAs in the Indonesian province of North Maluku

- Work Package A: Establish new fisheries management systems in North Maluku
- Work Package B: Improve and expand new MPA networks in North Maluku

Output 2: Improved management of selected MPAs in the Indonesian province of North Sulawesi

- Work Package C: Improve existing MPA networks in North Sulawesi province

Output 3: Improved management of selected coastal fisheries and MPAs in the Philippines¹

- Work Package D: Scoping of Philippines MPA and coastal fisheries
- Work Package E: Improve management of selected Philippines MPAs and MPA networks
- Work Package F: Establish new fisheries management systems in selected Philippines coastal fisheries

Output 4: Enhanced capacity for marine ecosystem management throughout the Coral Triangle Initiative

- Work Package G: Build regional capacity for climate-smart fisheries management
- Work Package H: Build regional capacity for combating IUU and marine wildlife trade
- Work Package I: Support sustainable financing in the Coral Triangle
- Work Package J: Support development of integrated ecosystem management approach ('Ridge to Reef') in Coral Triangle

WCS is the responsible implementing party for all outputs and packages, whereas direct target groups include local fishing actors (individuals, cooperatives and community compliance monitoring groups

¹ Note, the wording of Work Packages E and F may change slightly as the specific project activities in the Philippines are being designed in Year 1.

(Pokmaswas) at village and sub/district level, and in some cases, companies active at district or provincial level), as well as the local and national level fisheries agencies and government apparatus related to coastal management, and fisheries. In the case of North Sulawesi, the Project will also work with national parks authorities on the mainland area around Bogano Nani, where a wildlife refuge corridor has been established, and a 'Reef to Ridge' concept is being introduced, to integrate marine conservation with the terrestrial zones already being protected.

Project results will be measured through the following main Outcome Indicators:

1. Implementation of the conservation of Coral Triangle's biologically diverse marine ecosystems and important fisheries
2. Improved selected marine protected areas (MPAs) and MPA networks;
3. Improved management of some commercially and ecologically important, particularly small-scale fisheries
4. Improved management linked to selected terrestrial ecosystems, underpinned by sustainable finance models.

Location

The activities will take place in Indonesia and the Philippines, with 24 intervention villages identified in Indonesia as priority for intense engagement and livelihoods mitigation (for details see Table 1 and Figure 1). In both countries, the areas impacted by MPA and fisheries management changes are vast however direct intervention in the scale of total impacted area is beyond the capacity of Project resources. For this reason, intervention villages are selected to help delimit certain project activities to the areas where impacts are most likely significant. For the Philippines, initial assessments through scoping studies and collaborative project design will determine project sites and priority activities during Year 1 of the project.

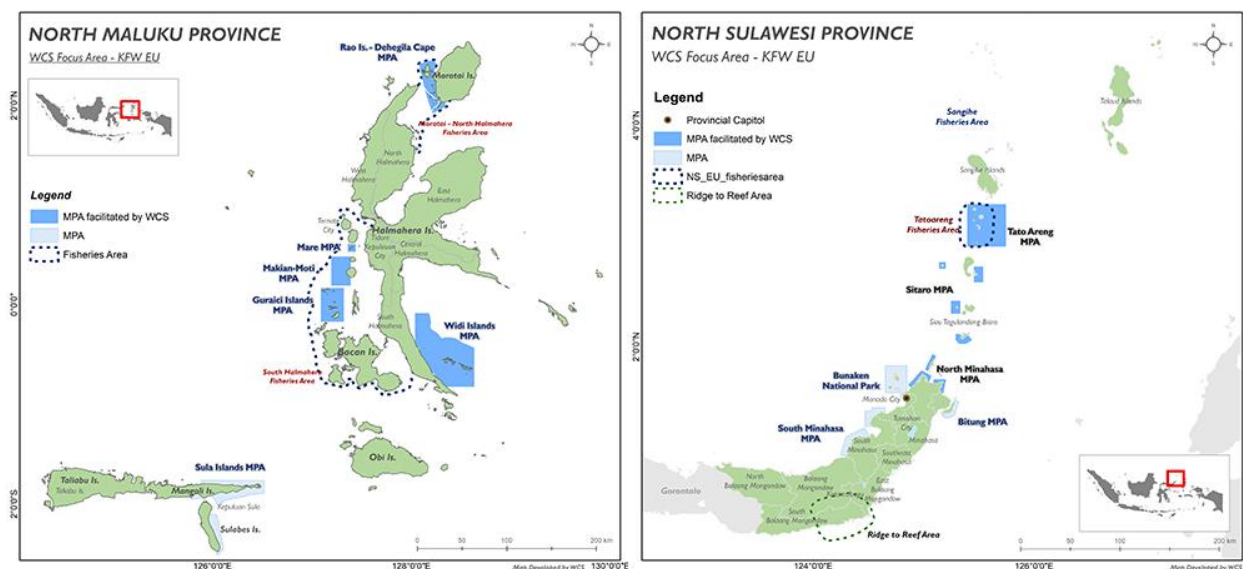


Figure 1. Map Showing Location of Project Sites in Indonesia

Table 1. List of Intervention Villages in Indonesia

Province	District	Sub-district	Village Name
North Maluku	South Halmahera	Kayoa	Talimau
North Maluku	South Halmahera	Kayoa	Gunange
North Maluku	South Halmahera	Kayoa	Siko
North Maluku	South Halmahera	Kayoa	Lelei
North Maluku	Morotai Island	Morotai Selatan	Galo-galo
North Maluku	Morotai Island	Morotai Selatan	Kolorai
North Maluku	Morotai Island	Morotai Selatan Barat	Wayabula
North Maluku	Morotai Island	Morotai Selatan	Juanga
North Maluku	Tidore Islands	Tidore Selatan	Marekofo
North Maluku	Tidore Islands	Tidore Selatan	Maregam
North Maluku	Tidore Islands	Tidore Timur	Dowora
North Maluku	South Halmahera	Makian Barat	Sebelei
North Maluku	Ternate	Moti	Tafamutu
North Maluku	South Halmahera	Batang Lomang	Bajo Sangkuang
North Maluku	Morotai Island	Pulau Rao	Posi-posi Rao
North Maluku	South Halmahera	Gane Timur Selatan	Gane Luar
North Maluku	South Halmahera	Gane Timur Selatan	Ranga-ranga
North Maluku	North Halmahera	Kayoa Selatan	Laluin
North Maluku	North Halmahera	Tobelo Utara	Tolonuo
North Maluku	North Halmahera	Tobelo	Tagalaya
North Sulawesi	BMS*	Pinolosian Tengah	Deaga
North Sulawesi	BMS	Pinolosian Tengah	Adow
North Sulawesi	BMS	Pinolosian Tengah	Torosik
North Sulawesi	BMS	Pinolosian Tengah	Mataindo

*BMS - Bolaang Mongondow Selatan (South Bolaang Mongodow)

To implement the Project, WCS will engage directly with the Ministry of Environment and Forestry (MoEF), Ministry of Marine Affairs and Fisheries, provincial-level government and its agencies. In Indonesia, the Ministry of Environment and Forestry is key partner. At local level, in addition to the provincial-level government and its agencies, particularly Nature Conservation Agency (BKSDA), Marine and Fisheries Agencies (DKP), local community-led compliance monitoring groups are also key partners. In the Philippines, the key partners within local government are the Department of Environment and Natural Resources (DENR) and the Bureau of Fisheries and Aquatic Resources (BFAR). In both countries, the project will develop community agreements at appropriate scales to ensure that project-related commitments from government, communities and project partners are clear. Particular attention will be

paid to ensure that women have equitable access to the economic opportunities presented by fisheries; where necessary, livelihoods support strategies and grants will be used strategically to ensure this.

WCS has been working in Indonesia's marine-scape since 2002 and has been engaged in the two target provinces for varying amounts of time. The project supplements the current project "Marine Biodiversity and Coastal Livelihoods in Sulawesi/ Coral Triangle" funded by the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI). Both projects pursue the same goals and are implemented by the same executing agency, the WCS. Lessons learned from the program will inform our strategies in North Maluku and North Sulawesi, and will be amplified regionally through the CTI-CFF platform.

The project will work directly in 20 villages in North Maluku and 4 villages in North Sulawesi, as well as with representatives and organisations present in over 300 villages across 5 regencies, and in as yet undefined villages in the Philippines. In Indonesia, the site selection was carried out using several criteria such as village location relative to the MPA or fisheries area, village dependence on fisheries, village development index, presence of illegal fishing activity, potential for diversification of livelihoods, presence of outside investment (private and government), existence of Village-Owned Enterprises, and the existence of community groups willing to engage in mitigation activities.

The preliminary activities (to December 2020) for Philippines entail scoping project sites and selection of the intervention area. WCS has developed baseline data for most of the Indonesian sites (based on studies between 2017 and 2019) and will conduct further targeted socio-economic baseline surveys in the remaining Indonesian villages in 2020 and at the Philippines sites once selected (early 2021). These data collection and consultation processes undertaken to date inform the definition of sub-Project activities, including confirming target groups, highlighting vulnerabilities refining options for interventions, and providing further data to support implementation and monitoring. Narrative village profiles have also been developed by WCS field teams, and fuller data sets on the intervention villages will be developed as part of the detailed livelihoods activity planning activities as a participatory process, and to inform the site-specific impact assessments and Environmental and Social Management Plans (ESMPs) or Village Activity Plans (VAPs).

Project Intervention Villages and Baseline

The site selection, and in particular ensuring that potentially impacted groups are targeted for Project interventions and monitoring are critical parts of the ESMF as they define the baseline data needed, help specify types of impacts anticipated, and help to focus the monitoring framework. The baseline data in this ESMF Section 3 describes the implementation regions at a level suitable for the framework, an overview of the specific village baselines where available, and a description of baseline data collection processes and tools is provided. Environmental data collection has been underway in some locations since 2017 and some social assessment activities have been carried out at various project locations as part of the preparation of the project, or in relation to previous WCS activities in the same areas. The project area baseline draws on secondary data whereas the village baseline profiles have been prepared by site teams

using secondary data, primary data and their first hand knowledge of the areas, where applicable. The selection of intervention villages was carried out using the parameters of determining the intervention village using several criteria such as village location, village dependence on fisheries, village index, illegal activity, potential for diversification of livelihoods, presence of outside investment (private and government), existence of Village-Owned Enterprises, and the existence of community groups willing to engage in mitigation activities. Within villages, locations for sub-project activities intended to support livelihood diversification are identified through consultation and use of screening tools, to avoid areas where there may be land disputes, conflict or other characteristics encompassed in a 'negative list'.

The process for selecting intervention villages is broadly described as:

- In North Maluku, target villages for intensive facilitation and support had been selected in 2019, based on: areas of impact given the scope of project activities; baseline profile and representativeness of the wider areas that will be impacted; a village's previous participation in WCS activities (18 out of 20 have had previous interventions); and probability of project activities being accepted. Additionally, the Project will support fisheries management by communities which will have an impact on approximately 220 villages in 5 districts (Ternate, Tidore Kepulauan, Halmahera Tengah, South Halmahera, Pulau Morotai). Overall, these five districts support a human population of 179,410 people, of which around 10% are fishers.
- In Sulawesi, there are 4 sites that have been selected based on their location and profile as within the wildlife refuge corridor and having fishing activities as part of the community livelihoods, which may be affected by the Reef to Ridge conservation approach being proposed; and
- In the Philippines, the process of overall site selection is based on desktop analysis, key informant recommendations and considerations of biodiversity, inclusion among national and regional (i.e., Coral Triangle) site prioritisation analyses, NGO and partnership engagement potential and local political dynamics as threat or opportunity. The specific provinces and villages for project implementation will be identified through consultative project design processes in Year 1.

In both countries however, a direct intervention in the scale of total impacted area is beyond the capacity of Project resources and thus the Project is required to delimit the areas where impacts are most likely significant, to prioritize and focus on:

- The population centres and residential areas (village and coastal/islands) surrounding the MPAs (existing or planned);
- The locations where the users of the fishing grounds reside (North Maluku, Philippines, Sulut/BN);
- The four intervention villages in or adjacent to the wildlife corridor (*kawasan pengungsian satwa*) within Bogonai Nani protected (terrestrial) area and near the proposed MPA/area for improved coastal management; and
- HCV landscape area, within the regency-wide approach.

Impacts and Mitigation

Screening of Project activities against the IFC Performance Standards and World Bank ESS Framework shows 9 policies as applicable or triggered for further analysis, to be addressed in this ESMF and subsequent Project plans and safeguard instruments. Table 2 below summarises the applicability of these standards and policies for the MPA Project.

Table 2. Summary of Standards and Policies Applicable or Triggered

IFC PS/ WB Bank Policies	Applicable
Assessment and Management of Environmental and Social Risks (PS 1) / Assessment and Management of Environmental and Social Risks and Impacts (ESS 1)	yes
Labor and Working Conditions (PS 2 / ESS 2)	yes
Biodiversity Conservation and Sustainable Management of Living Natural Resources (PS 6 / ESS 6) / Natural Habitats (OP/BP 4.04) / Forests (OP/BP 4.36)	yes
Resource Efficient and Pollution Prevention (PS 3) and Management (ESS 3)	Yes
Community Health, Safety and Security (PS 4 / ESS 4)	yes
Land Acquisition and Involuntary Resettlement (PS 5 / ESS 5)	yes
Pest Management (OP 4.09)	yes
Indigenous Peoples (PS 7 / / ESS 7)	yes
Cultural Heritage (PS 8 / ESS 8)	yes
Projects in Disputed Areas (OP/BP 7.60)	no
Projects on International Waterways (OP/BP 7.50)	no

The Project has been assigned a Category B+ status per KfW Sustainability Guidelines, mostly due to the social risks potentially resulting from access restrictions, aspects of procedural and distributional justice in village-based planning, impacts on vulnerable stakeholder groups and indigenous people (IP). While the Project is designed and expected to have primarily positive impacts on the natural environment and on governance, it may potentially generate adverse environmental and social impacts, related primarily to community livelihoods, social dynamics, safety and security. Approaches to avoid these impacts and to mitigate them are built into the Project activities already, and further measures identified in this ESMF are considered feasible and likely to be effective, if given adequate effort and resources.

Some of the most significant potential negative impacts relate to potential for increased conflict and social tension as a result of Project interventions related to zoning of MPAs and restrictions on use and access to the marine and coastal natural resources. Determining MPA and zones requires, by law, consultation and agreement with users, however this is achieved to varying degrees in practice.

At the Project site level, potential impacts on local livelihoods may be either positive or negative, depending on the specific context and phase of the Project (livelihood benefits of improved fisheries management will take some time to be reflected in improved fish catches, for example). A partial loss of livelihoods and impacts on food security may occur amongst resource-dependent people as a result of

MPA establishment, enforcement and in other species-specific fishing practices in North Maluku, and possibly in North Sulawesi and the Philippines. The changes in fisheries management will also affect a wider area, spanning several regencies in North Maluku as well as more limited areas in North Sulawesi site and a still-to-be-determined extent at the Philippines site.

The Project aims at restitution of the loss local / affected peoples in the intervention villages experience through the restrictions put in place or enforced with Project support. At the wider level, the Project advocates mechanisms and strategies for livelihood diversification, but will not work directly with all affected parties, due to limited resources. The success of restitution strategies depends also on the willingness and ability of the individual to seek alternatives and implement them successfully, as well as on the Indonesian government's attention to the welfare of coastal peoples. The Project will provide adequate opportunities for individuals to address and reestablish their loss in livelihoods; the "adequacy" of these opportunities needs to be demonstrated, with appropriate planning, consultation, assessment of feasibility of proposed livelihood interventions, and monitoring. Successful examples of livelihood restitution in the intervention villages will be used to advocate, inform and inspire options for villagers and stakeholders throughout the wider project impact areas.

Although access restrictions are to be negotiated with, and agreed by, affected users, the Project will develop Livelihood Restitution Plans (LRP) as part of Village Activity Plans (VAP) for each site/village, to more specifically target economically displaced persons and ensure they are not marginalized or impoverished as a result of Project activities. A Process Framework (PF) has been developed to guide the development of the these, with eligibility criteria and processes for determining livelihood restitution activities as 'sub-projects'. A Voluntary Land Donation mechanism will be established for scenarios where sub-Project activities or their mitigation require minor land areas, foreseeably linked to livelihood restitution activities. Potentially vulnerable groups identified for particular attention include women and youth in all areas, and people socially isolated due to historical circumstances, history of conflict, or disabilities or afflictions.

The Project will probably interact with, and potentially affect, indigenous peoples in two of the three project sites, namely North Maluku and the Philippines; there are opportunities for impacts to be mitigated through targeted engagement of these communities in Project interventions. An Indigenous Peoples Planning Framework (IPPF) has also been developed to specifically address risks to IPs. This IPPF provides a framework and overview of how Free, Prior and Informed Consent (FPIC) will be approached through future consultation and Project implementation and monitoring activities. North Maluku, specifically in North Halmahera; Planned mitigations are summarized herein, and an outline of the Indigenous Peoples' Plans (IPPs) to be developed specifically for each site, or embedded within the VAPs, is provided. The Project is expected to have potentially positive impacts on revitalization of indigenous knowledge and practices, including traditional systems for managing conflict over natural resources.

Consultation and Free, Prior and Informed Consent (FPIC)

This Framework was prepared in consultation with project personnel, and with limited consultation with government fisheries and other local government staff, civil society organizations, due to Covid-19 restrictions. Online consultations with stakeholders in North Sulawesi and North Maluku were conducted on two occasions in September 2020, albeit with limited representation of Project Affected People (PAP) from each province (local community members, indigenous people's representatives) due to access/connectivity challenges. To counter this, the project personnel who have been working in the majority of areas have provided assurance through reviews of the ESMF and a plan for consultation, including FPIC processes, has been included, to be implemented once Covid-restrictions are removed. National level consultations were agreed to be postponed in Indonesia to be held in mid 2021, due to the COVID-19 pandemic and key stakeholders' familiarity with the project concept and approach, based on ESMF consultations conducted for the WCS-lead KfW BMU project in other provinces in 2019. For the Philippines, initial consultations for site selection have been documented, and additional consultation processes generally, including FPIC will need to be implemented once sites have been determined, to refine Project implementation plans, with greater clarity on which indigenous groups are impacted (if any), where and in what ways, if and how these groups consent to participate in Project activities, and to ensure that appropriate group and site-specific mitigation measures are in place. A summary of key studies involving impacted persons, and other consultations undertaken to August 2020 are included in this ESMF, and will be periodically updated in the Project's stakeholder engagement plan or log, as a living document.

Stakeholder Engagement

The Project has identified national and site-level stakeholders in categories ranging from all levels and agencies in government, to communities, NGOs, media, academia and private sector. An outline of a Stakeholder Engagement Plan (SEP), including principles and methods of engagement is included in this ESMF, for further development and periodic revision. For the Philippines, guidance in this ESMF applies for the first stage of site selection, and a site specific engagement plan will be developed once the site is known. Stakeholder identification, analysis and consultation are important sub-activities in the feasibility assessment for the Philippines component of the Project. Overall, the SEPs are to ensure appropriate consultation and involvement of key parties in identifying potential impacts and mitigation options, and in agreeing and using the grievance redress mechanism. A Process Framework has been prepared to guide engagement, planning and implementation of activities in response to access restrictions and economic or physical displacement impacts, and an Indigenous Peoples Planning Framework has been prepared to guide engagement with IPs specifically.

Grievance Redress Mechanisms (GRM)

The Project requires clear processes for affected parties to communicate their concerns and grievances to WCS and if necessary, to KfW. Existing and potential systems for handling grievances were included in the consultation process at local, provincial and national levels. The grievance mechanism must be culturally appropriate and accessible to all, with WCS ensuring that affected parties are informed of the mechanism. This ESMF outlines a Grievance Redress Mechanism (GRM) based on these discussions and international best practice which will allow people, communities or members of the affected vulnerable indigenous communities, and PAPs to file complaints and receive satisfactory response in a timely manner. The GRM is outlined in the ESMF and will be included the associated plans that are yet to be developed; site specific mechanisms may be developed under the ESMPs, aligned with the principles and guidance provided herein. The GRM for the Philippines site will require further consultation and may be also be modified based on this ESMF, to reflect the institutions, norms and regulations applicable once the project sites are selected.

Implementation of the ESMF

The ESMF is a living document which has been developed in tandem with the Project's detailed design, and will be implemented along with the SEP, IPPF and PF. As such, it will be iteratively and progressively updated as the work on the Project design progresses, and as the measures, delivery mechanisms, and budgets are formalized, and as contextual information evolves, for example on stakeholders' identities and interests or issues. Implementation is planned around 4 outputs and 9 work packages, some of which are province/site specific and others which are more focused on building CTI and regional capacity for sustainable and climate-smart marine management. The implementation approach is to manage and deliver the program through a fully staffed team of professionals from multiple disciplines, based mostly in the field locations and supported by WCS Indonesia head office (Bogor) and WCS SEAA Regional office (Singapore) personnel and local technical specialists engaged on a sub-contract or consultant basis. For the Philippines, WCS will establish a presence and collaborate with a local partner, currently being identified.

Capacity building is an important aspect of the ESMF implementation, to strengthen teams and local target groups and partners' shared and individual capacities as need for Project success. This includes the need to improve and strengthen the awareness, understanding and knowledge skill for communities, governments (national/sub-national), partners and internal team. A training program will be a conducted on a regular basis and includes basic skills as well as technical subjects.

Schedule of Planned Activities / Next Steps

The key implementation activities for safeguard and impact mitigation involves developing 'sub-projects' alternative livelihoods for impacted persons/householders and supplementary income for Monitoring Groups. Livelihood activities are already part of the project plan (Activity I.7, II.3 and III.3), however more specific and detailed plans developed and presented in village specific documents for North Maluku, and in a 4-village plan for North Sulawesi. For the Philippines site, the approach to developing this detail will depend on the characteristic of the site selected as a result of assessment (Activity III.1).

The process of overall project implementation is based on cycles of annual workplans (AWP) developed between the national and regional (Provincial) teams to reflect targeted activities in line with the overall Project log-frame, as well as considering local developments, achievements and lessons learned through implementation and regular monitoring, including:

- Further defining baseline and impacts on indigenous peoples in the Project areas² (Q1 2020)
- Consultations including FGDs in the intervention areas to develop sub-project concepts, including specific consultations for FPIC if necessary (Q4 2020 or Q1 2021 – depends on Covid)
- Workshops to finalise sub-projects, assess impacts and develop ESMPs (Q1-Q2 2021)
- Develop detailed plans to address IPP, ESMP and LRP requirements (based on ESMF, IPPF and PF) (Q1-Q2 2021)
- Implementing initial sub-projects (Q4 2020 onwards)
- Monitoring and developing sub-sequent sub-projects (Q1 2021, Q4 2020 – 2024)

Other important next steps in implementing the ESMF are:

- Developing Grievance Log and communicating it to key stakeholder groups (Q3 2020)
- Dissemination of ESMPs to key stakeholders (Q3 2020 and ongoing as further sub-projects / livelihoods mitigation activities are developed)
- Dissemination Develop detailed plans (VAPs) to address IPP, ESMP and LRP requirements (Q2 2021)
- Annual training plan implementation for Project personnel (annual)
- Monitoring and evaluation (annual)

² Many of the dates in the timeline are specific to the Indonesian project sites

Planning for Monitoring and Evaluation

The Project has developed a mechanism and tools for monitoring and evaluation plan of the Project implementation, outlined according to the 4 outputs and 9 work packages as shown below. The ESMF also provides a checklist of actions to be monitored to ensure the ESMF is being implemented. General social and ecological indicators in the overarching Project M&E Plan are provided, and will be developed to site and sub-project specific indicators as part of ESMP development.

CHAPTER 1. INTRODUCTION AND OBJECTIVES

The Wildlife Conservation Society (WCS) is implementing the project entitled, “Marine Biodiversity and Support of Coastal Fisheries in the Coral Triangle” from 2020 – 2026, with funding from the European Union and supervision by the German development bank (KfW). The project will work in the Philippines and the Indonesian provinces of North Sulawesi and North Maluku, as part of a wider Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF).

WCS Indonesia and WCS Singapore (Southeast Asian Archipelago Region), with German promotional bank KfW, has developed this Project concept to address issues of marine protection, including sustainable fisheries and management of marine protected areas (MPAs) in Indonesia and the Philippines, from 2020 to 2026. WCS will manage the Project and will be responsible for all deliverables and outputs. WCS is a US non-profit, tax-exempt, private organization established in 1895 that saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. WCS started marine work in Indonesia in 2002 and has expertise in marine and socioeconomic surveying, fisheries science, MPA establishment and management, and marine and fisheries policy.

The ESMF is a safeguard instrument, developed to support the assessment of risks and potential impacts resulting from the proposed Project by setting out the principles, guidelines, and procedures to assess, avoid, reduce, mitigate, and/or offset potential adverse environmental and social impacts and to enhance positive Project impacts and opportunities. The Project background, context and design are outlined here as introduction to the ESMF. A description of the guiding references and approach to the ESMF development are explained in this chapter, along with an outline of the ESMF structure and content.

While the Project is not expected to have significant adverse environmental and social impacts, it has been assigned Category B+ status following the KfW Sustainability Guideline. B+ Projects carry higher risks in individual areas than Category B Projects, which are, however, not as diverse or unprecedented as those under A. Besides potential impacts of moderate significance resulting from alternative livelihood development activities and the construction of small infrastructure, potential risks of enhanced significance could result from the demarcation and recognition of land tenure, the distribution of benefits, the sustainability and selection of livelihood measures inter-communal conflicts over benefits and access restrictions that are all related on the meaningful participation of Project affected people, in particular indigenous peoples. Therefore, category B+ has been chosen as a precautionary measure to ensure that all safeguards policies are given due attention, and to help the Project implementation team to prepare and execute the Project most diligently.

The ESMF is intended to be a tool and a reference document for all involved in implementation, those affected, or any party interested in the “Marine Biodiversity and Support of Coastal Fisheries in the Coral Triangle” (“the Project”) for its duration. Supporting documents to be consulted in conjunction with this ESMF include the village baseline profiles, Indigenous Peoples Planning Framework (Annex 1), and Process Framework (Annex 2). The ESMF is a living document and is being developed in tandem with the Project’s detailed design, and will be implemented along with the SEP, IPPF and PF. As such, it will be iteratively

and progressively updated as the work on the Project design progresses, and as their measures, delivery mechanisms, and budgets are formalized. Change management for the ESMF is described in Section 1.4.5.

1.1 Project Background and Context

The Coral Triangle encompasses the marine jurisdictions of Indonesia, Malaysia, Philippines, Papua New Guinea, Solomon Islands and Timor Leste. The region contains 76% of the world's known coral species, 37% of the world's known reef fish species, and directly supports a human population of 130 million people living in coastal communities. Studies have shown that 90% of the region's resources are today threatened by over-fishing and unsustainable fishing practices, land-based impacts and climate change.

Within the Coral Triangle, 18% of the world's coral area is found within Indonesian territory, and more different kinds of fish, corals, seagrasses, and mangroves can collectively be found there than in any other country on Earth. Indonesia is the second largest producer of fish in the world. About 2.6 million Indonesians directly rely on marine resources for their livelihoods and tens of millions of Indonesians rely on fish as their primary source of protein. Of the more than 6 million tonnes of fish caught each year in Indonesia, about 75% is consumed domestically.

Throughout the Coral Triangle, domestic food security remains threatened by illegal, unregulated, and unreported (IUU) fishing. Indonesia is committed to stopping illegal fishing in its territorial waters, especially by unlicensed foreign fishing vessels. It remains committed to site-based conservation with over 17.3 million hectares of ocean territory currently under some type of protected status in Indonesia. The Government of Indonesia (GoI) is working to increase that number to 20 million by 2020 (and extending that to 30 million by 2030) and ensuring that 60% of the country's Marine Protected Areas (MPAs) are operating under "acceptable" levels of management as measured by Ministry of Marine Affairs and Fisheries (MMAF) own guidelines and standards for MPA management effectiveness. Being a volcanic island chain, Indonesia's steep and rugged topography gives rise to hundreds of watershed forests that start in the highlands and connect to coastal areas, including peat swamp and mangrove forests at sea level. However, these forests are under pressure for space and their timber, which has led to rapid clearance, degradation and the loss of irreplaceable ecosystem services. Impacts deriving from these coastal forests become primary stressors to the health of marine ecosystems once they reach marine ecosystems; nutrient runoff, pollution and sedimentation all threaten viability of nearshore marine ecosystems (particularly coral reefs), and are likely to reduce resilience to climate impacts (such as temperature increases and rising ocean acidity) and fishing pressures.

The Philippines is another of the world's megadiverse countries, with high species endemism. But the illegal trade of biodiversity, and IUU fishing are widespread. Poor natural resource governance gives way to threatened livelihoods and human well-being. Coastal communities are relatively poor, exacerbated by declining coastal resources. Improving the management of coastal resources, including those within MPAs, is therefore critical for effective conservation of the Philippines' unique biodiversity, and for human wellbeing. At present, the Philippines has protected over 3.4 million hectares of its marine estate as MPAs, with over 1,800 locally managed and 73 nationally managed MPAs documented (*source: Dr. Hazel Arceo,*

University of Philippines, CCEF Virtual MPA Conference, 9 September 2020). Although they are often designated 'no-take' zones, the numerous locally managed reserves are often small, with variable management effectiveness. There is great interest in the Philippines now to develop networks among these small sites in order to increase their overall effectiveness. For instance, in 2018, six municipalities in Palawan province committed to the creation of networked MPAs totalling more than one million hectares. To identify the project's priority sites in the Philippines, the Project will assess the current extent, performance and needs of MPAs in the provinces of the Sulu-Sulawesi Seascape, among other site suitability criteria.

The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) is a multilateral partnership formed between the Philippines, Malaysia, Timor Leste, the Solomon Islands, Papua New Guinea and Indonesia to respond to these growing threats. The CTI-CFF's regional plan of action (RPOA) is designed around goals of effectively managed seascapes, ecosystem approaches to fisheries management, marine protected areas, climate change adaptation and resilience, and improving the status of threatened species. The Wildlife Conservation Society (WCS), as the Project Executing Agency (PEA), supports the CTI-CFF as a Strategic Partner, and is actively engaged in the design of the new RPOA 2.0 (2020 – 2025).

For conservation efforts across the Coral Triangle region to succeed, there is a need to further develop support from and active participation by local people. Effective development pathways are needed that are consistent with sustainable fisheries management to encourage widespread local behavioural change away from destructive and/or illegal fishing practices, as well as legal and illegal international marine wildlife trade. Ideally, fisheries development and management reforms will go hand-in-hand; where market forces can be used to reinforce the sustainability aspects of new management regimes, fisheries will have the best chance of achieving profitability and sustainability. In areas where people are fully dependent upon natural resource extraction for their livelihoods and food security, voluntary compliance with management is only achievable if people have viable economic opportunities that can divert pressure from increasingly scarce coastal and marine resources, as well as adequate and reliable sources of nutritious food. Crucial to this will be the creation of effective resource management systems that incorporate strong social and economic goals – such as the economic empowerment of women and recognition of the critical importance of coastal resources to the health and well-being of local communities.

New economic opportunities in areas such as ecotourism and marine aquaculture have grown in the private sector. However, most men and women in local communities do not yet have the skills needed to take advantage of such opportunities, and continue to rely on the catch and sale of dwindling coastal resources as the basis for their livelihoods. Investment in social capital, including the better development of skills and relationships, is needed to create the enabling environment for local communities to move towards sustainable resource-based enterprises.

In addition, while substantial resources have been applied to the region, there is a significant need to learn from and develop sustainable financing tools. The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) recognises that consideration of a regional trust fund and other potential innovative and sustainable finance mechanisms may be applicable to the CTI context. There is a need to

build on experiences from elsewhere, e.g., the Caribbean Challenge Initiative, the debt for adaptation swap as well as the blended finance mechanism (Blue Bond) in the Seychelles, and 'Green Fees' that link protection with tourism like in Palau. Efforts such as this are essential to ensure the legacy of philanthropic and bilateral aid. A range of finance options will ultimately be needed throughout the CTI to support the multitude of funding and financing needs that will inevitably emerge in the quest for sustainable management.

1.2 Brief Project Description

The Project supplements the current Indonesia-based project "Marine Biodiversity and Coastal Livelihoods in Sulawesi/ Coral Triangle" funded by the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI). Both projects pursue the same goals and are implemented by the same executing agency, WCS. Lessons learned from the program will inform Project implementation strategies in North Maluku, North Sulawesi, and eventually, the Philippines, will be amplified regionally through the CTI-CFF platform.

Based on the EU action program to support the sustainable management of ecosystems and watersheds to improve livelihoods of local communities depending upon these environments, the expected outcome of this Project is: to contribute to the conservation of Coral Triangle's biologically diverse marine ecosystems and important fisheries through the creation and improvement of selected marine protected areas (MPAs) and MPA networks, improved management of some commercially and ecologically important (particularly small-scale fisheries), improved management linked to selected terrestrial ecosystems, underpinned by sustainable finance models.

The project will:

- Improve fisheries in North Maluku province, Indonesia, by establishing data systems, developing management regimes and plans, regulations and co-management systems, enhancing market opportunities, and building capacity for climate-smart fisheries management with a strong focus on social and economic goals alongside ecological sustainability. The project will support the establishment and then enhance the management of five MPAs in North Maluku to conserve habitat and threatened species and support sustainable livelihoods. The project will also support the management of selected fisheries and MPAs in North Maluku through the brokering of finance solutions that are cognisant of long-term ecological, social and economic goals, and that can support transitions to sustainable management.
- Support the enhancement of management systems for three MPAs in North Sulawesi to conserve habitat and threatened species and support sustainable livelihoods. It will integrate and connect management approaches around marine and terrestrial ecosystems and associated protected areas and watersheds at one northern Sulawesi Key Landscape for Conservation (KLC). Creation of fisheries harvest control system.

- Support the management of selected fisheries and MPAs in the Philippines, based on the outcome of initial assessments and scoping of potential sites in Year 1. Possible interventions may include the creation of sustainable fisheries co-management systems, and enhanced management of MPAs based on capacity support to management authorities, deployment of SMART MPA compliance monitoring information systems, creation of fisheries harvest control systems in MPAs, and support to counter illegal fishing and marine wildlife trafficking.
- Support the Coral Triangle Initiative (CTI-CFF) at regional level through the creation of new capacity building and technical partnerships focused on climate-smart fisheries management, sustainable financing of ecosystem management, the investigation of IUU fishing networks and promoting learning about integrated (land-sea) management approaches across the Coral Triangle region.

The project supplements the current project "Marine Biodiversity and Coastal Livelihoods in Sulawesi/ Coral Triangle" funded by the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI). Both projects pursue the same goals and are implemented by the same executing agency, the Wildlife Conservation Society (WCS). Lessons learned from the program will inform our strategies in North Maluku and North Sulawesi, and will be amplified regionally through the CTI-CFF platform.

The Project design consists of three Outputs, with relevant Work Packages under each, that will contribute to improve fisheries management, the establishment and expansion of MPAs, and national and provincial policies that are influenced by applied science and monitoring:

Output 1: Improve management of selected coastal fisheries and MPAs in the Indonesian province of North Maluku

- Work Package A: Establish new fisheries management systems in North Maluku
- Work Package B: Improve and expand new MPA networks in North Maluku

Output 2: Improved management of selected MPAs in the Indonesian province of North Sulawesi

- Work Package C: Improve existing MPA networks in North Sulawesi province

Output 3: Improved management of selected coastal fisheries and MPAs in the Philippines³

- Work Package D: Scoping of Philippines MPA and coastal fisheries
- Work Package E: Improve management of selected Philippines MPAs and MPA networks
- Work Package F: Establish new fisheries management systems in selected Philippines coastal fisheries

³ Note, the wording of Work Packages E and F may change slightly as the specific project activities in the Philippines are being designed in Year 1.

Output 4: Enhanced capacity for marine ecosystem management throughout the Coral Triangle Initiative

- Work Package G: Build regional capacity for climate-smart fisheries management
- Work package H: Build regional capacity for combating IUU and marine wildlife trade
- Work package I: Support sustainable financing in the Coral Triangle
- Work package J: Support development of integrated ecosystem management approach ('Ridge to Reef') in Coral Triangle

Table 3. Project Logic and Hierarchy of Impacts

<p>A priority of both Indonesia and the Philippines under the United Nations SDGs is to reduce or eradicate poverty particularly through (1) improving the quality of human resource and (2) enhancing economic opportunities for sustainable livelihood. Particularly, the government of Indonesia believes that improving economic opportunities for sustainable livelihoods can be achieved through, among other things, achieving SDG Goal 14 – to conserve and sustainably use the oceans, seas and marine resources. This goal incorporates targets on reducing marine pollution, managing and protecting marine ecosystems, minimizing the effects of ocean acidification, regulation of fisheries harvesting and ending IUU. The project makes a relevant contribution to achieving the objectives.</p> <p>The project makes a relevant contribution to achieving the objectives agreed in the Convention on Biological Diversity (CBD) and produces a sustainable impact beyond the project area by: promoting effective marine protected areas (Aichi Target 11), the sustainable management of fisheries (Aichi Target 6), decreasing threats to coral reefs (Aichi Target 10), and by contributing to overall delivery of the CBD by mobilizing financing resources (Aichi Target 20)</p>			
<p style="text-align: center;">Outcome</p> <p>To contribute to the conservation of Coral Triangle's biologically diverse marine ecosystems and important fisheries through the creation and improvement of selected marine protected areas (MPAs) and MPA networks, improved management of some commercially and ecologically important, particularly small-scale fisheries, improved management linked to selected terrestrial ecosystems, underpinned by sustainable finance models.</p>			
<p>Output I</p> <p>Improve management of selected coastal fisheries and MPAs in the</p>	<p>Output II</p> <p>Improved management of selected MPAs in the</p>	<p>Output III</p> <p>Improved management of selected coastal</p>	<p>Output IV</p> <p>Enhanced capacity for marine ecosystem management throughout the Coral Triangle Initiative</p>

Indonesian province of North Maluku	Indonesian province of North Sulawesi	fisheries and MPAs in the Philippines	
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The project will benefit local communities throughout the project area who rely on marine resources for their livelihoods and general well-being. In addition, the CTI-CFF at the regional level, Indonesian Ministry of Marine Affairs and Fisheries, fisheries and conservation managers in North Maluku, and North Sulawesi provinces of Indonesia, managers of selected marine sites in the Philippines and the numerous local communities throughout the project area who rely on marine resources for their livelihoods and general well-being. The target groups of the project include approximately 12,300 fishers in North Maluku, who will be supported through enhanced fisheries management, and 82,300 livelihoods in North Maluku (39,800) and North Sulawesi (42,500) provinces that will be supported indirectly through enhanced management of MPAs by provincial agencies. The detailed target groups in the Philippines will be defined in the first year of the Project through a Scoping Study of the Sulu-Sulawesi Seascape which encompasses the Sulu and Sulawesi Seas and the inner Visayan, Bohol, Sibuyan, Samar and Camotes Seas. An overview of the expected impact area in Indonesia is provided in Table 4 below. Due to restrictions in project resources, direct interventions will not be in all the impacted areas but in village defined using criteria and engagement processes explained in this document (Section 4).

Table 4. Estimated Impact Area (Indonesia)

	MPA activities - Malut	MPA activities - Sulut	Fisheries activities - Malut	Fisheries activities - Sulut
Number of MPAs	5	3	-	-
Number of regencies (Kabupatens)	4	3	5	1
Number of villages	57	16	381	7
Number of population	41,341	11,581	491,039	5,426
Area (Hectares)	546,959.20	234,926.48	1,773,140.48	132,459.52
Coastline (Kilometers)	603.77	293.04	2,240.24	79.72

1.3 Project Implementation

The Wildlife Conservation Society (WCS) is responsible for implementation of this project. WCS is a US non-profit, tax-exempt, private organization established in 1895 that saves wildlife and wild places worldwide through science, conservation action and education. Headquartered in New York, WCS is active in 14 priority regions globally. WCS has strong expertise and experience in marine and socioeconomic

surveying, fisheries science, marine protected area creation and management, and marine and fisheries policy. WCS is currently also acting as the implementor for the KFW-IKI/BMU project 'Marine Biodiversity and Coastal Livelihoods in Sulawesi/Coral Triangle' and will build upon the lessons learned and strong partnerships from this project. WCS will further be responsible for managing sub-contracts with project partners including Environmental Defense Fund (EDF), Conservation Finance Alliance (CFA), Impact Investment Exchange Asia (IIX) and other local partners to be identified upon project commencement.

The WCS office for the Southeast Asian Archipelago Region, based in Singapore, is responsible for project oversight, as well as direct delivery of the Philippines and CTI-CFF components. WCS Indonesia manages all project activities in Indonesia, including national-level engagement, and delivery of field activities in North Maluku and North Sulawesi provinces. Primarily, WCS will maintain close coordination with Indonesian government partners at national level (Ministry of Environment and Forestry, and Ministry of Marine Affairs and Fisheries), provincial level DKP (across up to four target provinces), and work with relevant district and village-level offices. A comparable structure will be developed through partnerships with appropriate agencies in the Philippines once the Project begins implementation in year 2 of the project.

For the implementation of some of the working packages and activities described in Section 3, WCS will sub-contract other organisations with specific combination of expertise and experience required to add to WCS team inputs. The organisations are outlined below, with explanation of the specific work they will perform as part of this project. ESMF implementation, including organizational chart, resources, training and next steps, is discussed in Chapter 8.

The Environmental Defense Fund (EDF), headquartered in the US, and active globally, has a 50-year history, and brings a strong market-based focus to environmental challenges, along with a reputation as a global leader in fisheries co-management. Their 20-year effort to develop co-management of Gulf of Mexico Red snapper has informed and inspired many similar efforts globally in subsequent years. In the proposed project, EDF will work under Outputs I.3 and 1.4 (s. page 9) and will employ their innovative scientific and economic modelling methodology to support better fisheries management planning and investment decision-making. More specifically, EDF will develop multi-species models for small-scale reef fisheries in the Coral Triangle context; these models will draw on environmental parameters, known biological data of key species or functional groups, oceanographic information, and fisheries data including fishing mortality, length frequency and fishing effort to produce a complex picture of how fishing effort is impacting ecological condition, and how climate impacts are likely to impact production. When combined with economic information, including supply chain pricing and performance, known spoilage rates, and what is known about markets and demand for key species, EDF's models will for the first time allow fisheries managers to make truly informed decisions about exploitation regimes and post-harvest economic strategies.

The Conservation Finance Alliance (CFA) is a global alliance of conservation finance practitioners, with strong links to a dozen or more members from public, not-for-profit and private sectors. CFA was shortlisted as a potential partner based on its global expertise on conservation finance, as well as its broad reach across related sectors and actors. CFA will work with the PEA and partners under Output I.8 (s. page 9), as well as Output IV.3 and IV.4 (s. page 11) to identify and select the Coral Triangle MPA sites most ready

for finance interventions. Assessments will determine where financing and investments are most likely to yield desired outcomes, and which financing options are most feasible for those sites. When a decision is taken to develop a financing option, it will then be supported by the strengthening of MPA management systems and alignment with government funding programs.

Impact Investment Exchange Asia (IIX) is a highly innovative, award-winning investment platform based in Singapore, working with more than 1000 accredited investment partners globally. It has the unique mission of addressing inequality and sustainability challenges through the brokering of innovative impact investment partnerships. The PEA will work with IIX under Output I.5 (s. page 9) to broker new fisheries investments that can leverage market forces to support transitions to sustainable management; management that is within ecological parameters, is equitable, and in line with community goals. The investment process will be supported by investible entity identification, investment readiness preparation, impact assessment, and the structuring of an appropriate investment vehicle to be listed on IIX's exchange (to raise private capital of up to US\$ 0.5 million – 1 million). Investments will also be designed to leverage further new investment where that is deemed viable and necessary.

Intervention villages have been identified as the main locales where WCS will facilitate or implement certain activities, such as strengthening local livelihoods support strategies. These villages in Indonesia are noted below, along with their administrative areas, across which there will also be activities and influences, potentially encompassing approximately 400 villages across the 5 regencies in the 2 provinces of Indonesia (see Table 5). Additional villages in the Philippines where project activities will be implemented will be determined through the consultative project design process that will be completed by the end of Year 1.

Table 5. Intervention Villages (Indonesia)

Province	District	Sub-district	Village Name
North Maluku	South Halmahera	Kayoa	Talimau
North Maluku	South Halmahera	Kayoa	Gunange
North Maluku	South Halmahera	Kayoa	Siko
North Maluku	South Halmahera	Kayoa	Lelei
North Maluku	Morotai Island	Morotai Selatan	Galo-galo
North Maluku	Morotai Island	Morotai Selatan	Kolorai
North Maluku	Morotai Island	Morotai Selatan Barat	Wayabula
North Maluku	Morotai Island	Morotai Selatan	Juanga
North Maluku	Tidore Islands	Tidore Selatan	Marekofo
North Maluku	Tidore Islands	Tidore Selatan	Maregam
North Maluku	Tidore Islands	Tidore Timur	Dowora
North Maluku	South Halmahera	Makian Barat	Sebelei
North Maluku	Ternate	Moti	Tafamutu
North Maluku	South Halmahera	Batang Lomang	Bajo Sangkuang
North Maluku	Morotai Island	Pulau Rao	Posi-posi Rao

Province	District	Sub-district	Village Name
North Maluku	South Halmahera	Gane Timur Selatan	Gane Luar
North Maluku	South Halmahera	Gane Timur Selatan	Ranga-ranga
North Maluku	North Halmahera	Kayoa Selatan	Laluin
North Maluku	North Halmahera	Tobelo Utara	Tolonuo
North Maluku	North Halmahera	Tobelo	Tagalaya
North Sulawesi	BMS*	Pinolosian Tengah	Deaga
North Sulawesi	BMS	Pinolosian Tengah	Adow
North Sulawesi	BMS	Pinolosian Tengah	Torosik
North Sulawesi	BMS	Pinolosian Tengah	Mataindo

* Bolaang Mongondow Selatan (South Bolaang Mongodow Regency)

1.4 ESMF Scope and Approach

1.4.1 ESMF Objective

The objective of the Environmental and Social Management Framework (ESMF) is to support the assessment of risks and potential impacts resulting from the proposed Project by setting out the principles, guidelines, and procedures to assess, avoid, reduce, mitigate, and/or offset potential adverse environmental and social impacts and to enhance positive Project impacts and opportunities. It is also to provide reference and guidance for the Project management staff, consultants, government, communities, and other related stakeholders participating in Project, providing processes, principles, rules, procedures and institutional arrangements to be followed to ensure appropriate environmental and social management.

The ESMF is a living document developed in tandem with the Project's detailed design, and will be implemented along with the other safeguard instruments such as Stakeholder Engagement Plan, Indigenous Peoples Planning Framework and Process Framework. Specific objectives of the ESMF include:

- Integrating the environmental and social concerns into the identification, design and implementation of all Project interventions in order to ensure that those are environmentally sustainable and socially feasible;
- Ensuring all relevant environmental and social issues are mainstreamed into the design and implementation of the Project and also in the subsequent phases of the Project;
- Considering in an integrated manner the potential environmental and social risks, benefits and impacts of the program and identify measures to avoid, minimize and manage risks and impacts while enhancing benefits;
- Ensuring compliance with national and EU/KfW requirements, such as IFC PS and World Bank ESS; and

- Guiding development of the detailed action plans for mitigations for the later phases of the Project, as appropriate to the Project components/sub-components and agreed work packages.

The ESMF sets out the requirements and steps to screen, assess, manage and monitor the mitigation measures of potential environmental and social impacts of the Project, and for the handling of Project consultation processes and grievances. It provides an overview of the types of sub-Project activities to be assessed, the environmental and social screening process and the sub-Project-specific safeguard instruments that will be prepared once the Project locations and other details are known. Monitoring and reporting is also addressed to ensure ongoing adherence to environmental and social safeguards.

Guidance is provided to support the implementers – WCS with government and community stakeholders - to comply with the Project requirements, procedures and regulations related to environmental management, land acquisition and resettlement (as it relates to restricted access to natural resources and economic displacement), and Indigenous Peoples. The guidance provided is in accordance to prevailing GoI regulations and supplemental provisions of relevant KfW Sustainability Guideline (2019) IFC and World Bank Environmental and Social Standards (ESS), along with other good practice references.

1.4.2 ESMF Scope and Approach

The scope of the ESMF includes identification and mitigation approaches for both direct and indirect potential impacts caused by Project activities. In parallel with the ESMF, an Indigenous Peoples Planning Framework (IPPF) and Planning Framework (PF) have been prepared, to guide more specifically the planning and implementation of mitigations for impacts related to land/resource access, livelihood impacts and particular needs of indigenous peoples. The ESMF will provides information, processes and practical tools to ensure that important information is gathered and used to support the Project and ESMF objectives. This includes for baseline data and monitoring, for consultation with indigenous peoples and local communities (IPLC), for conflict prevention through training for field staff and government, and for the preparation of additional instruments required. As depicted below (Figure 2), these are a Stakeholder Engagement Plan (SEP), Environmental and Social Management Plans (ESMP) and/or Environmental and Social Codes of Practice (ESCOP), Indigenous Peoples' Plan (IPP) and Livelihood Restitution Plan (LRP). The LRP is to be an adaptation of a Resettlement Action Plan (RAP), to meet safeguard requirements related to access restrictions and economic displacement. Based on the agreement between WCS and KfW about integrating implementation planning requirements for the marine conservation project being implemented in Indonesia since 2019 (in North Sulawesi, Aceh and NTB provinces), the approach to addressing the environmental and social implementation requirements for this Project is develop a combined Village Action Plan (VAP), rather than multiple individual documents for each site. This approach will also be used for the Philippines sites once selected.

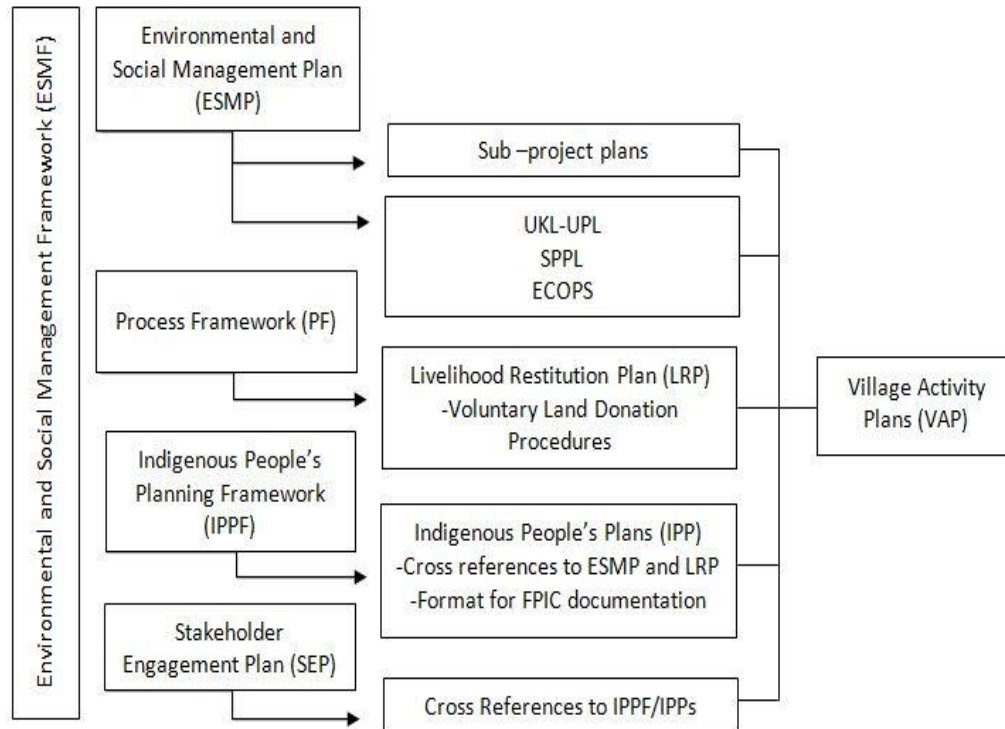


Figure 2. Schematic Overview of the Link Between Safeguard Instruments.

Steps in the process for safeguarding environmental and social impacts are outlined below, including screening sub-projects, assessing potential impacts and developing mitigation plans, with necessary consultation, documentation and monitoring.

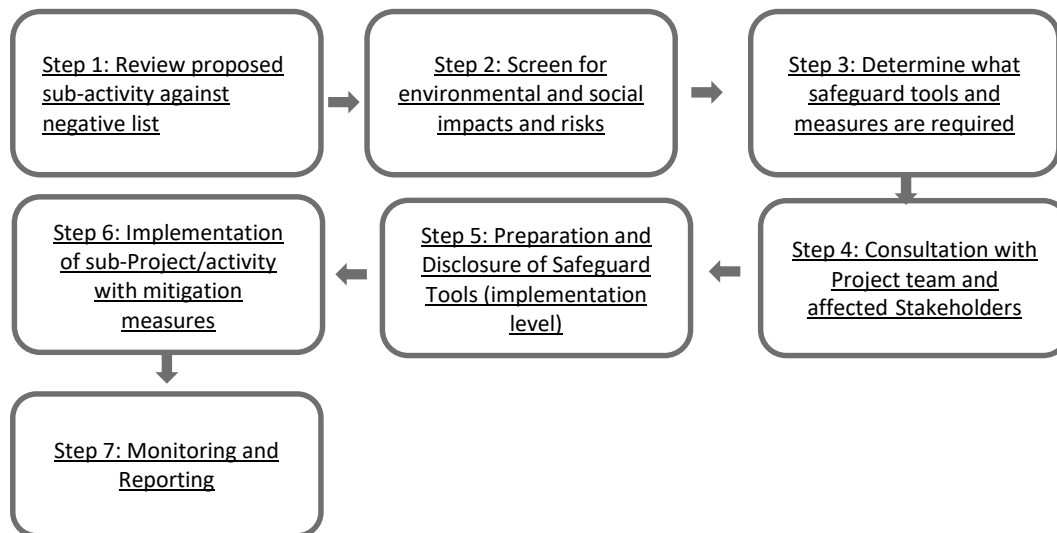


Figure 3. Impact Screening, Assessment and Mitigation Process Steps

1.4.3 Guiding Principles

This ESMF and associated documents incorporate the following principles:

- Every effort will be made to identify environmental and social risks and mitigation measures;
- All Project stakeholders will be trained to become aware of potential environmental and social risks and mitigation measures under the Project and carry out their responsibilities under this ESMF; and
- Local communities in the Project intervention areas will be engaged in all stages of the sub-Project/activity planning, implementation, management, and monitoring.

Current project activity includes policy revision or implementation guidance be developed to improve fisheries management regimes and strengthen MPA implementation in future, which is in line with current project design. However, to ensure clearer fulfillment of safeguard requirements, the WCS team's emphasis through the Project will be stronger in relation to issues of consent, gender and livelihood impacts.

1.4.4 Overview of ESMF Methodology

In developing this ESMF, WCS engaged experienced consultants to work with the project management and field teams to develop a common understanding of ESMF. Most people had been involved in previous ESMF development, which had included an inception workshop/training event in early 2019 and a training workshop for Indonesia-based staff on indigenous peoples in July 2020; therefore, for this ESMF, meetings were held with the Program Manager and research coordinators in July 2020, an online workshop with the full team was held in August 2020, followed by an internal review workshop later the same month. In the Philippines, consultation activities involved consultations with 14 separate stakeholders for scoping purposes, rather than specifically on the ESMF, yet some relevant input was obtained. In Indonesia, Public Stakeholder Consultations in each province and nationally were held online in September 2020. The consultants and WCS Project team collaborated on the following key steps to develop the content for this ESMF:

- **Document review** - the key project documents were reviewed, including design narrative and logical framework, as well as historical documents on the project areas where WCS has prior activities. This included some baseline survey reports for areas in North Maluku and Sulawesi (BN national park), as well as some preliminary materials being used to prepare the Philippines assessment (project activity for 2020). Other secondary sources were accessed for contextual data, including government policy documents and statical reports; and other donor activity reports related to marine conservation. Donor policy documents were also reviewed as part of the ESMF preparation.

- **Screening** – the initial process considered the Project design or plan and its implementation context, along with guiding policies, regulations and standards, to identify potential impacts, risks, issues, and options for mitigation approaches. A team workshop was facilitated in August 2020 to analyse the project activities and potential impacts, considering environmental, social, economic, cultural and other issues.
- **Stakeholder mapping and analysis** - conducted for the Indonesia sites by reviewing the data, arranging various categories of stakeholders by profile and interest, and assessing their power and influences in the community or a wider context, as well as their interests to issues related with the Project, other factors including the context, history and other relevant activities in an area. Analysis of the level of power, influence and interests, as well as the degree of impact on these stakeholders was used as a reference to determine engagement and mitigation strategies. Stakeholder mapping of all relevant Project stakeholders, included identification of impacted people, government agencies and other institutions such as NGOs with activities in the Project area, local media, religious and customary (adat) leaders, academics in relevant disciplines, and others by the Project teams in each of the three provinces. These individuals were invited to attend the public consultations held in each provincial capital during the field work.

Two sub-national consultation workshops for Indonesia were held in September 2020 online, with participants from government, academia and NGOs familiar with the topic and Project locations. Section 6 of this ESMF document elaborates consultation undertaken to develop this ESMF and where the input has been incorporated. Annex 4 outlines the Stakeholder Engagement Plan to be developed for this Project. An overview of stakeholders identified, engagement principles and planning steps required to develop a Stakeholder Engagement Plan has been included in the ESMF. Individual consultations were carried out in the Philippines scoping process, but ESMF consultations will be conducted when appropriate – foreseeably in Q2 of 2021.

- **Environmental and social baseline development** – based on an understanding of the Project area and activities in Indonesia, preliminary baseline data was compiled to provide a starting point upon which the impact of Project activities were predicted, assessed and monitored. The baseline data outline was included in the ESMF and data needs and tools were developed for more detail in separate documents such as the ESMPs for each site. The social baseline includes social, cultural, economic and other data on history, development and any issues that serve as relevant context to understand the Project implementation setting. The environmental baseline is determined by the scope of the Project, but sets out the general bio-physical, ecological and climatic conditions, highlighting any particular features or vulnerable areas for attention. Baseline approaches outlined in this ESMF are applicable for both Indonesia and the Philippines, although the later will be undertaken in 2021.

Impact analysis and mitigation planning – assessment of potential impacts from the Project activities considered both benefits and risks, with a level of effort to analyze and plan mitigations that are commensurate with the severity of the potential impact. Screening provided the first level of impact identification, and combined with baseline data and the Project description, analyses were carried out to further define and assess the potential impacts. Mitigation efforts in this Project are focused most on efforts required to avoid or minimize negative impacts, and opportunities to maximise

positive impacts are identified. Other mitigation efforts may include adjusting or adapting the Project sites, activities or strategies to prevent impacts, and to accommodate public input and concerns regarding potential impacts is a process to be carried out by the Project teams, and described in the ESMF. Steps have included: developing an outline of the main area of footprint or the boundary for baseline data for Indonesia, and the same process will be used for the Philippines; the identification of the Project activities which are most relevant for impact assessment, namely those with most direct potential to impact people or the environment, in both countries; and the types of impacts anticipated as a result of the initial screening, then analysed further as part of the impact assessment and outlined in the ESMF, and identification of other instruments needed. For example, as this Project is implemented in areas where there are indigenous peoples present and potentially impacted, an Indigenous Peoples Planning Framework has been developed, applicable to both Indonesia and the Philippines. Similarly, initial screening showed that resource access restrictions and economic displacement resulting from Project activities, therefore a Process Framework has been prepared to set out activities required for all affected sites.

- **Consultation and Disclosure** – due to Covid-19 conditions, there were limited opportunities to use diverse methods of consultation to access information including perspectives or opinions on the Project concept, planned activities, baseline data, issues and potential impacts and mitigation options, to correct, improve and validate the ESMF content. Information used in this ESMF relies mostly on secondary data and on the Indonesia WCS field teams’ direct knowledge of the project areas where they have worked before, or the stakeholders already known, with whom consultations have been held previously. Fourteen individual consultations were held in relation to the Philippines site selection, between May and June 2020. Online consultations were held as feasible. During the online sub-national consultations in Indonesia in September 2020, the Project description, impact analyses, mitigation approaches including for stakeholder engagement and FPIC, and grievance mechanism were all commented upon. Input from the consultants was used to inform and adapt Project activities and mitigation framework outlined in this ESMF.
- **Developing a Grievance Redress Mechanism (GRM)** – discussions of current or previous communications processes and handling of grievances were held with the Project team, to develop a formal mechanism that was conveyed to stakeholders during consultation in Indonesia. The field teams will be trained in the GRM and its use will be monitored by the Project management team and donors on a periodic basis. The GRM in the ESMF is the initial plan for the Project, and may be modified or updated over time, to ensure its effectiveness. The GRM will be assessed and adapted for the Philippines upon initiation of activities in the second year of the project.
- **Legacy issues** - Legacy issues were considered separately by the Project team later after review of the draft documents and based on discussion with KfW it was agreed that the Project, in collaboration with other actors in marine conservation in Indonesia and the Philippines, will be addressing wider legacy issues through:
 - In collaboration with the other WCS-KfW project in North Sulawesi and North Maluku, discreet investigation of the scope (nature) and scale of legacy issues, either in the project areas or more broadly; which is also part of the MPA management effectiveness tool the Project is revising,

revision of Ministerial Decree, etc. Concrete examples, case studies etc. collected are to be used to help set out the issues in a more forums for dialogue with government.

- Dialogues initiated with national governments and provincial governments about legacy issues in MPA context, for example in MPA visioning with MMAF and in the policy tools and revisions noted above;
- Supporting the organization of a seminar or conference on the topic, to bring together diverse stakeholders on MPA work to raise awareness and influence government in addressing retrospective action for legacy issues and impacts of past MPA designation and implementation, as part of forward planning in line with Project objectives; and
- Specifically, for the Philippines, sites within the Sulu-Sulawesi Seascape, where assessments are being conducted to define a project site and scope, there is a history of conflict. This is particularly the case in southern areas of the Seascape, in such as southern Mindanao, southern Palawan and the Sulu Archipelago. The conflicts, and their resolution (in part) through creation of autonomous governance structures, are context in which further analysis and documentation will be carried out, to ensure that project interventions are sensitive and responsive to that context. The project will avoid working in areas deemed too risky or unstable due to on-going conflict.
- Within villages selected for direct Project interventions, locations for sub-project activities intended to support livelihood diversification are identified through consultation and use of screening tools, to avoid areas where there may be land disputes, conflict or other characteristics encompassed in a 'negative list'.

1.4.5 ESMF Future Steps and Change Management

The ESMF will be updated on an as-needed basis, with WCS responsible for revisions, to be agreed with KfW. The triggers for updates include: a substantial change in the Project description, for example: expansion of Project area (to new locations, including the specification of sites in the Philippines); the addition of new work packages; or a change or addition of new activities which may result in significant social or environmental impacts. Additional definition or detailed approaches to the implementation of planned project activities is to be addressed through the detailed screening that is carried out for sub-projects, and documented in the ESMPs. Updated ESMF versions are to be recognized by the date on the document cover, and noted as updates in the Executive Summary and Introduction chapter. Significant revisions to the ESMF may require stakeholder consultation, to be documented in the ESMF, and public disclosure of the document on the WCS website.

1.4.6 Incorporating Lessons Learned

Lessons learned from other Project experiences have been incorporated based on a focus group discussions (FGD) with national experts in Indonesia in March 2019 for the parallel project in North Sulawesi, Aceh and NTB, and on review and evaluation of experiences in implementing the project in those locations to date. Resource materials and persons related to indigenous peoples, livelihoods and conflict have been identified and accessed as part of parallel implementation which also supports this project. For the Philippines, locale-specific lessons are to be documented as part of the site selection assessment and project design activities. Key references will be WWFs documented lessons learned from the 1999-2016 stewardship efforts and cooperative relationships of the three nations involved in the Sulu-Sulawesi Marine Ecoregion (SSME), the Ecoregion Conservation Plan, action plans for 2010-2012, and evaluations of relevant projects under the Coral Triangle Initiative. Some lessons have also been drawn from other related projects that the team/consultants are familiar with, such as the ADB funded Project 'Promoting Sustainable Community-Based Natural Resource Management and Institutional Development' and the World Bank funded 'Dedicated Grant Mechanism for Indigenous Peoples and Local Communities'.

Some general lessons from ESMF implementation from other Projects in Indonesia are summarized here, to be incorporated and guide this ESMF and its implementation:

- Timely and systematic stakeholder participation at all levels is a key instrument for ensuring Project success. This includes involving the relevant governmental agencies at all administrative levels, including village level, and communities in early stages of planning the Project activities. Moreover, appropriate approaches for customary (adat) communities, respecting social structures, language, and cultural norms need to be developed and applied.
- Trained staff with clear job descriptions and conducting environmental and social audits has given good results. Exposure visits to similar Projects in- and outside the country can greatly enhance the understanding and attitude of staff about safeguards issues. Repeated training in relevant fields is important considering staff turnover. Where staff turnover is low, and safeguards are a new addition to the work approach, repeated engagement and involvement in each stage of monitoring and reviews build capacity over time.
- A responsive and accessible Grievance Redress Mechanism should be developed at the outset of the Project which will also act as an "early warning system" and provide locally accessible mechanisms for dispute resolution. Project managers need to use the grievance logs as information for regular analysis of trends and issues, not just to confirm that responses have been timely and cases are closed.
- Regular and timely engagement of the KfW with the senior leadership of the line ministries and the Project helps to focus attention on, and compliance with, ESMFs, but equally important, with the compliance with the ESMPs and related instruments such as LRP (Livelihood Restitution Plans) and IPP (Indigenous Peoples Plan).
- Allocation of budget and resources with clear implementation and monitoring arrangements for the ESMF are essential. It is important to ensure resources from Project budgets and within government

(MMAF and related agencies at provincial level at least) have foresight to plan for participation in monitoring and reviews.

- It is important to ensure availability of ESMP (plan) documents, including all guidelines such as ESCOP, as well as IPP or LRP are in local languages at Project sites and in the affected local communities. ESMF as a higher level document is of less interest to communities than the plans which affect them more directly. Government agencies are more interested in the ESMF, as are external stakeholders.
- Provisions of safeguards instruments must be incorporated in bidding/contract documents with accompanying translation in local languages and must be reviewed with any contractors or partners by WCS management prior to start of their work.
- Contractors or partners need training in understanding and complying with provisions of safeguards instruments, i.e. ESMPs and other requirements (for example, LRP, UKL/UPL). To streamline implementation of safeguard requirements at the village / site level, integrating plans to a single document (such as a Village Action Plan), can reduce the burden on field teams and enable them to put more focus and energy in facilitating the Project activities. This builds greater trust with the affected peoples and advances the project toward achieving its objectives.

Based on the 2017 baseline survey reports done in some of the Project areas in Indonesia, through the USAID Sustainable Ecosystems Advanced (SEA) Project, there are also some recommendations that may serve as lessons for attention during Project implementation, as follows:

- To measure the impact of the project on people wellbeing, consider using other indicator of wealth other than assets ownership (material dimension). Other indicators could be used, such as expenses (material dimension), participation in decision making (relational dimension), and life satisfaction, trust (subjective dimension);
- To strengthen the financial capacity of local community in five MPAs, consider a program which target women. It is also important to understand the time perspective of the local community prior to any financial program or intervention;
- Encourage the involvement of resource users in the process of making and modifying operational rules;
- Consider gender and ethnic proportion in each program, and aim to increase women and minorities' participation as much as possible;
- Open information access to fisher and local community related to cheap energy, cold chain, fish processing, market, ETP, and sustainable fishery;
- Involve the local resource users and consider their fishing grounds when establishing the closure and/or zoning of an area;
- All MPAs have potential to be developed as tourist destination. Before developing community based tourism, consider asking local community opinion and assessing their readiness to contact with

outsiders who will bring different behavior, values, norms, habits, and beliefs which potentially conflict with their traditional behaviors, values, norms, habits and beliefs; and

- To improve future data collection, have a set of core indicators and methodology prior to the baseline study.

CHAPTER 2. LEGISLATIVE, REGULATORY AND POLICY REGIME

This chapter outlines the legislative, regulatory and policy framework guiding the social and environmental impact management approaches under this ESMF. The first part of this chapter comprises a review of the relevant international commitments, and of Indonesian and Philippines laws, regulations, and policies on (i) environmental assessments, (ii) fisheries and marine conservation, (iii) land acquisition as it relates to access restrictions and economic displacement, and (iv) indigenous peoples or *adat* (customary) communities.

The second part contains an overview of international best practices and standards guiding this ESMF and includes (i) a summary of the relevant aspects from the KfW Sustainability Guideline and—as the Sustainability Guideline largely mirrors the IFC Performance Standards and applicable World Bank’s safeguard requirements; and ii) —a review of the applicable Performance Standards. Analysis of the gaps of key topics for this Project, comparing international standards and the relevant Indonesian and Philippines regulations is included in the discussion below, with equivalence and important gaps or differences in key policy and regulations is noted where necessary.

2.1 International Commitments

Across both Indonesia and the Philippines, there are some key international initiatives and commitments, including:

- ***Sustainable Development Goals (SDGs):***

A priority of both Indonesia and the Philippines under the United Nations SDGs is to reduce or eradicate poverty particularly through (1) improving the quality of human resource and (2) enhancing economic opportunities for sustainable livelihood. Particularly, the government of Indonesia believes that improving economic opportunities for sustainable livelihoods can be achieved through, among other things, achieving SDG Goal 14 – to conserve and sustainably use the oceans, seas and marine resources. This goal incorporates targets on reducing marine pollution, managing and protecting marine ecosystems, minimizing the effects of ocean acidification, regulation of fisheries harvesting and ending IUU. The project makes a relevant contribution to achieving the objectives.

- ***Port State Measures:***

Indonesia and the Philippines are both signatories to the FAO-led Port State Measures Agreement to Prevent, Deter, and Eliminate IUU Fishing (PSMA). This project will support the PSMA through the creation of fisheries management plans and strategies, the assessment of IUU and marine wildlife trafficking in the Sulu-Sulawesi marine ecoregion, and capacity support to maritime managers in provinces in Eastern Indonesia and southern Philippines, as well as the CTI-CFF.

- ***FAO Code of Conduct for Responsible Fisheries (CCRF) and Voluntary Guidelines for Small-scale Fisheries (VGSSF):***

This project presents an opportunity to help mainstream key principles and practices contained within the CCRF and VGSSF. Management systems created with the project's support can embed key VGSSF objectives and principles in order to achieve sustainable utilization and responsible management of fisheries resources, consistent with the CCRF. Any delivery of livelihoods strategies related to fisheries supply chains will also be consistent with the VGSSF.

- ***FAO guidelines related to gender:***

This project will also utilize the FAO handbook "Towards gender-equitable small-scale fisheries governance and development. In support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication" as a resource for training and awareness raising of Project personnel and partners, particularly in relation to the engagement and participation of women in the MPA zoning processes and livelihoods activities.

- ***Convention on Biological Diversity (CBD):***

The project makes a relevant contribution to achieving the objectives agreed in the Convention on Biological Diversity (CBD) and produces a sustainable impact beyond the project area by: promoting effective marine protected areas (Aichi Target 11), the sustainable management of fisheries (Aichi Target 6), decreasing threats to coral reefs (Aichi Target 10), and by contributing to overall delivery of the CBD by mobilizing financing resources (Aichi Target 20).

Within Indonesia and Philippines, this project is consistent with multiple governmental initiatives and priorities at the national level, and subject to various policies and laws, outlined below. The legal context related to fisheries and conservation, applicable for this Project, is complex, with laws, acts, regulations at the national level as well as regional by-laws and sub-jurisdictional regulations that can be applied. For example, national regulations on conservation areas exist but when applied to an area already under a tourism zoning, some intent and requirements are similar but terminology and related institutions and processes are different. The Project tries to transcend these differences, working in the agreed areas and within the legal frameworks that apply there. The following provides an overview of the main legislative instruments identified as part of ESMF development⁴.

⁴ The overview provided aims to capture the principle laws and policies relevant to the Project activities, however is not an exhaustive analysis. Further regulations, particularly at the local level, may also exist or be under development, and be applicable for some sites.

2.2 Indonesia National Legislative, Regulatory and Policy Regime

National policies:

- ***Indonesia - Sustainable Development Plans:***

Indonesia remains committed to a “green development path”—a path that seeks simultaneously to be pro-growth, pro-job and pro-poor. In this context and by Presidential Regulation (No. 32/2011), which is part of Indonesia’s Master Plan for Economic Development (2011-2025), the need to sustainably increase fish production and revenue generated by tourism is emphasized. As a result, MMAF continues to integrate sustainable fisheries development within provincial and regional development plans.

- ***Indonesia - Provincial jurisdiction over marine resource management:***

Law on Local Government (UU23/2014) saw jurisdiction for the management of natural resources re-centralised, from district level to provincial level. Since that time, considerable effort has taken place to realign policies, negotiate ‘handovers’ and transition staffing and budget arrangements to provinces. Under authority of the provinces, the creation of MPA management bodies at sub-provincial scale is now underway across the country, and the proposed project will provide significant support to North Maluku Province as it contends with this challenging task. This includes support in strategic and operational planning, design of law enforcement and monitoring systems, creation of integrated durable finance models and effective engagement of communities in management. Similarly, the management of fisheries resources by provincial departments requires a ‘sub-provincial’ approach, and the creation of fisheries ‘action plans’ that will be nested in super-provincial ‘Fisheries Management Plans’ that set the strategic direction and targets. The proposed project will support development of Management Plans and Action Plans, as well as support community-led ‘co-management systems’ to support their implementation.

- ***Indonesia – Global Maritime Axis doctrine:***

In his first term, Indonesian President Joko Widodo brought a strong focus to Indonesia’s maritime economy, and has progressed maritime infrastructure projects, including ports and updated maritime security measures. A Coordinating Ministry was created to help integrate various policies and ministries active in the marine space. Inherent in these policies across multiple portfolios is an understanding that Indonesia has not maximized the economic potential of its vast marine estate, and that inter-agency coordination, significant investments in maritime infrastructure, and enforcement of the nation’s maritime laws can help unlock this potential. Within this vision of Indonesia as a global maritime ‘axis’ or hub, the Minister for Marine Affairs and Fisheries launched a dedicated and sustained effort to rid the country of IUU fishing, end transshipment-at-sea, and introduced policies to support small-scale fishers and the coastal economies they contribute to. This project strongly aligns with these policies; by empowering local fishers to develop their own fisheries sustainably, with a strong focus on social and economic goal-setting and ecological sustainability in the face of over-

fishing and climate change, the project helps to fill significant gaps at the provincial and district level needed to realise the vision.

2.2.1 Relevant Sectoral Regulations – Indonesia

Environmental and Social Assessment

There are several Indonesian laws and regulations that guide the assessment and management of environmental and social (including, social, cultural and economic) impacts from projects and other activities. The relevant laws and regulations guiding this ESMF are described below.

Law No. 32/2009 on Environmental Protection and Management is the most important in this respect as it defines responsibilities for environmental protection and management of projects/activities as well existing types of impact assessments. It categorizes activities/projects into three types:

- Those that require a full ESIA (*Analisa Mengenai Dampak Lingkungan* - (AMDAL));
- Those that require an Environmental Management Monitoring Effort (*Upaya Pengelolaan Lingkungan Hidup-Upaya Pemantauan Lingkungan Hidup* [UKL-UPL]); and
- Those that do not require ESIA (AMDAL) or UKL-UPL.

Ministry of Environment Regulation No. 5/2012 defines activities and projects for which an ESIA (AMDAL) is required. It further defines thresholds below which local government agencies responsible for the environment will determine an appropriate environmental category. Finally, the regulation provides an extensive list of screening and sector-specific criteria for investment activities requiring ESIA (AMDAL). Per article 3, an ESIA (AMDAL) is not required for activities that:

- Support the conservation of protected areas;
- Consist of cultivation without significant (adverse) environmental impacts; and/or
- Consist of cultivation by indigenous peoples on a fixed area of land that does not reduce the function of a protected area and includes close monitoring and/or supervision.

Ministry of Environment Regulation No. 16/2012 provides general guidance on preparing ESIA (AMDAL) and UKL-UPL documents and Statements of Environmental Management and Monitoring (*Surat Pernyataan Pengelolaan Lingkungan* [SPPL]). The regulation defines the required elements and contents of these documents. An SPPL describes the procedures to monitor and manage environmental impacts of projects that do not require an ESIA (AMDAL) or UKL-UPL.

Amongst others, **Ministry of Environment Regulation No 17/2012** provides guidance on the definition of communities to be involved in the ESIA (AMDAL), UKL-UPL and Environmental Permit process and outlines

procedures and methods for community involvement through public announcements and consultations and other methods.

The requirements for UKL-UPL and SPPL are determined with **Ministry of Environment and Forestry Regulation No 25/2018** on “Guideline for determining types of planned Business and/or Activities that must have an Environmental Management and Environmental Monitoring Effort (UKL-UPL) or Statement of Environmental Management and Monitoring Ability”.

Ministry of Public Works Regulation No. 10/PRT/M/2008 applies to public works and/or infrastructure projects for which an ESIA (AMDAL) is not required. The regulation defines the types of – and thresholds for – projects/activities for which a UKL-UPL is mandatory instead.

Per **Government Regulation No. 27/2012**, projects that need to elaborate an ESIA (AMDAL) or UKL-UPL must obtain an environmental permit from the appropriate government authority before implementations. projects that only require an SPPL, do not need to obtain an environmental permit. The application for an environmental permit needs to contain the environmental assessment documents (ESIA (AMDAL) or UKL-UPL), legal documents, and a business profile.

Marine Protection and Sustainable Fisheries

Some key Indonesian laws of note are listed below, followed by key regulations, with some general commentary and analysis provided.

- Law No. 31 of 2004 on Fisheries (Additional Gazette of the Republic of Indonesia No. 4433) as amended by Law No. 45 of 2009 on amendments to Law No. 31 of 2004 on Fisheries (Additional State Gazette of the Republic of Indonesia No. 5073);
- Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands (State Gazette of the Republic of Indonesia of 2007 No. 84, Additional State Gazette No. 4739) as amended by Law No. 1 of 2014 (Gazette of the Republic of Indonesia of 2014 No. 2, Additional State Gazette No. 5490) provides for the management of coastal areas and small island and in particular for their planning, utilization, conservation, disaster mitigation, coast reclamation, rehabilitation of coastal damage, rights and access of communities, settlement of conflicts and elaboration of related international conventions;
- Law No. 23 of 2014 on the Local Government (State Gazette of the Republic of Indonesia of 2014 No. 244, Supplement to State Gazette of the Republic of Indonesia No. 5587) as amended several times by Law No. 9 of 2015 on the Second Amendment to Law No. 23 of 2014 on Local Government (State Gazette of the Republic of Indonesia of 2015 No. 58, addition of State Gazette of the Republic of Indonesia No. 5679) specifies implementation of government affairs which will be carried out by the local government as well as related legislation according to the principles of autonomy and assistance with the broad autonomy within the system; Law No 32 on Maritime (Gazette of the Republic of Indonesia of 2014 No. 294) addresses the sovereignty of Indonesia as an archipelagic state to manage and utilize maritime resources for the nation economic benefit sustainably according to national and international laws and regulations in its territorial waters, exclusive economic zone, and continental shelf; and

- Law No. 7 of 2016 on the Protection and Empowerment of Fishermen, Fish Raisers and Salt Farmers (State Gazette of the Republic of Indonesia of 2016 No. 68, addition of State Gazette of the Republic of Indonesia No. 5870), which establishes the requirements to be satisfied in order to benefit from financial assistance to perform fisheries, aquaculture and salt exploitation activities.

Below these overarching laws, regulations and guidance on specific aspects that apply to coastal /island management sustainable fisheries aspects, including for empowerment of small-scale fishers, have been developed. The key regulations are:

- Government Regulation No. 54 of 2002 on Fisheries Business which regulates procedures for the granting of fisheries and aquaculture licenses;
- Regulation of the Minister of Marine Affairs and Fisheries No. 29/PERMEN-KP/2012 concerning Guidelines on the development of management plan for capture fisheries;
- Regulation of the Minister of Marine Affairs and Fisheries No. 30/PERMEN-KP/2012 concerning capture fisheries business in Fishery Management Areas of the Republic of Indonesia;
- Regulation of the Minister of Marine Affairs and Fisheries No. 23/PERMEN-KP/2013 regarding Registration and marking of fishing vessels as amended by the Regulation of the Minister of Marine Affairs and Fisheries No. 05/PERMEN-KP/2019;
- Regulation of the Minister of Marine Affairs and Fisheries No. 18/PERMEN-KP/2014 concerning Fisheries Management Area of the Republic of Indonesia, and subsequent decrees on the management of specific areas (e.g. 571-73, 711-718) Regulation of the Minister of Marine and Fisheries No. 23/PERMEN-KP/2016 on the planning of management of coastal and small islands areas;
- Regulation of the Minister of Marine Affairs and Fisheries No. 71/PERMEN-KP/2016 on fishing routes and placement of fishing gear in the Fisheries Management Area of the Republic of Indonesia;
- Regulation of the Directorate General of Capture Fisheries No. 15/PER-DJPT/2017 on the Technical guidelines for the operationalization of Management Unit of the 11 Fisheries Management Areas; and
- Regulation of the Directorate General of Capture Fisheries No. 17/PER-DJPT/2017 on the Technical guidelines for the development of fisheries harvest strategy document.

More specific to conservation and protected areas, the following regulations guide the process for determining potential areas, steps in consultation on zoning and management planning, which are key references for the MPA aspects of the Project, and to some extent for the sustainable fisheries activities. A ministerial decree is also under preparation, related to the community-based marine surveillance system (Siswasmas), and will be finalized and implemented during the Project period.

- Government Regulation No. 60 of 2007 on the Conservation of Fishery Resources which prescribe general conservation and management measures for the protection of fishery resources;

- Regulation of the Minister of Marine Affairs and Fisheries No. 17/PERMEN/2008 on conservation areas in coastal areas and small islands;
- Regulation of the Minister of Marine Affairs and Fisheries No. 02/PERMEN/2009 concerning the procedures for marine conservation areas establishment;
- Regulation of the Minister of Marine Affairs and Fisheries No. 30/PERMEN/2010 concerning management planning and zoning of MPAs; and
- Regulation of the Minister of Marine Affairs and Fisheries No. 29/PERMEN/2012 concerning guidelines for developing a capture fisheries management plan.

2.3 Philippines National Legislative, Regulatory and Policy Regime

Based on the Philippines Constitution (1986), the state is required to ‘protect the rights of subsistence fishermen, especially of local communities, to the preferential use of communal marine and fishing resources’.

The Philippines Development Plan (2017-2022) is a high-level strategic document that horizontally integrates and aligns key sectors in the country’s medium-term development cycle. This five-year document has chapters focused on ecologically sustainable development and fisheries, and of particular relevance to the project, notes the importance of EAFM, MPAs, law enforcement in achieving its vision. Relevant targets in the plan include:

- Increase productivity of commercial, municipal and aquaculture sectors by 2.5, 1 and 5% respectively (based on 2015 baseline);
- Quality of coastal and marine habitats improved (based on 2016 coral reef health baselines) - target undefined, apart from ‘improving quality’; and
- Employment from ecotourism and sustainable community resource-based enterprises increased (baseline ‘to be determined’, target ‘increasing’).

Relevant strategies to achieve the above targets include:

- Pursue an Ecological Approach to Fisheries Management (EAFM);
- Enforce complete delineation, delimitation and zoning of municipal waters;
- Strengthen law enforcement and the management of coastal and marine areas;
- Effectively manage Protected Areas (PA); and
- Strengthen law enforcement against illegal trade of wildlife species.

Philippines - Sustainable Development Plans - The Philippines, together with 192 other United Nations (UN) member states, committed in September 2015 to achieving the 17 Sustainable Development Goals (SDGs) and their 169 targets by 2030. The SDGs, also called the Global Goals, have a range of economic, social, environmental, and governance aims that are at sync with the 2017-2022 Philippine Development Plan (PDP) and the country's long-term aspirations articulated in AmBisyon Natin 2040 (NEDA 2017; NEDA 2016). The Philippines, together with 50 other countries, presented a Voluntary National Review (VNR) of the SDGs in the 2019 High-Level Political Forum (HLPF) on Sustainable Development. The 2019 VNRs focus largely on the six of the SDGs, viz., Goals 4 (Quality Education), 8 (Decent Work), 10 (Reduced Inequalities), 13 (Climate Action), 16 (Peace, Justice and Strong Institutions) and 17 (Partnership for the Goals).

Since the adoption of the SDGs, the Philippine government has carried out several activities related to setting up the policy and enabling environment for the implementation of the SDGs. Further activities have also been conducted regarding compilation and analysis of data for monitoring the country's conditions on the SDGs. The National Economic and Development Authority (NEDA), as the cabinet-level agency responsible for economic development and planning, looks into synergies of the SDG indicator framework in relation to the monitoring of the country's medium and long term development plans. All concerned government agencies have been enlisted to provide the necessary data support for monitoring the Global Goals. The Philippine Statistics Authority (PSA), an attached of NEDA, is designated as the official repository of SDG indicators for the country.

Philippines National Maritime Policy and Strategy

The Philippines governance approach is based on the following administrative units: National; Administrative Region; Province; Municipality (Local Government Unit); and Barangay (village). Many government services are decentralised to local-level governments. Relevant sectoral laws and regulations identified during ESMF development for this Project are outlined below. At the national level there is an active discourse on maritime policy and strategy, with the National Coast Watch System (NCWS) as an agency covering a variety of aspects such as Maritime Safety and Security, Maritime Economic Development and Sustainment, Interagency Capability and Capacity Development. Each September they promote Maritime and Archipelagic Nation Awareness Month, with the 2020 theme being "Awakening a Whole-of-Nation Consciousness on Philippines Maritime Issues through Online Platforms".

2.3.1 Relevant sectoral regulations – Philippines

Environmental and Social Assessment

Key laws, regulations and standards related to environmental and social issues including requirements and procedures of Environmental Impact Assessment (EIA), stakeholder participation, and information disclosure are referred to as part of the Philippine Environmental Impact Statement System (PEISS), legislated as follows:

- Presidential Decree No.1151 (1977) - Philippine Environmental Policy;

- Presidential Decree No. 1586 (1978) - Establishing an Environmental Impact Statement System including other Environmental Management related Measures and for other purposes, Environmental Impact Statement System;
- Presidential Proclamation No. 2146 (1981) - Proclaiming Certain Areas and Types of Projects as Environmentally Critical and within the scope of the Environmental Impact Statement System established under Presidential Decree No.1586;
- Presidential Proclamation No.803 (1996) - Declaring the Construction, Development and Operation of a Golf Course as an Environmentally Critical Project Pursuant to Presidential Decree No. 1586;
- Administrative Order No.42(2002) - Rationalizing the Implementation of the PEISS and giving authority in addition to the Secretary of the DENR, to the Director and Regional Directors of the Environmental Management Bureau to Grant or Deny the Issuance of ECC;
- DENR Administrative Order No.2003-30 (DAO 03-30) - Implementing Rules and Regulations (IRR) for the Philippine Environmental Impact Statement (EIS) System; and
- DENR Administrative Order No.2003-30 (DAO 03-30) (2004-005) - Revised Procedural Manual.

Marine Protection and Sustainable Fisheries

MPAs in the Philippines fall into two broad categories: those managed by the National government and those locally managed by municipal governments, as determined by the following regulations:

- Republic Act No. 7586, commonly known as the Integrated Protected Areas System (NIPAS) Act of 1992 - the legal basis for protected areas designated by acts of Congress, as national MPAs. Under NIPAS, 33 nationallevel MPAs had coverage of 14,500km². In July 2017, the Republic of the Philippines declared a further 91 protected areas, under the 'E-NIPAS' (expanded NIPAS) Act of which 21 appear to be either marine, or include a marine component. E-NIPAS marine protected areas include the following PA types: National Park; National Marine Reserve; Protected Landscape and Seascape; and Wildlife Sanctuary.
- E-NIPAS Act of 2018 (RA 11038) - provides provisions for indigenous peoples to govern and manage protected areas. Indigenous and Community Conserved Areas (ICCAs) may be natural or modified ecosystems that are voluntarily managed by Indigenous Peoples, often using customary means.
- Indigenous Peoples' Rights Act (IPRA) of 1997 - sets conditions, requirements, and safeguards for plans, programs, and projects affecting Indigenous Peoples. It spells out and protects the rights of Indigenous Peoples.
- The Local Government Code of 1991 - authorises local municipal and city governments to declare MPAs, to be managed through co-management arrangements consistent with the Fisheries Code. Under this Code, the municipalities and cities (often referred to as 'local government units' or 'LGUs') are charged with the management of nearshore marine areas within 15km of the shoreline. These 'municipal waters' are important to coastal communities and must be managed by LGUs in accordance with the Fisheries Code (1998). Within these waters, LGUs are able to establish their own conservation

areas, fisheries regulations and aquaculture industries, while ensuring that resources are managed sustainably and equitably.

- Philippines' Republic Act 8550 of 1998, commonly referred to as the Fisheries Code – consolidates all previous fisheries law into a single code. Key elements of the code include:
 - Declares food security as the main consideration in development, management and conservation of fisheries resources;
 - Reflects an adherence to long-term sustainability, fully recognizing its multiple dimensions and complex elements in the fisheries context;
 - Employs prohibitive and regulatory measures to balance protection with reasonable and responsible use;
 - States that 15% of municipal waters be set aside for protection as marine reserves;
 - Highlights the importance of community participation in management of marine reserves;
 - Outlines the arrangements for management of all fisheries and aquaculture activities in the Philippines, including commercial and municipal scale fishing operations; and
 - mandates the creation of Municipal Fisheries and Aquatic Resources Management Council (FARMCs), and sets out roles, responsibilities and authorities of stakeholders and decisive engagement of fisherfolk in coastal resources and fisheries management. The Fisheries Code may also be utilised to create local MPAs.

In 2015, amendments to the Philippine Fisheries Code were made to strengthen enforcement frameworks, including new requirements for fishing boats to adopt vessel-monitoring technologies (such as vessel monitoring system, or 'VMS'). Republic Act 10654 (The Act To Prevent, Deter And Eliminate Illegal, Unreported and Unregulated Fishing) further amends the Fisheries Code.

- The Fisheries Administrative Order No. 196 defines the FARMC implementation process. To support the function of these groups, there is a national FARMC Program Management Centre, and one at each BFAR Regional Office⁵.
- The Fisheries Administrative Order (FAO) 263 - establishes 12 'Fisheries Management Areas' (FMAs) and requires that science-based and participatory governance frameworks be created to ensure their sustainable management. This is a significant piece of legislation which for each FMA requires the establishment of a Management Body (MB), which may be in the form of a 'council or board', and a scientific advisory group (SAG).

⁵ One of the key mechanisms employed by LGUs in decision-making is the FARMC. While the nomenclature and function of these councils may vary, they are essentially multi-stakeholder groups that municipalities call upon to decide on policy, resource allocation, law enforcement and integration issues. Upon selecting a site, it will be incumbent on WCS to ascertain the level of effectiveness of any municipal-level councils; they will provide an opportunity to convene stakeholders at the local level, and develop consensus around marine resource use.

- ‘Sagip Saka Act’ (2019) - establishes a Farmers and Fisherfolk Enterprise Program. This program provides support to fishers (often through cooperative structures) on the following: improvement of production and productivity; improvement of producers' and enterprisers' access to financing; provision of access to improved technologies; and provision of business support and development services.

2.4 “Land Acquisition and Involuntary Resettlement” as Relates to Access Restriction and Economic Displacement

The development and enforcement of MPAs entails a process of zoning, with areas set aside for open fishing, for recreation including tourism-related activities, and a no-take zone. This typically requires changes in the access and use patterns of marine areas both along coast lines, including beaches, mangroves, reefs and inshore areas, as well as offshore areas that are used by various groups. The changes in access constitute restrictions and are expected to affect the economic or livelihood activities of people in the area. A partial loss of livelihoods will likely occur on a wide scale as a result of MPA establishment, enforcement and in other species-specific fishing practices.

The Project aims at restitution of the loss local / affected peoples experience through the restrictions put in place or enforced with Project support, but notes that the success of restitution depends also on the willingness and ability of the individual to seek alternatives and implement them successfully, as well as on the Indonesian government’s attention to the welfare of coastal peoples. Hence the Project design includes activities to provide adequate opportunities for individuals to address and reestablish their loss in livelihoods; the “adequacy” of these opportunities needs to be demonstrated, with appropriate planning, consultation, assessment of feasibility of proposed livelihood interventions, and monitoring.

While there are clearer legal frameworks related to land acquisition, effects on livelihoods referred to as economic displacement, and to physical displacement (referred to collectively as resettlement), under both national and international references, the guidance and requirements related to marine areas is less clear.

The IFC PS 5 and World Bank Environmental and Social standards (ESS 5) on Land Acquisition and Resettlement is considered relevant as it covers activity scenarios and impacts related to restrictions on access to natural resources and economic displacement. For national regulations, however, the references to rules governing scenarios with land acquisition are not clearly relevant.

In both Indonesia and the Philippines, livelihood restitution is not specifically required by law. There is also no regulation specifically guiding Voluntary Land Donation (VLD) in Indonesia, however there are numerous precedents in the application of VLD in the context of donor-financed projects⁶ and conditions

⁶ Lack of regulation on VLD is identified as a gap between GOI policy and lender/IFC policy. Examples of precedents using VLD in Indonesia include World Bank funded projects with the Ministry of Fishers and Ministry of Public Works and Housing, such as Core map (Coral Reef Rehabilitation and Mapping Project) and DOISP (Dam Operational and Improvement of Safety Project). Various Land Acquisition and Resettlement Action Plans (LARAP) for projects in the Philippines also note the use of VLD as an

are consistent in terms of requiring transparent processes and clear documentation. The key law in Indonesia is No 2/2012 which considers land acquisition as in public interest (Land Acquisition for the Development in the Public Interest). This law applies to public infrastructure, e.g. roads, dams, landfills, ports, power generation, etc. Land acquisition for other purposes need to be achieved through a willing sell and willing buy approach (negotiation process, which in some cases is approached in practices as a VLD). In the Philippines, the key laws pertaining to land acquisition in the public interest are Republic Act No. 7160 (Local Government Code of 1991) and Executive Order (EO) No.1035, 1985. Philippines Republic Act RA 8974 specifies land donation as an optional mechanism for acquisition under certain circumstances.

If the principles seen in the land laws are extrapolated to the marine context, where the process of determining and agreeing the zones within an MPA must be negotiated, as also outlined above in relation to Indonesia's Ministry of Marine Affairs and Fisheries Regulation no 30/2010 and the Philippines' Republic Act 8550 of 1998 (the Fisheries Code). Indeed, the principles of this process will be in accordance with the Constitutions of both countries, emphasising humanity, justice, expediency, certainty, transparency, agreement, participation, welfare, and sustainability. In both countries' regulatory frameworks, compensation can be given in: (i) cash, (ii) land swap, (iii) resettlement, (iv) shareholding; or (v) other kind agreed by both parties. Compensation in the marine context will relate to resettlement (economic displacement) and to other kinds of compensation or offset as agreed by both parties.

2.5 Indigenous Peoples – Policy and Regulatory Framework

Indonesia and the Philippines are ethnically diverse countries comprising numerous ethnic groups with distinct cultures and traditions. The Project will be implemented in areas known to have indigenous peoples and further specific investigation as to the presence and status of groups in the Project will be required. An overview of the policy framework applicable to indigenous peoples in both countries is provided here, and elaborated in the Project's Indigenous Peoples Planning Framework (IPPF).

Indigenous Peoples/Adat Communities - Indonesia

While the Indonesian Government considers most Indonesians to be indigenous, there are also distinct communities with the same ancestral lineages who inhabit a certain geographical area and have a distinctive set of ideological, economic, political, regulatory, cultural and social systems and values. In Bahasa Indonesia they are referred to as *Masyarakat Adat* or *Masyarakat Hukum Adat* (communities governed by custom).

The existence of indigenous peoples is recognized in the Constitution, namely in Article 18 and its explanatory memorandum. It states that in regulating a self-governing region and adat communities, the government needs to respect the ancestral rights of those territories. After amendments, recognition of

acceptable mechanism, with conditions. For example, the Asian Development Bank Health Sector Reform LARAP (2006), and JICA-Philippines North-South Commuter Rail Development Project Resettlement Action Plan (2016).

the existence of adat communities was provided in Article 18 B Para. 2 and Article 28 I Para. 3. Indonesia has not yet ratified ILO Convention 169 on Indigenous Peoples.

The definition of adat used in the Indonesian Legislation such as the Forestry Act (Law No. 41/1999), the Village Law (Law No. 6/2014) and the Ministry of Home Affairs Regulation 54/2014 is largely like those used by the World Bank (OP 4.10) and indigenous peoples' organisations, except for the acknowledgement of self-recognition as a valid identifier.

The Indonesian NGO AMAN (*Aliansi Masyarakat Adat Nusantara* [Indigenous Peoples Alliance of the Archipelago]), defines indigenous people in Indonesia as a group of people who have lived on their ancestral land for generations, have sovereignty over the land and natural wealth in their customary bounded territory, where adat (customary) law and institutions arrange the social life of the community, and carry out the social-political and economic lives of the community.

The following Indonesia laws and regulation recognise the specific rights of indigenous peoples:

Law No. 5/1960 on Basic Agrarian Principles: Apart from defining types of land rights of private individuals and other entities, the law recognises land rights over customary territories (*hak ulayat*) and customary law (adat law) if it is not in conflict with the national interest.

Law No. 6/1974 on Principles of Social Welfare: The Law regulates the rights of all Indonesian citizens to the best level of social welfare and is obliged to participate as much as possible in social welfare efforts. This Law assigns the government to: (1) determine the policy lines needed to maintain, guide and improve social welfare efforts; (2) maintain, guide and improve awareness and a sense of community social responsibility; and (3) securing and supervising the implementation of social welfare businesses. This Law has been detail described with the following regulation:

- **Presidential Decree 111/1999** defines and determines the characteristics of Remote Indigenous Communities (*Komunitas adat terpencil*) that need to be empowered to improve their social welfare.

Law No. 39/1999 on Human Rights: Article 6 of the Law states that the needs of customary communities need to be recognised and protected by the Law, society, and the government. The identity of customary communities including customary land rights need to be protected in harmony with development.

Law No. 6/2014 on Villages: The Law acknowledges the existence and rights of *Masyarakat Hukum Adat* (customary law communities). The communities can establish adat villages with their own institutional structures and authority although this Law suffers from the lack of guiding regulations and institutional mandates to make such provisions operational. The Law grants a *desa adat* (customary village) the authority to conduct adat-based public administration. This Law has been detail described with the following regulation:

- **Presidential Regulation 42/2014 regulates the procedures for the formation of Village (general)** and Adat Village, including regulating changes of Adat Village into Village, and vice versa.

Law No. 23/2014 on Local Government: This Law recognizes the existence of adat institutions (*lembaga adat*) by giving them rights to “empowerment”. Second, the Law determines that adat law is an additional rule for purposes such as village elections. Third, the Law makes adat or adat law the basis upon which to conduct local development, or as a parameter to measure social cohesiveness.

Law No. 11/2010 on Cultural Heritage: This Law recognises customary communities as owners of their cultural heritage and grants them authority to manage it. The Law requires observation and data collection on cultural heritage sites that may be affected by Project activities.

Indigenous Peoples – Philippines

Philippine legislation provides strong rights to indigenous peoples (IP) and the Philippine government voted in favor of the United Nations (UN) Declaration on the Rights of Indigenous Peoples, although it has yet to ratify the ILO Convention 169 on Indigenous Populations. The regulations relating to indigenous peoples are quite compatible with the policy requirements of IFC and World Bank, with some exceptions such as national regulations having less requirements on baseline data, gender inclusion and monitoring. Some key points related to indigenous peoples' legal framework in the Philippines include:

- The 1987 Constitution of the Republic of the Philippines recognizes the rights of indigenous peoples to their ancestral domains and their power of dominion over their lands and resources. Moreover, it respects basic rights and their beliefs, customs and traditions tied to the land, e.g.:
- The right to exclusively own, occupy, cultivate lands and utilize natural resources in accordance with Section 17, Article XIV of the 1987 Constitution which states that 7 customary laws governing property rights or relations shall be applied in determining the ownership and extent of ancestral domains;
- The right to use manage and conserve natural resources as implied in Section 22, Article II and Sec. 5 of Article XII of the constitution which states that the rights of indigenous peoples to natural resources pertaining to their lands shall be, specially safeguarded. These rights include the right of the indigenous peoples to participate in the use, management and conservation of natural resources;
- The right to stay in their territory and not be removed there from except when relocation is necessary as an exceptional measure, as in the case of Mt. Pinatubo's eruption. Any necessary relocation should take place with the prior and informed consent of the indigenous peoples and must occur under appropriate procedures established in the law and regulation, including public hearings to give the indigenous peoples opportunity for effective representation;
- The right to return when cause for relocation cease. The rule is that indigenous peoples have the right to return to their traditional domains as soon as the ground for relocation ceases to exist. When return is not possible, indigenous peoples should be provided in all possible cases with lands of equal, if not more quality and legal status as the land they have lost and suitable to provide for their present needs and future development;
- The right to safe, clean air and water. This right is pursuant to the UNCFD Agenda 21 which recognizes that indigenous peoples and their communities have a historical relationship with their lands and are generally descendants of the original inhabitants of the land which understands land to include environment. Agenda 21 encourages the full partnership of governments and intergovernmental organizations with the indigenous peoples in fulfilling a number of goals among which are recognition that the lands of the indigenous peoples should be protected from activities that are environmentally unsound or what the indigenous peoples concerned consider to be socially or culturally inappropriate

and the adoption or strengthening of appropriate policies and or legal instruments towards these ends.

- The Philippine Indigenous Peoples Rights Act (IPRA) of 1997 (Republic Act No. 8371). The IPRA is a landmark legislation to recognize and respect the rights of the various indigenous cultural communities in the Philippines, including rights of control of their ancestral lands and right to self-determination. The law created the National Commission for Indigenous Peoples (NCIP) which is tasked to implement the IPRA. The law requires, among others, that all development undertakings within the declared ancestral domains of the ICC/IPs shall be subject to free, prior informed consent (FPIC) of the Indigenous Cultural Community/Indigenous People (ICC/IP) group who owns that particular ancestral domain following different procedures depending on the character of activities.
- The policy-making body of the NCIP is composed of seven Commissioners belonging to ICCs/IPs, one of whom shall be the Chairperson⁷. These Commissioners are appointed by the President of the Philippines from a list of recommendees submitted by authentic ICCs/IPs.
- Ancestral Domain. For the purpose of the law, IPRA introduced the concept of ancestral domain to refer to all areas generally belonging to ICCs/IPs, subject to property rights within ancestral domains already existing and/or vested upon the effectivity of IPRA, comprising lands, inland waters, coastal areas, and natural resources therein, held under a claim of ownership, occupied or possessed by ICCs/IPs by themselves or through their ancestors, communally or individually since time immemorial, continuously to the present, except when interrupted by war, force majeure or displacement by force, deceit, stealth, or as a consequence of government projects or any voluntary dealings. It shall include ancestral lands, forests, pasture, residential, agricultural, and other lands individually owned whether alienable and disposable or otherwise; hunting grounds; burial grounds; worship areas; bodies of water; mineral and other natural resources; and lands which may no longer be exclusively occupied by ICCs/IPs, but from which they traditionally had access to, for their subsistence and traditional activities, particularly the home ranges of ICC/IPs who are still nomadic and/or shifting cultivators.

2.6 Cultural Heritage

Cultural heritage is an integral part of a peoples' cultural identity and practices, and may be a source of valuable historical and scientific information, as well as an asset for economic and social development. Some developments can lead to the loss of cultural heritage, which is irreversible, but fortunately it is often avoidable. The objective of safeguarding Physical Cultural Resources (PCRs) is to avoid, or mitigate, adverse impacts on cultural resources as result of Project developments. The impacts on physical cultural resources resulting from Project activities, including mitigating measures, may not contravene either the national legislation, or its obligations under relevant international environmental treaties and agreements. A relevant resource on cultural heritage laws for the Project implementation partners is

⁷ The seven Commissioners shall come from the following 8 "ethnographic areas": (1) Region I (Ilocos Region) and the Cordilleras; (2) Region II (Cagayan Valley); (3) the rest of Luzon; (4) Island groups, including Mindoro, Palawan, Romblon, Panay, and the rest of the Visayas; (5) Northern and Western Mindanao; (6) southern and Eastern Mindanao; and (7) Central Mindanao.

UNESCO's online compendium of laws by country (<https://whc.unesco.org/en/statesparties>). The following laws specific to cultural heritage will be valid for this Project:

Indonesian Law No. 11/2010 on Cultural Heritage: This Law is a legal basis for the preservation, management, development and utilization of cultural heritage in Indonesia so that conservation goals can be achieved. The Law also regulates procedures for finding cultural heritage objects. This Law is a substitution of Law No. 5/1992 on Cultural Heritage Objects.

Philippines laws on cultural heritage stem from Article 14 of the Consitution of the Philippines which states in Section 16, that "All the country's artistic and historic wealth constitutes the cultural treasure of the nation and shall be under the protection of the State which may regulate its disposition". Some key legislation includes the National Museum Act of 1998 and the Presidential Decree No. 374 amending certain sections of the Republic Act No. 4846. These include provisions on cultural moveable heritage/cultural property, cultural immovable heritage, intangible cultural heritage, protected areas, national heritage and underwater cultural heritage.

2.7 Application of IFC Performance Standards

The Project is required to comply with IFC Performance Standards instead of the World Bank Environmental and Social Standards (WB ESS). However, the World Bank Group General and sector-specific EHS Guidelines as well as the Human Rights Guideline of the German Federal Ministry for Economic Cooperation and Development (BMZ), the UN Basic Principles and Guidelines on Development-based Evictions and Displacements, and VGGT do apply to this Project. In addition, applicable World Bank Environmental and Social Standards (ESS) should be applied, such as ESS 5 in regards to the access restrictions and displacement (requiring the preparation of a Process Framework) and ESS 7 in regards to indigenous peoples and requiring the preparation of an IPPF. As such, an overview of both the IFC PS and World Banks Environmental and Social Framework (ESF)⁸ is provided here. This is valid and applicable for the Project activities in both Indonesia and the Piliipines.

Tables 6a and 6b below provide an overview of the relevant policies and their focus, whereas a description of the applicability, or why these policies are triggered and should be followed by this Project, is presented in Chapter 4 on the ESMF and impact screening results. The tables summarise the key focus of each but do not present the full requirements of each policy – for this, the respective policies and their guidance notes can be accessed online.

Table 6a. IFC Performance Standards Overview and Objectives

⁸ The World Bank introduced its new Environmental and Social Framework (ESF) with 10 environmental and social standards (ESS) to become effective from January 2019. As this Project was approved after that date, the ESF is applicable for this ESMF development.

PS	Safeguard	Overview and Objectives
1	Assessment and Management of Environmental and Social Risks and Impacts	PS 1 sets the framework for initial and ongoing risk management through the entire lifecycle of a Project through establishment of an ESMS, identification of risks and impacts, management programs, ensuring that the Project organisation has sufficient capacity and competency to address the identified risks, has an ongoing monitoring and review program and has engaged Project affected persons and interested parties through stakeholder engagement activities.
2	Labor and Working Conditions	PS 2 recognises that the workforce is a valuable asset for any business and that a sound worker management relationship, through the protection of fundamental rights of workers, is key to the sustainability of a company/Project.
3	Resource Efficient and Pollution Prevention	PS 3 outlines a Project level approach to resource efficiency and pollution prevention and control; where Projects may generate increased levels of pollution to air, water and land and consume finite resources.
4	Community Health, Safety and Security	PS 4 recognises that Project activities, equipment and infrastructure can increase community risks and impacts. It is the Project's responsibility to avoid or minimise the risks and impacts to community health, safety and security of the Public.
5	Land Acquisition and Involuntary Resettlement	Project related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use the land. Refers to both physical displacement and economic displacement.
6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	Protecting and conserving biodiversity, maintaining ecosystem services and sustainably managing living natural resources are fundamental to sustainable development. PS6 addresses how Projects can sustainably manage and mitigate the impacts on biodiversity and ecosystem services throughout the Project lifecycle
7	Indigenous People	IFC PS 7 recognises that Indigenous Peoples, as a social group, are distinct from mainstream groups in national societies and are often among the most vulnerable and marginalised segments of population. IPs may be more vulnerable to adverse impacts associated with Project development than non IP communities; through loss of identity, culture and natural resource based livelihoods.
8	Cultural Heritage	IFC PS 8 recognises the importance of cultural heritage for current and future generations

Table 6b. World Bank Environmental and Social Standards and their Policy Objectives

Standard	Concerning / Safeguarding	Focus/Objectives
ESS1	Assessment and Management of Environmental and Social Risks and Impacts	Ensure the environmental and social soundness and sustainability of Projects. Support integration of environmental and social aspects of Projects in the decision-making process

Standard	Concerning / Safeguarding	Focus/Objectives
ESS2	Labor and Working Conditions	Ensure appropriate labor management procedures, terms and treatment of direct, contracted, community, and primary supply workers, and government civil servants; non-discrimination and equal opportunity; addressing workers organizations, child labor and forced labor and occupational health and safety.
ESS3	Resource Efficiency and Pollution Prevention and Management	Ensure technically and financially feasible measures to improve efficient consumption and management of energy, water, and raw materials, waste and hazardous materials, calculation of greenhouse gas emissions and management of pesticides, preferring integrated pest management (IPM) and integrated vector management (IVM), and where pesticides are necessary, minimizing risks to human health and the environment.
ESS4	Community Health and Safety	Ensure provisions for general safety and road/traffic safety, climate change, and applying the concept of universal access, where technically and financially feasible ; addressing impacts on ecosystem services, including water-related, communicable, and non-communicable diseases; addresses risk associated with security personnel.
ESS5	Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Promotes avoidance or minimizing involuntary resettlement and, where this is not feasible, assist displaced persons in improving or restoring their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of Project, whichever is higher.
ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	Defines categories of resources/landscapes and promotes environmentally sustainable development by supporting the protection, conservation, maintenance, and rehabilitation of natural habitats and their functions.
ESS7	Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Design and implement Projects in a way that fosters full respect for Indigenous Peoples' dignity, human rights, and cultural uniqueness and so that they (1) receive culturally compatible social and economic benefits, and (2) do not suffer adverse effects during the development process.
ESS8	Cultural Heritage	Assist in preserving PCR and in avoiding their destruction or damage. PCR includes resources of archeological, paleontological, historical, architectural, religious (including graveyards and burial sites), aesthetic, or other cultural significance.
ESS 10	Stakeholder Engagement	Promotes early stakeholder identification and engagement throughout the project life-cycle, and preparation and implementation of a Stakeholder Engagement Plan (SEP), an inclusive and responsive grievance mechanism, and information disclosure requirements.

2.8 Environmental, Health and Safety (EHS) Guidelines

Community compliance monitoring groups in Indonesia (Pokmaswas) are to be formed, trained and supported to carry out monitoring works, which entail occupational and community health and safety risks, as well as potential conflicts and risks to the environment. Similar mechanisms are anticipated in the Philippines, and other groups, such as fishing groups or women's groups, are expected to be involved in alternative livelihood activities or sub-projects that may support livelihoods in both countries. These project activities may foreseeably require some light infrastructure development (for example rehabilitated fish landing sites, fish storage or processing spaces, etc.), with attendant social and environmental implications.

The EHS Guidelines will be applied during all stages of sub-Project implementation, based on screening, described in this ESMF. The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP) and are referred to in the World Bank's Operational Policies/Environmental and Social Framework (OPs/ESF) and in the IFC's Performance Standards. The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank Group, and that are generally considered to be achievable in new facilities at reasonable costs by existing technology.

The General EHS Guidelines contain information and guidance on the following issues/aspects/impacts regarding 1. Environment, 2. Occupational Health and Safety, 3. Community Health and Safety, and 4. Construction and Decommissioning. The Industry Sector Guidelines reflect this structure and summarise sector specific impact, management, and monitoring issues. The following Industry Sector Guidelines may also be relevant in the Project scope:

I. Infrastructure

- Tourism and Hospitality Development: Project may support Pokmaswas (community compliance monitoring groups) and/or fishing communities in developing ecologically sustainable and economically viable ecotourism concepts. Developing ecotourism as an alternative or complementary local economic activity in some Project locations will foreseeably require the development of some infrastructure, along with other efforts such as training. Although the construction of hotels or other large-scale tourism infrastructure is not foreseen, the guidelines contain general advice on impacts and mitigation measures that are relevant to the potential activities as well, and are therefore noted here.

II. Agribusiness/Food Production

- Community-based, small-scale, low-subsidy and sustainable aquaculture may be developed as a livelihood strategy to offset or compensate for reduced access to marine resources as a result of

the MPAs or in the sustainable fisheries activities. Guidelines on aquaculture and its management are available in the World Bank Groups' EHS Guidelines on Fish Processing and Aquaculture IDH Sustainable Trade guideline for sustainable aquaculture, to be adapted to small scale Projects with communities under this Project (<https://www.idhsustainabletrade.com/publication/investment-guideline-for-sustainable-aquaculture-in-indonesia-2018/>)

- Sustainable fisheries activities also make reference to the FAO guideline on responsible fisheries: <http://www.fao.org/iuu-fishing/international-framework/code-of-conduct-for-responsible-fisheries/en/>
- Perennial Crop Production: The Project will work with communities who produce copra, coconut, spices and vegetables, in addition to fishing, which may all be considered for support and development as part of alternative livelihood strategies.

2.9 Human Rights Standards and Approach to Law Enforcement

The German Federal Ministry for Economic Cooperation and Development (BMZ) has developed guidelines on incorporating human rights standards and principles, including gender, in proposals for bilateral German Technical and Financial Cooperation (BMZ, 2013). The guidelines illustrate selected human rights risk areas and propose ways of enhancing the human rights orientation of development interventions. WCS also has policy references and guidelines such as its "Conservation and Human Rights: A Framework for Action" and the "WCS Policy on Human Displacement and Modification of Resource Access to Achieve Conservation Objectives".

The human rights guidelines identify several human rights risks that may be relevant in the context of the Project, to be considered in the framework of impact assessment and mitigation for this Project. The issues are captured in the wider impact assessment undertaken for the ESMF, but noted here as they pertain to the human rights references:

- Disadvantage to groups living in poverty through restrictions imposed on the use of natural resources that are the resource base on which they depend;
- Violation of indigenous peoples' participation rights through environmental and natural resource conservation measures, including REDD activities on indigenous land; and
- Exclusion of the local population from profits generated from the sustainable management of natural resources.

BMZ (German Federal Ministry for Economic Cooperation & Development) human rights guidelines specify, inter alia, that development interventions must not exacerbate existing social disadvantages, and should aim to reduce disadvantage. Planning processes should be as inclusive as possible and free, prior-informed consent (FPIC) must be respected in decisions affecting indigenous peoples. Involuntary

resettlement should be avoided, but if there is no alternative, it should be justifiable and proportionate, and compensation should be paid at full replacement costs or preferably through the provision of alternative lands of equal value and further livelihood restitution measures, and legal protection must be guaranteed. These guidelines are aligned with the requirements of the IFC Performance Standards to which this ESMF has been prepared.

Project Approach to Law Enforcement

The project activities and the people involved, whether citizen/community members or public officials including police and fisheries authorities, are bound by the applicable laws, regulations and procedures of the Government of Indonesia, as outlined below. For the Philippines part of the Project, similar boundaries are anticipated, but are to be defined and confirmed once sites have been selected and proposed project activities approved.

As an International NGO in Indonesia, WCS adheres to the applicable regulation of the GOI, No. 59 of 2016 on Mass Organisations Founded by Foreigners, attached to Basic Law No. 17 of 2013 Article 52 c) which prohibits any activities considered intelligence, surveillance or law enforcement.

The GOI is responsible for recruitment of its personnel, whether civil servants or police and military. GOI is also responsible for processing human rights violations by law enforcement officials. In relation to qualifications and checks on recruited personnel, Regulation No. 98 of 2000 on Recruitment of Civil Servants, deals with various aspects of recruitment of civil servants: Chapter III deals with screening tests for applicants; Chapters IV-VI provide for appointment and dismissal of would-be civil servants.

The GOI is also responsible for Code of Conduct for law enforcement personnel, through Basic Law No 2 of 2002 on National Police and the Regulation of the Chief of the Indonesian National Police No. 8 of 2009 Regarding Implementation of Human Rights Principles and Standards in the Discharge of Duties of the Indonesian National Police, and includes the Code of Conduct and Code of Ethics applicable to the Police. Regulation No 8 includes standards for handling of arrests and detention, including special provision for women and minors; training in human rights and supervision of implementation of police duties in line with the human rights principles and standards. The Head of Police Decree No 14 of 2011 on Professional Code of Ethics for the Indonesian Police Force is also applicable (“Perkapolri 14/2011”).

In the Philippines, Republic Act No. 6975 established the Philippine National Police (PNP) under a Reorganized Department of the Interior and Local Government. This law stated that PNP is supposed to have a Maritime Police Unit, to absorb the police functions of the Coast Guard and to be provided with sea capabilities. Republic Act 6713 establishes a code of conduct and ethical standards for public officials and employees, to uphold the time-honored principle of public office being a public trust, granting incentives and rewards for exemplary service, enumerating prohibited acts and transactions and providing penalties for violations thereof. The Philippines National Police also has an Ethical Doctrine Manual, which can serve as a key reference for dialogue in the context of Project activities involving surveillance and handling of illegal and destructive fishing activities.

WCS emphasizes that the role of community marine compliance monitoring groups (Pokmaswas in Indonesia, and similar mechanisms in the Philippines) are at monitoring level only; their objective is to encourage the prevention of destructive and illegal fishing practices and is not for law enforcement or persecution. They may not apprehend anybody allegedly doing illegal/destructive fishing activities. Should they find any activities as such, they should report their observations.

Under this Project, WCS will include general information on human rights, background checks and code of conduct in training modules for Pokmaswas/compliance monitoring groups, and in briefings for multi-stakeholder Working Group and/or prior to SMART patrol activities.

WCS follows its HR procedures and the laws of Indonesia for handling any issues related to its own personnel and their behaviour / conduct in relation to project activities and stakeholders. In a case where a WCS personnel is involved in unlawful activities and charged guilty by the court and has to conduct the punishments under the GoI Court Regulation, her/his employment is automatically terminated as stated in the HR Regulation, which has been approved/endorsed by the Ministry of Labour (GoI and Philippines)). The manager's discretion would likely also be exercised, to limit field work exposure during the period that an employee or incident is under investigation.

WCS will ensure that training modules for WCS team/partners, compliance monitoring groups, adat or customary leaders, police, other officials and community members involved in monitoring activities are developed which include material on human rights, use of force, conflict mediation and resolution, and explicit reference to the avoidance of gender-based violence and sexual harassment. Information on the Standards will be provided as part of these modules. Wherever feasible, WCS will include reference to these laws, as well as to the Standards in the UN Code of Conduct for Law Enforcement Officials" and the "Basic Principles on the Use of Force and Firearms by Law Enforcement Officials", along with other supporting information, advice and practical examples as part of the training modules and briefings for people involved in relevant project activities, such as community fisheries compliance monitoring, SMART patrol, and activities that involve engaging with people doing illegal activities (such as destructive fishing or wildlife trade).

The governments of Indonesia and Philippines are responsible for Disciplinary Procedures for unlawful conduct on the part of law enforcement personnel or others. The Disciplinary Code in Government Regulation No. 2 of 2003 on Disciplinary Code For All Members of Indonesian Police Force, elaborates from Article 27 paragraph (2) Act No. 2 of 2002 on Indonesian National Police. In the Philippines, the procedures are well established and the People's Law Enforcement Board receives complaints about police misconduct. WCS role is only to monitor and report any incidents of unlawful conduct known in relation to the Project area, for example involving community compliance monitoring group members or participants in SMART patrols.

A generic procedure for reporting of incidents (e.g. confrontation situations, including where suspects are not detained) is proposed in this ESMF, and will be adapted to local contexts on a case-by-case basis. The basic procedure is for reporting to be made to local police by the witness (compliance monitoring group member or other) via or with the acknowledgement of the Village head/office or other relevant authorities, in the case of the Philippines, yet to be defined). WCS' role will be to help monitor and record the number and nature of reports as part of data collection.

2.10 Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT)

The Project will respect the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) developed by the Food and Agriculture Organization of the United Nations (FAO, 2012). The VGGT promote secure tenure rights and equitable access to land, fisheries and forests as a means of eradicating hunger and poverty, supporting sustainable development and enhancing the environment.

The guidelines provide direction and information on internationally accepted practices for systems that address the rights to use, manage, and control land, fisheries, and forests. For indigenous peoples, consultation processes should enable Free, Prior and Informed Consent (FPIC) to be achieved where applicable. For other peoples, consultation processes should consider existing power imbalances between parties and ensure active, free, effective, meaningful, and informed participation of individuals and groups in the decision-making processes. VGGT particularly highlights that women and girls should have equal tenure rights and access to land resources and legal services to defend their tenure interests; that gender-sensitive assistance shall be provided where people are unable through their own actions to acquire tenure rights; and that men, women, and youth should be involved in relevant consultations. As per Section 3, guiding principles of responsible tenure governance, States should:

- *Recognize and respect all legitimate tenure right holders and their rights.* Reasonable measures should be taken to identify, record, and respect legitimate tenure right holders and their rights, whether formally recorded or not; to refrain from infringement of tenure rights of others, and to meet the duties associated with tenure rights
- *Safeguard legitimate tenure rights against threats and infringements.* Tenure right holders should be protected against the arbitrary loss of their tenure rights, including forced evictions inconsistent with their existing obligations under national and international law
- *Promote and facilitate the enjoyment of legitimate tenure rights.* Active measures should be taken to promote and facilitate the full realization of tenure rights or the making of transactions with the rights, such as ensuring that services are accessible to all
- *Provide access to justice address infringements of legitimate tenure rights.* Effective and accessible means should be provided to everyone, through judicial authorities or other approaches, to resolve tenure rights disputes. Affordable and prompt outcome enforcement should also be provided. States should provide prompt, just compensation where tenure rights are taken for public purposes
- *Prevent tenure disputes, violent conflicts, and corruption.* Active measures should be taken to prevent tenure disputes from arising and from escalating into violent conflicts. States should endeavour to prevent corruption in all forms, at all levels, and in all settings.

As per section 23.1, States should ensure that the legitimate tenure rights to land, fisheries, and forests of all individuals, communities, or peoples likely to be affected, with an emphasis on farmers, small-scale food producers, and vulnerable and marginalized people, are respected and protected by laws, policies, strategies, and actions with the aim to prevent and respond to the effects of climate change consistent with their respective obligations, as applicable, in terms of relevant climate change framework agreements.

WCS project team promotes adherence with the VGGT through its capacity building activities with the Government of Indonesia and the Government of the Philippines through this Project, and with appropriate safeguard processes to address the VGGT requirements.

2.11 Assessment of IFC Performance Standards and World Bank Environmental and Social Standards (ESS) Triggered

The IFC requirements are driven by its policy on environmental and social management of Projects as published in January 2012. The policy is articulated through the definition of a series of eight performance standards, covering various aspects of Project development. Those standards are closely related and similar to the World Bank ESS

Critical for this Project ESMF is the understanding of the PS and their relevance for screening and compliance review purposes. IFC PS 1 is the cornerstone and key link of all eight IFC performance standards. It requires a Project proponent to conduct an environmental and social assessment, and to establish and maintain an Environmental and Social Management System (ESMS) ‘appropriate to the nature and scale of the Project and commensurate with the level of its environmental and social risks and impacts’.

The framework under which an IFC-based assessment is made cascades down from the performance standards to a set of EHS guidelines. The guidelines often quote standards and concentrations that should be applied, but often give examples of other standards and approaches that can be used, however they are guidance and their use should be justified. As a general rule it is best to apply the standards that are quoted in the guidelines. Thus, there is a link between the IFC policy document, its performance standards through to the methodologies that are used to determine parameters, assess impacts and determine environmental and social risks and mitigations.

Table 7 below provides analysis of which IFC Performance Standards and World Bank Operational Policies (Ops) are triggered by the Project activities. An explanation of the reasons for the applicability of the PS and OPs is given thereafter. Overall, the Project is considered as being a Category B+ Project, as it is implemented in a complex environment and has potential adverse impacts on human populations, despite having mostly positive and environmentally important impacts on natural habitats. These impacts are site-specific; generally irreversible; and in most cases mitigatory measures can be designed. Further analysis of impacts is provided in the ESMF Sections 4.4 and 4.5. The scope of activities in both Indonesia

and the Philippines is for the most part the same, and as such the policy triggers are relevant for both countries, despite the Philippines sites not being determined at the time of ESMF development.

Table 7. Applicability of IFC Performance Standards and World Bank Environmental and Social Standards (ESS) for this Project

Applicable Policy / Standard	Rationale for Trigger
PS 1 / ESS1: Assessment and Management of Environmental and Social Risks (PS 1) / Environmental Assessment	The Project activities under all outputs and work packages involve diverse stakeholders, interact with multiple social and environmental variables, and involve actions which cause both positive and negative impacts, requiring assessment and mitigation.
PS 2/ ESS 2: Labor and Working Conditions	The Project activities involve employment of personnel, engagement with people in their occupations as government officials, as fisherfolk, and involves the potential involvement of community members or local contractors as labour for minor sub-projects to support alternative livelihood initiatives. Partnerships with private sector operators (for example fishing companies and copra mills) will also require attention to labour and working conditions.
PS 3 / ESS 3: Resource Efficiency and Pollution Prevention (& Management)	The Project may involve sub-projects that risk causing pollution to waterways or soil, in particular as an impact of sub-Project related to supporting alternative livelihoods.
PS 4 / ESS 4: Community/ Health and Safety	The Project brings potential health and safety risks for community members involved in compliance monitoring activities, particularly where there are people involved in destructive fishing practices, and/or where there are existing conflicts. Some alternative livelihood activities or sub-projects may also have health and safety considerations, depending on their nature. For example, fish or coconut processing or production activities involving machinery/equipment can lead to injuries.
PS 5/ ESS5: Land Acquisition & Involuntary resettlement (Restrictions on Land Use & Involuntary Resettlement)	The Project introduces and/or strengthens restrictions in access to natural resources areas that communities use for livelihood and/or cultural purposes; the Project may also involve sub-projects that require land.
PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources / Natural Habitats (OP/BP 4.04) / Forests (OP/BP 4.36)	The Project works in sensitive, fragile or biologically significant areas – marine, coastal and terrestrial. The Project’s objectives and activities are directly linked to conservation and sustainable natural resource management, with habitats of endangered species being potentially involved and impacts on forest resources also possible (North Sulawesi site, possibly Philippines sites).

Applicable Policy / Standard	Rationale for Trigger
PS 7 / ESS7: Indigenous Peoples	The Project activities involve areas traditionally used and owned or claimed by indigenous peoples, and involves engaging with these people on activities that affect their institutions and livelihoods in particular.
PS 8/ ESS8: Cultural Heritage /Physical Cultural Resources	The Project areas may potentially overlap with areas/sites of cultural heritage significance, which may or may not be recognized or registered with government authorities; in particular, some Project activities are likely to affect intangible cultural heritage such as traditional knowledge, practices and objects used in the
ESS10: Stakeholder Engagement & Information Disclosure	The Project involves a diverse set of stakeholders from international level to village and sub-group level, spanning government, researchers, industry, media, fisherfolk, security authorities, all with an interest or ability to influence Project implementation and the achievement of Project objectives.

Gaps between the relevant Indonesian and Philippine laws and regulations and the requirements under the IFC Performance Standards and World Bank Environmental and Social Standards (ESS) triggered by the Project are discussed in Section 2.11 on policies and regulatory framework. The main gaps relate to requirements for Free Prior and Informed Consent in relation to indigenous peoples (in Indonesia), scope of impacts analysed, and in the level of impact mitigation expected, to respond to the anticipated impacts. Indonesian national policies on impact assessment and mitigation do not specifically require attention to vulnerable groups, including gender or to child labour, although the law forbids this. Requirements for consultation and disclosure are also more rigorous under the IFC PS and WB policies than in Indonesian and Philippines environmental impact assessment laws, although the equivalence is higher in the Philippines (where it is more explicit and stringent in terms of consultation requirements). The ESMF and resultant ESMPs or equivalent documents to be developed for this Project's implementation will address the gaps by working to the higher standard, ensuring plans and activities are developed to meet the more specific or more stringent requirements of the PS/ESSs, while also complying with national regulations.

CHAPTER 3. PRELIMINARY ASSESSMENT OF BASELINE CONDITIONS

This section of the ESMF presents high level Project baseline area descriptions for the two provinces where the Project will be implemented in Indonesia, and a general overview of the areas being considered as part of site selection assessments for the Philippines. It also presents a discussion of selection for village level interventions, and overview of baseline data status.

In Indonesia this Project works in two provinces with Project interventions covering 24 villages – 20 in North Maluku and 4 in North Sulawesi, as listed in this ESMF Executive Summary and Chapter 1. WCS has been working in Indonesia's seascape since 2002. The two provinces that are covered in the current Project have been in WCS's work program for different periods, and with different scopes of work. In North Sulawesi, WCS has been working since 2009 but with different Project activities, scope, and locations. In the Bogani Nani National Park area, WCS has been working on terrestrial conservation activities, that are now to be expanded through to marine areas with the planned "Ridge to Reef" approach for the area. WCS is also implementing MPA and fisheries management activities through another KfW supported Project in 3 other regencies within the province of North Sulawesi, and will thus build on existing experience and relationships there. In North Maluku, WCS has been active since 2016 and has previously worked with a limited scope in 18 of the 20 intervention villages and has existing primary ecological and socio-economic survey data for 16 of the 20. The 2 villages where WCS has not yet collected any data are in North Halmahera, and surveys are planned for Quarter 3, 2020. Philippines site baseline data will be collected in 2021, and this ESMF updated accordingly. The variables considered and the methods for baseline data compilation will be essentially the same in the Philippines as in Indonesia, as described below.

3.1 Baseline Data Collection – Methods and Status

The principle objective of the data collection activities is to establish a baseline of local conditions for the relevant variables, and in some cases to update, verify and/or gap-fill the information that WCS had on some Project areas prior to this Project period. The baseline data is used to understanding the existing conditions so that key contextual issues can be understood when designing consultation activities, interventions, for assessing potential impacts and risks, and to provide a measure against which changes can be monitored and assessed in future, both during and after the Project period.

Collecting baseline data for social, economic and ecology in the Project areas in Indonesia has been designed with reference to a practical monitoring handbook: A Global Social-Ecological System Monitoring Framework for Coastal Fisheries Management (2018) which describes a key set of social and ecological indicators. For Indonesia specifically, the Government of Indonesia's Ministry of Ocean and Fisheries (KKP) also has a standard called Management Effectiveness of Aquatic, Coasts and Small Islands Conservation Areas (EKP3K), which affords a grading for MPA with categories (red, green, blue and gold) depending on data availability, institutional status, and social-ecological factors (see ESMF Section 9). For

MPAs under this Project, the KKP relies largely on data already generated by WCS or to be gathered by WCS as a Project output⁹. WCS has been undertaking ecological and socio-economic baseline data collection during 2016 to 2019 at various sites. Data collection methods used for the surveys are provided in Annex 5.

The baseline for ecology, summarized in the baseline sections for each Project area below, is derived from a combination of:

- Primary data collected by WCS prior to Project implementation in a selection of Project locations and/or during previous activities implemented in the same locations;
- Secondary data collected by WCS and various other parties for the Ministry of Ocean and Fisheries (KKP), used to establish the grading of the Project's MPAs (existing and yet to be established). The grading is based on ecological status, as well as institutional and community factors; for the ecological baseline status, the current grading is taken as the baseline condition upon which the target of increased grade ranking is to be monitored; and
- Secondary data on the areas of interest within the Sulu-Sulawesi seascape, being considered for a Project site.

For primary ecological data, a range of methods were used:

- For hard coral and habitat complexity, using modified survey method of Hill and Wilkinson, (2004) and Yulianto et al., (2012), which includes Point Intercept Transect and Quadrant Transects, noting lifeforms, reef crest, reef slope, 30 minute swim over times with 3 repetitions.
- For reef fish ecology, data on number and abundance of species and biomass in a location, visual census is used, referring to Yulianto et al., (2012), the Coral Fish Diversity Index (CDFI) of Werner dan Allen, (1998), and Hill and Wilkinson, 2004). Analysis of coral fish biomass uses the Index A and B, after Kulbicki et al., (2005).
- For macro benthos, the surveys assess abundance of species with important economic and ecological values, such as giant clams (famili Tridacnidae) noted as length and girth in centimeters, sea cucumber (famili Holothuridae), sea urchin (famili Echinoidea), crown of thorn starfish (Acanthaster planci) after Yulianto et al., (2012).
- For mangrove, the sampling sites are selected purposively using satellite imaes and field observation, with input from community members and forestry police (POLHUT); parameters considered are based on the Mangrove Community Monitoring Guide, 2nd edition (Panduan Pemantauan Komunitas Mangrove) by Dharmawan dan Pramudji, (2017). Density (Trees, Saplings, Shrubs), and include Basal

⁹ Specific indicators for ecology, social-economy will be the man source for the assessment and monitoring of output indicators 1 (improved fisheries management) and output 2 (management effectiveness of MPAs). The results of the analysis of these indicators, such as coral reef area, increase in fish biomass recorded at landing sites, etc., will be analyzed material to determine whether the marine fisheries area has been managed well, which will later be used as input to the formulation of policies in related agencies.

Area, Frequency, Relative Frequency, Relative Density, Relative Dominance, Significance Value Index, Uniformity Index and Diversity Index.

The primary methods through which the Project socio-economic and cultural baseline data is collected and compiled are a combination of qualitative and quantitative assessments, including:

- Desktop review and analysis of secondary data, from various sources including government publications, other Project reports and online journals or academic articles;
- Design and use of questionnaires for primary socioeconomic, cultural and resource-usage data, which cover the following general variables:
 - Geography and demography including residential details, gender and civil status, education level, religion and ethnic categories (including indigenous peoples), community organization membership;
 - Livelihoods including household income generating activities from fishing and gleaning/gathering, as well as non-fishing activities;
 - Fisheries behavior including catch type, location, equipment used, timing, knowledge of regulations and type/ frequency of infringements (illegal activities);
 - Supporting economic factors including assets and lifestyle habits and banking (saving/debts);
 - Information on knowledge of conflict type, cause, frequency; and
 - Awareness about endangered species, traditional use rules, conservation and climate change.
- Peer review of baseline conditions and key issues, conducted by experts within WCS and with selected stakeholders through the ESMF public consultation process.

A summary of ecological and social-economic baseline data availability for the Indonesia sites is provided in Table 8, and the summary of data for this ESMF purpose is presented, with reference to the main sources, in the following sections (3.2). The secondary data list (bibliography) and survey instruments used as primary baseline data collection tools are provided in Annex 6. Design of questionnaires and FGDs has been to gather information on fisheries management (composition of fishermen with others, fishing gear, size and capacity of vessel); monitoring of fish stock and ecological condition; on historical issues, destructive fishing practices, law enforcement and conflict resolution in regard to utilize of fisheries resources. Although all affected villages have fishing as a basic economic activity, the other local revenue-generating activities have also been identified in order to facilitate alternative livelihood planning.

Design of the Project's monitoring and evaluation scheme has been developed based on the Project log-frame with consideration of the baseline data outline above, to inform the monitoring methods and the indicators for outputs and outcomes, to review and monitor the progress achievement in target areas.

Table 8. Social Baseline Data Status Summary for Indonesia project sites

Province	District	Sub-district	Village Name	Ecological baseline status	Social baseline status
North Maluku	South Halmahera	Kayoa	Talimau	✓	✓
North Maluku	South Halmahera	Kayoa	Gunange	✓	✓
North Maluku	South Halmahera	Kayoa	Siko	X	X
North Maluku	South Halmahera	Kayoa	Lelei	✓	✓
North Maluku	Morotai Island	Morotai Selatan	Galo-galo	✓	✓
North Maluku	Morotai Island	Morotai Selatan	Kolorai	✓	✓
North Maluku	Morotai Island	Morotai Selatan Barat	Wayabula	✓	✓
North Maluku	Morotai Island	Morotai Selatan	Juanga	✓	✓
North Maluku	Tidore Islands	Tidore Selatan	Marekofo	✓	✓
North Maluku	Tidore Islands	Tidore Selatan	Maregam	✓	✓
North Maluku	Tidore Islands	Tidore Timur	Dowora	X	X
North Maluku	South Halmahera	Makian Barat	Sebelei	X	X
North Maluku	Ternate	Moti	Tafamutu	✓	✓
North Maluku	South Halmahera	Batang Lomang	Bajo Sangkuang	✓	✓
North Maluku	Morotai Island	Pulau Rao	Posi-posi Rao	✓	✓
North Maluku	South Halmahera	Gane Timur Selatan	Gane Luar	✓	✓
North Maluku	South Halmahera	Gane Timur Selatan	Ranga-ranga	✓	✓
North Maluku	North Halmahera	Kayoa Selatan	Laluin	✓ X	✓ X

Province	District	Sub-district	Village Name	Ecological baseline status	Social baseline status
North Maluku	North Halmahera	Tobelo Utara	Tolonuo	✓ X	✓ X
North Maluku	North Halmahera	Tobelo	Tagalaya	✓ X	✓ X
North Sulawesi	Bolaang Mongondow Selatan	Pinolosian Tengah	Deaga	✓	✓
North Sulawesi	Bolaang Mongondow Selatan	Pinolosian Tengah	Adow	✓	✓
North Sulawesi	Bolaang Mongondow Selatan	Pinolosian Tengah	Torosik	✓	✓
North Sulawesi	Bolaang Mongondow Selatan	Pinolosian Tengah	Mataindo	✓	✓

Table 9. MPA Status Summary for Indonesia sites

No	MPA Name	Coverage (Ha)	Year of process	Type of MPA	Legal Aspect of MPA designation/ establishment	Management plan progress	Level of EKKP3K
1	KKP3K Kepulauan Guraici in South Halmahera District	91.538,99	2018-2020	Taman Pulau Kecil (TPK)	Proposition letter to MoMAF from governor	Zoning and management plan is still on finalization process by MoMAF Sep 2020	
2	KKP Pulau Rao - Tanjung Dehegila in Morotai Island District	65.892,42	2018-2020	Taman Wisata Perairan (TWP)	Ministrial Decree No. 67/ 2020	Zoning and management approved by MoMAF and in legal process for governor regulation	
3	KKP Pulau Mare in Tidore Kepulauan Municipality	7.060,87	2018-2020	Taman Wisata Perairan (TWP)	Ministrial Decree No. 66/ 2020	Zoning and management approved by MoMAF and in legal process for governor regulation	
4	KKP3K Kepulauan Widi in South Halmahera District	315.117,92	2018-2020	Taman Pulau Kecil (TPK)	Proposition letter to MoMAF from governor	Zoning and management plan is still on finalization process by MoMAF Sep 2020	
5	KKP Pulau Makian dan Pulau Moti in Ternate Municipality and South Halmahera District	67.349,00	2018-2020	Taman Wisata Perairan (TWP)	Proposition letter to MoMAF from governor	Zoning and management plan is still on finalization process by MoMAF Sep 2020	
Total		546.959,20					

3.2 Baseline Conditions Description

Baseline information for the Indonesia part of the Project area comprises ecological and socio-economic information, taken from secondary data and primary survey reports in the specific Project sites (MPA areas in North Maluku and Boganonani in North Sulawesi) by WCS from 2017, and synthesised by geographical area in this section of the ESMF. There are also narrative village profiles developed for the majority of villages, and an example is provided in Annex 5. With 24 intervention villages in Indonesia, and more to be identified in the Philippines, the intervention village profiles are too lengthy to be included in the Project ESMF.

The social and ecological baseline data for the Project areas in Indonesia is fairly well developed – covering 20 of the 24 intervention villages, with plans for the remaining village data collection to be completed by first quarter (Q1) of 2021. Household economic data per intervention village is to be collected subsequent to this ESMF (and PF), as part of detailed planning for sub-Projects, targeted for completion in Q2, 2021. Covid-19 restrictions on access to the villages are such that this data will likely be collected along with the process of more intensive consultations on impacts and mitigation activities, to define sub-Projects to support livelihoods, between Q4 2020 and Q2 2021. Baseline information on the Philippines included here is high level only, with some description of the general Sulu-Sulawesi seascape region being assessed as part of Project implementation, to define a further work area.

3.2.1 Site selection process

The selection of project sites is based on a long process of research and advocacy on marine areas that are critical for species and ecosystem survival and sustainability. The sites expand the network of MPAs and also fill gaps in the MPA ‘maps’ in both Indonesia and the Philippines. Within the larger sites or work areas under this Project, the selection of sites for direct Project intervention in Indonesia was carried out using several criteria such as village location, village dependence on fisheries, village index, illegal activity, potential for diversification of livelihoods, presence of outside investment (private and government), existence of Village-Owned Enterprises, and the existence of community groups willing to work together on mitigation activities. For the Philippines, estimates and description of impacted areas will be provided in the revised ESMF once sites are selected. In both countries however, a direct intervention in the scale of total impacted area is beyond the capacity of Project resources and thus the Project is required to delimit the areas where impacts are most likely significant, to prioritize and focus on:

- The population centres and residential areas (village and coastal/islands) surrounding the MPAs (existing or planned);
- The locations where the users of the fishing grounds reside (Malut, Philippines, Sulu/BN);
- The four intervention villages in or adjacent to the wildlife corridor (*kawasan pengungsian satwa*) within Bogonai Nani protected (terrestrial) area and near the proposed MPA/area for improved coastal management; and

- HCV landscape area, within the regency-wide approach.

General descriptions of the Project work areas' baseline conditions is provided below.

3.2.2 North Maluku – Project Area Description

The islands of North Maluku lie within the broad divide between Southeast Asia and Melanesia, resulting in diverse communities and cultures. In North Maluku province, the Project will work directly with approximately 20 villages (10% of total villages in the Project) located in 3 target districts (South Halmahera, Tidore Kepulauan, Pulau Morotai) and in or adjacent to 5 MPAs (Rao Island–Cape Dehegila, Pulau Mare, Kepulauan Guraici, Gugusan Pulau Widi, Pulu Makian and Pulau Moti).

Additionally, the Project will support fisheries management by communities which will have an impact on approximately 220 villages in 5 districts (Ternate, Tidore Kepulauan, Halmahera Tengah, South Halmahera, Pulau Morotai). Overall, these five districts support a human population of 179,410 people, of which around 10% are fishers.

Ecological overview¹⁰

North Maluku Province is located in the heart of the coral triangle, a place with the highest marine biodiversity in the world (Turak and DeVantier 2008, Allen 2008), whom which also the 5th geographical priority of marine conservation in Indonesia (Huffard et al, 2012). It possesses high potential of marine resources but still has not been optimally managed. North Maluku marine fishery production is only utilizing 29.23% of sustainable fisheries potential based on data of North Maluku Bappeda in 2012. Meanwhile, the sensational world class diving and snorkeling spots in North Maluku have not been managed properly as well, in fact- at some locations, coral reefs are heavily damaged. A huge field of coral rubble found in shallow reefs as the result of unsustainable fishing practices using fish bombs and cyanide is one of the main causes of coral reef damage in North Maluku. These are one of the reasons for North Maluku Province government to protect and manage coastal resource areas in its territory.

In 2012, the government reserved several coastal areas in North Maluku Province into Marine Protected Areas (MPAs). These locations are: Guraici Islands MPA, which is reserved through the South Halmahera Regent Decree no 99/2012; Mare Island MPA, reserved through Tidore Islands Major Decree no 72/2012; Rao Islands MPA, reserved through the Regent of Morotai Island Decree no 523/2012; Widi Islands MPA, reserved through North Maluku Governor Decree no. 251/2015, Jiew Island MPA, reserved through Central Halmahera Regent Decree no. 523/KEP/288/2013. Among 5 reserved MPAs, ecological surveys were only conducted in 4 MPAs, excluding Jiew [which is not in the Project scope]. Identifying coral reef

¹⁰ This synthesis has been modified from Pardede, S. Muttaqin, A. Tarigan, S. A. Setiawan, F. Muhidin. 2017. Profil Ekosistem Terumbu Karang di Kawasan Konservasi Perairan Derah di Maluku Utara. Wildlife Conservation Society - Indonesia Program. Bogor. Indonesia. Further detail on the baseline can be found therein.

status in North Maluku Province is one of the early phases of MPAs establishment. Coral reef ecology study was conducted in March-April 2017 at 52 study sites located in four MPAs in North Maluku.

The baseline study in these areas aimed to determine the current status of coral reef condition, collect baseline data for initial reference in preparing management system of the conservation areas based on zonation, as well as to identify the existence of important charismatic marine megafauna found in the waters of North Maluku. North Maluku's Coral Reefs Condition suggests that the diversity of hard coral species and reef fish in North Maluku is exceptional. The diversity of coral species is estimated to exceed 80 genera based on the compilation of this study and previous studies by Turak and DeVantier (2008). The diversity of reef fish species recorded from the results of this survey reached 580 species. This value does not include some coral reef locations in other part of North Maluku that have not been surveyed to date, such as Sula Islands, Taliabu, Obi, Bacan, etc.

Besides the high biodiversity of marine species, coral reef resource potential of North Maluku is quite high but also quite damaged in some locations. Hard coral cover in shallow transects (50%) was higher than in deep transect (40%), inversely to the higher cover of rubble in deep transects (18%) than in shallow transects (11%). Although the dominant hard coral is less than 50%, it is still indicating high potential of marine resource, and suitable habitat for many species of fish and other important marine biota associated with coral reefs. Higher coverage of rubble in deep transects suggesting that more damage occurred in deeper depth. The condition of coral reefs although tended to be more damaged in deep transects but the abundance and biomass of reef fish is higher compared to shallow transects.

The average biomass of targeted fish in North Maluku was 461,37 kg.ha⁻¹ (\pm 63,24 SE; n = 52) with the largest family composition was from family Acanthuridae (32%) and Caesionidae (25%). The main targeted fish families with the highest selling values are family Lutjanidae, Ephinephelidae, and Carangidae, but they build only 5%, 3% and 2% of the total target fish biomass composition in North Maluku, respectively. In general, the size range of reef fish in North Maluku is dominated by the class of 5-10 cm (31%) and 20-25 cm (22%). The fish from size class >20 cm generally has higher economic value, and this group represents 50% of all reef fish biomass composition based on sizes.

In addition to the high diversity of marine biodiversity, North Maluku is also a habitat for some charismatic marine megafauna, which has important ecological value for the world. The southern coast of Mare Island is known as a natural habitat for dolphins (*Stenella* spp.) and black tip reef sharks (*Carcharinus melanopterus*). Widi Islands MPA, Guraici Islands MPA, and Mitita (southern Morotai) are habitat for black tip (*C. melanopterus*) and white tip (*Triaenodon obesus*) reef sharks. In west Guraici MPA, there is one important location for manta ray habitat (*Manta alfredi*) named Rajawali Island. Other than for fish, the west coast of Halmahera is also known as important feeding location for Papuan leatherback turtles. Sea cucumbers, coralivorous snails, and also COTS (*A. plancii*) are very low abundance in all regions. The high population of COTS recorded from the results of previous studies, is no longer found in this study. The density of sea urchins is quite abundant at locations outside Mare MPA, which are at the high-populated villages in south Tidore Island, while the density of giant clam was low even though it is found evenly in all regions. The following is a more detailed overview of the marine ecology in each area¹¹.

¹¹ Ibid.

Coral reefs of 4 reserved MPAs in North Maluku. Of the four marine conservation areas studied, the highest coral genera diversity was encountered in Widi MPA with an average of 10 genera ($\pm 0,77$ SE) per site, while the highest diversity of reef fish species was found outside the Guraici MPA with 82 species of reef fishes per site ($\pm 2,95$ SE). The highest average of hard coral cover was also found at sites outside Guraici MPA (56%), in Rao/Morotai MPA (52%), and Widi MPA (47%). The average density of hard coral recruitment ranged from 0,52 to 2,58 no.m⁻² with total average was 1,27 no.m⁻². There was no difference between Mare MPA, Rao/Morotai MPA and Widi MPA, but the density of coral recruitment around Guraici MPA in particular was lower than the other MPAs.

The average reef fish abundance from all 52 survey sites in North Maluku Province was of 31.376,79 no.ha⁻¹ ($\pm 1.734,55$ SE). The results showed that the lowest fish abundance was found in Rao/Morotai MPA while the highest abundance was found in sites outside Guraici MPA. The abundance of herbivorous fish in North Maluku ranged from the lowest 661,25 no.ha⁻¹ ($\pm 81,74$ SE) in Mare MPA and the highest 1.104,44 no.ha⁻¹ ($\pm 391,13$ SE) outside Mare MPA with the overall average of fish abundance was 654,10 no.ha⁻¹ ($\pm 72,08$ SE). The lowest abundance of carnivorous fish was found in Guraici MPA and the highest was found from outside Mare MPA. The average biomass of reef fishes from all 52 survey sites in North Maluku Province was 1.021,19 kg.ha⁻¹ ($\pm 93,01$ SE). The lowest fish biomass was found in Rao/Morotai MPA and the highest was found in Widi MPA. The lowest average of herbivorous fish biomass was found in Mare whereas the highest was in Widi MPA. The lowest biomass average of carnivorous fish was found in Rao/Morotai MPA, while the highest was found in the outside Guraici MPA. Biomass of target fish was found the lowest in Rao/Morotai MPA and Mare MPA, and the highest was in Widi MPA.

Five groups of important macrobenthos were observed in this study: giant clams, sea urchins, sea cucumbers, coralivorous snails, and *Acanthaster planci* (crown of thorn starfish - COTS). The density of sea cucumbers (Holothuridae), coralivorous snails, and COTS are found very low. Meanwhile, the highest density of sea urchin was outside Mare MPA with value of 36,55 no.100m⁻² ($\pm 16,70$ SE). The highest giant clam density was found outside Guraici MPA with value of 1,50 no.100m⁻² ($\pm 0,50$ SE) and the lowest was in Widi MPA with value of 0,50 no.100m⁻² ($\pm 0,13$ SE).

Coral Reefs of Mare MPA and the surroundings. The condition of coral reef ecosystem within Mare MPA is not significantly different compared to the outside Mare MPA. Survey results from shallow transects showed better hard coral cover compared to the deep transects. The average hard coral cover ranged from 11% in Maregam as the lowest and 65% in Batu Nona as the highest. The abundance of reef fishes ranged from the lowest in West Mare 2 and the highest in East Mare. The abundance of reef fishes in Mare MPA was not significantly different from outside Mare MPA, similar with the value of reef fish biomass which is not different significantly between inside and outside the MPA. Meanwhile, the lowest average of reef fish biomass was found in front of Maregam village and the highest was found in East Mare. Abundance and biomass of herbivorous fish were higher outside the MPA than in the inside MPA, whereas abundance and biomass of carnivorous fish tend to not differ between inside and outside MPA. The highest target fish biomass is at the site of West Mare and West Mare 2. Based on the scoring and weighing values of the 11 ecological parameters observed in each location, the best-preserved sites from ecological point of view are Marekofo and Batu Nona. Therefore, these sites are highly recommended for

full protection and managed efficiently in order to support the desired conservation target of Mare MPA, which is sustainable use of coastal resources.

Coral Reefs of Guraici MPA. The condition of coral reef ecosystem is better in the outside Guraici MPA compared to the inside Guraici MPA. Data collection from shallow transects showed better hard coral cover compared to in deep transects. The average hard coral cover ranges between the lowest 18% in Gafi and the highest 71% in Gunange. The abundance of reef fish ranged from 68.250 no.ha-1 ($\pm 8.188,2$ SE) in Guraici as the lowest and 11.696 no.ha-1 ($\pm 1.448,7$ SE) in Gafi as the highest. The abundance of reef fish outside Mare MPA was significantly higher than inside Guraici MPA, but there is no significant difference in reef fish biomass. Meanwhile, the highest reef fish biomass was in Miskin whereas the lowest reef biomass averages were found in Taneti. Abundance and biomass of herbivorous fish are not significantly different between outside and inside the MPA, as well as abundance and biomass of carnivorous fish. The highest target fish biomass is in the Legoma and Miskin areas. Based on the scoring and weighting scores on 11 ecological parameters studied in each location, the best locations are Legoma and Tanjung Marikoko, as well as the three survey sites outside the Guraici MPA; they are Miskin, Tanjung Modayama, and Sagawe. Compared with 2007 data, the average Guraici hard coral cover in 2017 did not change significantly, while the abundance and biomass of reef fish in 2017 experienced a significant increase.

Coral Reefs of Widi MPA. The condition of coral reef ecosystems in Widi was not significantly different between those surveyed at shallow transects compared to the deep transects. The average hard coral cover ranges between the lowest 17,5% in Daga and the highest 69,8% in Sukar. The abundance of reef fish ranged between the lowest in Hilang, and the highest in Dadawe Veda. Meanwhile, the lowest reef fish biomass was found at Hilang, whereas the highest in Dadawe Gane. Abundance and biomass of herbivorous fish are not significantly different from abundance and biomass of carnivorous fish. The highest target fish biomass was found at the Dadawe Veda and Daga sites. Based on the scoring and weighing values on the 11 ecological parameters studied in each location, the best locations are Dadawe Weda, Kokota, and Dadawe Gane, suggesting that these sites are the top priority for conservation target of coral reef management program in Widi MPA.

Coral Reefs of Rao/Morotai. The coral reefs of Rao/Morotai MPA was in better coverage at shallow transects compared to the deep transect. The average of hard coral cover ranged between 32,3% in Ngele-Ngele Kecil as the lowest and 63% in LeoLeo as the highest. The abundance of reef fish ranged between 9.253,33 no.ha-1 ($\pm 1.837,81$ SE) in Laumodoro as the lowest and 37.936,66 no.ha-1 ($\pm 1.501,39$ SE) in Loleba Besar as the highest. The lowest reef biomass was in Laumodoro and the highest was in Saminyamau. The abundance of herbivorous fish was not significantly different from the abundance of carnivorous fish, but the herbivorous fish biomass was significantly higher than the carnivorous fish biomass. The highest target fish biomass is in Saminyamau and Gosong Wayabula location. Based on the scoring and weighting values on the 11 ecological parameters, the best locations among all sites surveyed in Rao/Morotai MPA are Loleba Besar, Aru Burung, Saminyamau, Wayabula, Leo-Leo, and Ngele-Ngele Besar.

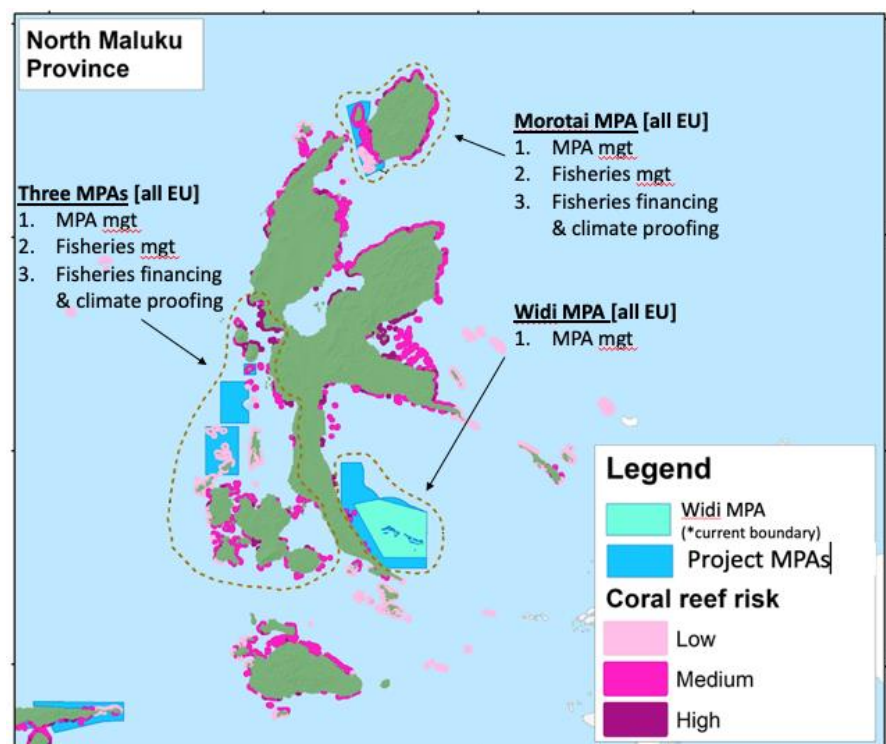


Figure 4: Existing and Potential MPA in North Maluku

Socio-economic and cultural overview¹²

Total villages surveyed as part of the socio-economic baseline were 58 villages, and there were 541 household respondents and 119 key informants participating in the survey. All respondents were male, and generally graduated from primary school. Sixteen of the 18 Project intervention villages were included in the survey, and narrative information on these villages has also been recorded as village profiles.

Most of respondents in Guraici, Jiew, Mare and Widi MPA were Muslim, whereas in Rao Island MPA most were Christian. Almost all respondents were in the productive age (15 - 64 years). There are 21 ethnicities were identified in the survey location, with the composition varying in each MPA. The language used daily by respondents other than Bahasa Indonesia is the local language of each ethnic group. Ethnic majority in Guraici Islands MPA is Makian and Bajo. Mare Island MPA is dominated by Tidore ethnic. Widi Islands MPA's ethnicity is the most diverse, with Tidore, Makian, Patani and Bajo peoples coexisting there.

Households in the North Maluku Project area MPAs ranges from 3 to 6 family members. Mare MPA has the highest average relative wealth score compared to other MPAs. The lowest average Material Style of Life (MSL) score is Rao Islands MPA and only Mare MPA has a higher score than the average across the study area. The distribution of respondents' wealth based on MSL score also shows that Mare MPA's respondents are better off than those in the other MPAs. A small proportion of respondents mentioned

¹² This synthesis has been modified from WCS (2017) USAID SUSTAINABLE ECOSYSTEMS ADVANCED (SEA) PROJECT Socio-Economic Baseline Survey Report, Site: Guraici, Jiew, Mare, Rao and Widi MPA (North Maluku). Further detail on the baseline can be found therein.

they have taken a loan in the last one year. For those who have loans, sources vary from friends/ family to banks, boat owner/boss, loan sharks and other financial institutions. Most survey respondents are not part of any community organization.

People in five MPAs perceived fishing as an alternative livelihood, but most of the respondents in the baseline study have fishing as their main livelihood options. Besides fishing, they usually have another livelihood option such as farming or working in the informal sector. The main fishing gear used by most of fishers is hand line. The most efficient fishing gear based on the average catch and operational cost is one boat-operated purse seine, followed by encircling gillnets, and set long lines. Target fish are barracuda, skip jack tuna, snapper, grouper, mackerel scads, mackerel tuna, parrot fish, chub mackerel, and tuna. Most of target fish can be catch all year around although the number of catch varies from time to time. Fisheries related infrastructure is limited in the surveyed villages. Most fisherfolk sell their fish directly to the nearest local trader. There are no traditional rules on area or time closure (tenure/manage access/sasi) in effect. Most of respondents mentioned that there are rules about fishing gear forbidden in their area, namely blast fishing, cyanide, hookah and trawling. Based on respondents' perceptions, the violation of rules is low. Related to Endangered Threatened and Protected (ETP) species, two third of baseline survey respondents did not understand rules related to ETP species.

In terms of natural and economic potential, all the Project areas have potential to be developed as tourist destinations. They have beautiful and pristine landscape, rich biodiversity both on land and underwater, and unique cultures. The main barriers identified to developing tourism are limited infrastructure (transportation, accommodation), promotion, regulation, and human resources.

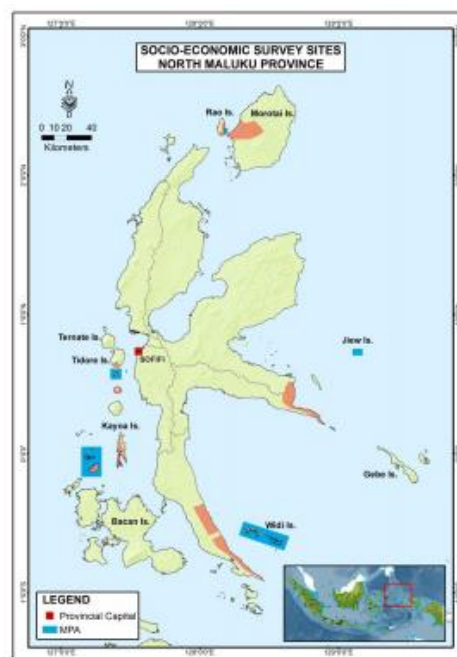


Figure 5: Socio-Economic and Cultural Baseline Area Map (North Maluku)

3.2.3 North Sulawesi – Project Areas Description

In North Sulawesi, the Project will work with 3 MPAs in 3 districts (North Minahasa, Sitaro and Sangihe) to conserve habitat and threatened species and support sustainable livelihoods; all districts where WCS currently works under the BMU/IKI Project, “The Marine Biodiversity and Coastal Livelihoods in Sulawesi/Coral Triangle Project”. These existing BMU investments will be enhanced through the addition of fisheries harvest control rules within MPA regulations, and the strengthening of specific MPA institutional capacities related to planning, management and administration. The three districts have a total population of approximately 300,000 people, with approximately 38,000 living in or adjacent to the MPAs. Baseline conditions are documented in the The Marine Biodiversity and Coastal Livelihoods in Sulawesi/Coral Triangle Project ESMF. In addition, the Project will pilot an integrated land-sea management approach at the northern Sulawesi landscape of Bogani Nani, which includes the Bogani Nani-Wartabone National Park, and watersheds providing essential ecosystem services to 152,000 people living along the southern coast. An overview of baseline information on the Bogani Nani area where the Project will focus is presented below.

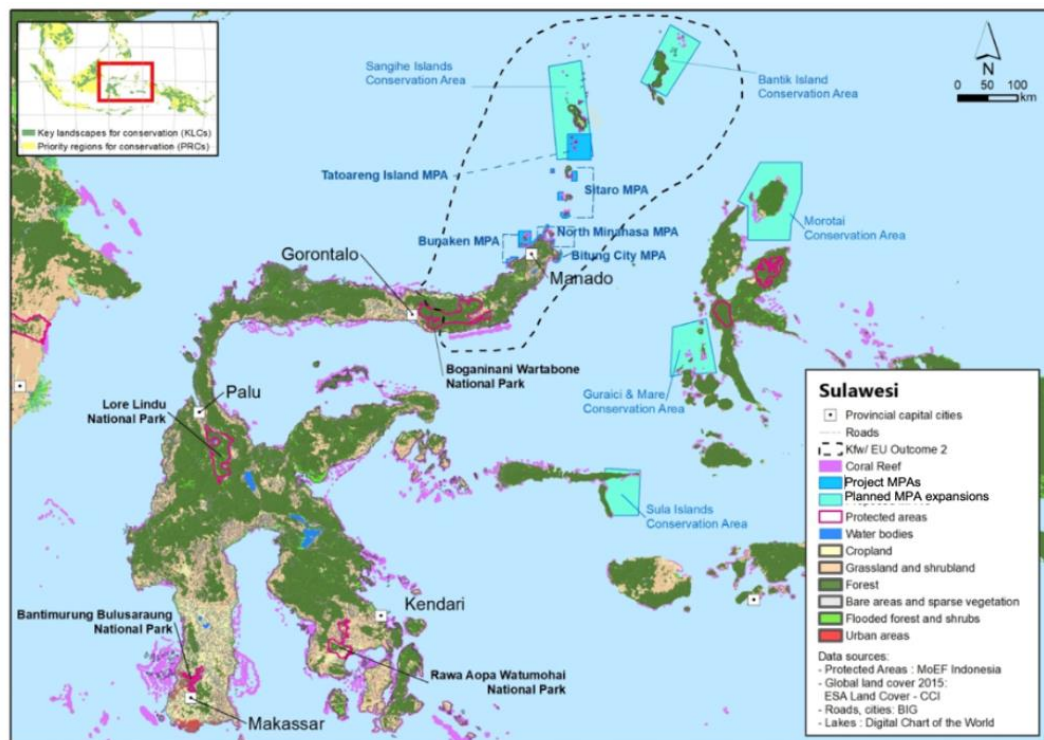


Figure 6: North Sulawesi MPA Network

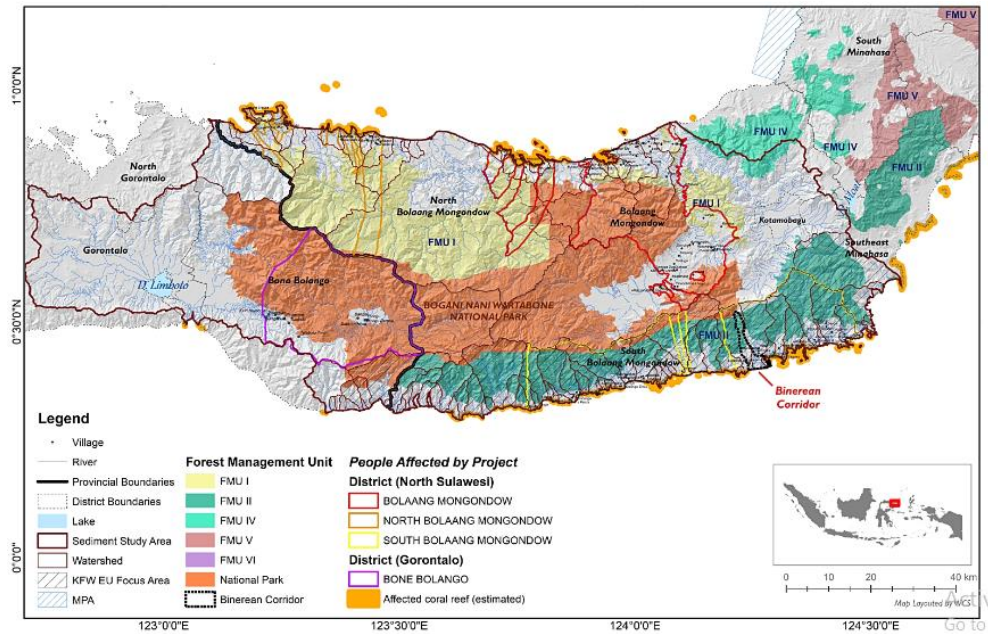


Figure 7. Ecological baseline (Bogani Nani area, North Sulawesi)

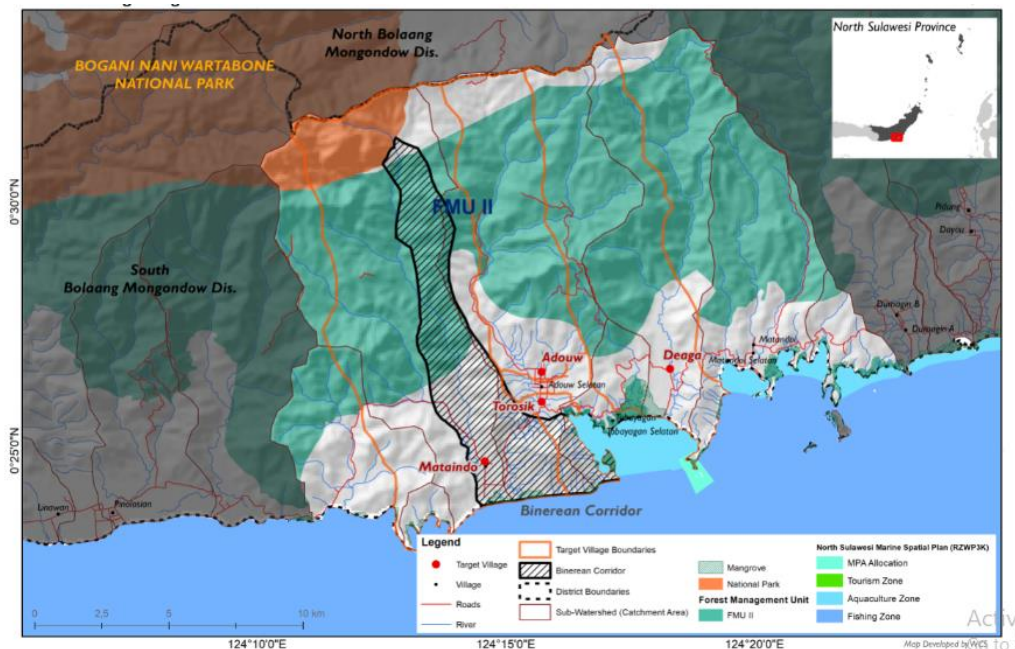


Figure 8. Project Site Maps, North Sulawesi

Ecological baseline (Bogani Nani area, North Sulawesi)

Bogani Nani area in northern Sulawesi, Indonesia covers a total area of approximately 500,000 hectares. The Bogani Nani landscape watershed feeds into marine and coastal ecosystems on the southern coast where WCS conducted marine surveys across 1,245 ha of coral reef in 2015. The surveys revealed a coral biodiversity richness higher than that in the UNESCO World Heritage Site of Bunaken NP, rich seagrass

and mangrove ecosystems, home to dugong, whale shark and other threatened marine species; and also important for their carbon sequestration services. The beach provides vital nesting grounds for three turtle species (leatherback, olive ridley and green), as well as the endemic maleo, a megapode and flagship bird for the North Sulawesi Province. Yet despite this biodiversity richness, the coastal ecosystem and its coral reefs fall outside of the provincial MPA network, making it especially vulnerable to anthropogenic threats. More generally, in both landscapes, sedimentation and nutrient/waste run-off resulting from unsustainable land use practices, caused marine pollution in the form of ocean plastics, diseased fish stocks, poor human health and more.

The Binerian Corridor within Bogani Nani National park (Bolaang Mongondow Selatan Regency, Pinolosian Tengah Sub-District) has been created conceptually and on the ground to protect high conservation value areas, and in particular to support the need for refuge of local wildlife, such as the Maleo bird, pigdeer and dwarf buffalo.

Social baseline (Bogani Nani area, North Sulawesi)

There are 4 villages inside the corridor which are targeted as Project intervention villages. They are all within 13 km of the Binerian corridor (protected area). The village populations are all heterogeneous ethnically, with Mongondow being the dominant group in all four villages. There are no people identifying as indigenous or meeting the characteristics of indigenous peoples by local or international definition. The economies in the villages show some diversity but are all heavily reliant on agriculture, in which the majority of people are occupied. The fishing activities are simple, using limited equipment. Illegal activity level in the 4 villages is considered moderate and in the area this refers to a mixture of poaching and logging, rather than destructive fishing methods. All villages have an established BUMDES or village enterprise unit, however information in their activities is not yet available. Similarly, household level economic data and information on the types of, and participation in, social organisations or other types of collective activity at the village level has yet to be recorded. The basic demographic information and some overview of other baseline characteristics in the intervention villages is provided in Table 10 below.

Table 10. Overview of Social Baseline for the North Sulawesi Intervention Villages

Village name and main ethnic groups	Total population / male/female	Number of households	Number of fishers / farmers	Characteristics
Deaga (Mongodow, Gorontalo, Sanger)	567 / 295 / 272	191	31 / 95	Coastal village, under-developed (lagging), has a port Has a village regulation on the management of its mangrove ecosystem Has some cultivation of mangrove crabs Formerly hosted/received/participated in a project called Mangrove for the Future Designated as a tourism village by DPMD and Dispar (government agencies) Formerly hosted/received/participated in the SUSCLAM (Sustainable Coastal Livelihood and Management Program)
Adow (Mongodow, Minahasa, Javanese)	1156 / 587 / 569	307	0 / 307	Land-locked village, under developed (lagging) Has some cloves plantations/gardens Has a farmers group (gapoktan) in place since 2013
Torosik (Mongodow, Gorontalo, Sanger)	695 / 360 / 335	191	40 / 70	Spans land and coast, a developed village Sanger ethnic living in one hamlet are farming on steep slopes Has a protected mangrove forest (hutan lestari) Has high incidence of turtle hunting Has previously done participative village mapping Has a harbour/port, is on a sailing / shipping route Is flood-prone Has eco-tourism potential and fisheries (keramba/cage) potential
Mataindo (Mongodow, Gorontalo, Bugis)	639 / 342 / 297		20 / 371	Spans land and coast, a developed village with WCS intervention since 2007 Has coral reefs in good condition Is flood-prone

Village name and main ethnic groups	Total population / male/female	Number of households	Number of fishers / farmers	Characteristics
				<p>Has previously received the TMMD program (TNI Manunggal Membangun Desa) where the military built a new road for farmers' enterprises</p> <p>Has basic infrastructure for developing eco-tourism based on maelo and turtles as key attractions</p> <p>Has strong local community and government support/attitudes</p>

3.2.4 Philippines – Project Areas Description

The Project will most probably benefit communities in the Sulu-Sulawesi marine ecoregion of southern Philippines. Initial assessments and scoping (Year 1) will determine Project sites and priority activities, which may include creation of sustainable fisheries co-management systems, enhanced management of MPAs, integrated land-sea management approaches, deployment of SMART MPA patrol information systems, creation of fisheries harvest control systems in MPAs, and support to counter illegal fishing and marine wildlife trafficking. Seven specific sites within the broader Sulu-Sulawesi Seascape were selected during the first phase of the scoping study completed in July 2020, and of those, the Bohol Sea have become the focus for more detailed assessment. As such, baseline information presented here is an overview of the marine biodiversity status of the Philippines in general and on the fisheries sector there, the general status of data on its MPA, and description of the Bohol Sea being considered for further investigation. Baseline data on the specific sites will be compiled once they are selected and the potential project activities have been approved.

The Convention on Biological Diversity notes that the Philippines is one of 18 ‘mega-biodiverse’ countries on earth, containing two-thirds of the world’s biodiversity; with 700 threatened species, making it a global conservation priority. Situated within the Coral Triangle, the global epicentre of marine biodiversity, it has a higher concentration of (marine) species per unit area than anywhere in Indonesia and Wallacea. It has been described as the ‘centre of marine shorefish’ globally (Carpenter and Springer, 2005).

In 2017, the Philippines ranked 9th among the top fish producing countries in the world with a total production of 4.125 million metric tons of fish, crustaceans, molluscs, and aquatic plants (including seaweeds); this catch represented about 2% of world production, with a value of P122.02 billion (approx. USD 2.4bn), or 1.3% of GDP. EDF reports that ninety percent of fish caught in the Philippines is consumed locally.

Broadly speaking, these fisheries within one of two categories; municipal fisheries (within 15km of shore) and commercial fisheries. BFAR reports that more than close to two million Filipinos derive their livelihoods from fishing, although others have put that figure closer to five million [source]. 99% of these fishers are local, municipal fishers, who account for 49% of total national landings (BFAR, 2018). By volume, the Philippines largest export-oriented fisheries are tuna (with 171,451MT landed by commercial fisheries in 2018), seaweed and shrimp, as well as other finfishes, crabs, octopus, ornamental fish and sea cucumber (BFAR, 2018). Within municipalities, target stocks vary enormously from place to place and detailed assessments exist for many sites. By virtue of the high volumes they produce, small pelagic fisheries are vital to local and regional food security. Numerous species are targeted by municipal fisheries using seines, gillnets and lift-nets; by volume, primarily sardines (*Sardinella* spp.) and anchovies (*Stolephorus* and 32 *Engraulis* spp.) but also herrings, skipjacks, flying fishes, scads and small tunas including Skipjack and Bullet tuna (Dalzell, 1988). A landmark study of these fisheries conducted thirty years ago confirmed their general decline at that time (Dalzell, 1988). Many municipal fisheries consist of multi-gear, multi-species fisheries which presents challenges for monitoring and management of effort and stocks.

The Philippines' first MPA, the Hundred Islands National Park was created in 1940 by Presidential decree. Since that time, more than 1800 locally managed MPAs in addition to over 70 nationally managed sites have been created, making Philippines' MPA system one of the world's largest. Among its most famous are the Tubbataha Reef Natural Park (a World Heritage Area) and the Apo Reef Natural Park that was established in 1996. The CTI-CFF website's MPA webpage currently notes the existence of 1800+ local MPAs and 73 national (E-NIPAS) sites, with coverage of 33,825.78 km² for 'nationally-managed sites' only. This data appears to be the most reliable and up-to-date. No figures are currently provided by DENR's website. Protected Planet, the World Protected Area Database currently states that the Philippines has only achieved 1.16% coverage (or 21,269km²) of its territorial waters. The Philippines' own MPA Support Network Database was offline for updating during the preparation of the ESMF and could not be interrogated. The CTI's ReefBase MPA Atlas does not include a figure for the extent of the Philippines' MPA coverage. The Philippines National Biodiversity Strategy and Action Plan (2015- 2028), published in 2016, stated that there were 1,653 MPAs (1620 local and 33 national) but did not report coverage.

With many local MPAs in the tens of hectares, their ability to support ecosystem function may be limited; they may be too small, in the wrong place, or be designed around biodiversity objectives that may not fit with fishers' ecological objectives. Research undertaken by Silliman University (Abesamis et. al, 2017) examined fish larval dispersal patterns among MPAs along a 90 km section of coast in Negros. This research essentially validated assumptions that individual MPAs were connected ecologically; there was an exchange of larvae between MPAs, many of which were also seeding fishing grounds. In demonstrating this connectivity, the research has helped to build the case for larger and more connected reserves based on their importance in replenishing stocks of reef fishes.

The Bohol Sea ecosystem is a 7,946km² inter-island sea between the islands of Bohol and Mindanao, and was recently declared a Fisheries Management Area (FMA 9) by the Philippines government. It supports vital municipal fisheries, and contains 11 national (NIPAS) protected areas, and numerous municipal MPAs and MPA networks. Siquijor and Camiguin Islands are also situated in this ecosystem. The Sea's unique ecological assets include populations of marine mammals and ETP elasmobranch species. Several suitable partner organisations are located within the vicinity of this site, and there is a timely opportunity for WCS to work with government partners to help establish the new FMA, and integrate MPAs within a new ecosystem-level management framework.

CHAPTER 4. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

This chapter presents an overview of the anticipated environmental impacts including identification of the key impact-generating activities, discussion of potential benefits and risks, with a focus on the Project activities most directly having a negative affect on human populations and the environment. Analysis is based on the understanding of the Project activities, work areas, and on discussions through workshops with the Project teams familiar with the Project areas, and with Project stakeholders in each province in Indonesia and the areas being considered for sites in the Philippines. It is also based on past impact assessment and evaluation experience in the marine conservation and community development arena, using professional judgement. This chapter begins with an overview of the causes underlying problems which the Project seeks to address, then describes the preliminary screening methods and criteria for determining the impact boundary, followed by key Project activities that are likely to generate impacts. Next, this chapter presents results of specific impact analysis, applicable for both the Indonesia and Philippines settings.

4.1 Problem Overview

The issues underlying the depletion of fish stocks, destruction of coral reef and other critical habitats, and other threats to marine resources in both Indonesia and the Philippines generally encompass:

- Limitations in the capacity of national, provincial, local and village government authorities to regulate the use of resources, to effectively administer and enforce the laws, to survey and monitor areas;
- Limitations in community, and in particular fishermen's, knowledge of conservation laws and rationales, including of protected areas, protected species, and of fisheries management requirements;
- Breakdown in traditional systems of social organization, in particular for natural resource and conflict management, and associated with this, changed roles and responsibilities, authority and loss of detailed ecological knowledge of local areas by local peoples; and
- Changes in equipment and the affects and demands of technology; migration and demographic changes; political and economic factors including changing policies and market conditions well beyond the influence or understanding of most local people.

The Project seeks to address these issues through multi-dimensional interventions, as outlined in Section 1.2 (Brief Project Overview). Discussion of the types of activities on the ground is also provided in Section 4.2 below. The Project aims to conserve marine ecosystems and important fisheries through creation and improvement of MPAs and improved management of commercially and ecologically important fisheries, including introducing an integrated terrestrial and marine or "Ridge to Reef" management approach in

North Sulawesi. Building capacity and sharing knowledge across strategic platforms is another important way the Project addresses its objective. As such, the Project is thus designed to generate positive changes, from policy level through to institutional strengthening, as well as on-the-ground activities with local village communities and fishermen in particular, and in the case of Sulawesi Utara (Bogani Nani area), also with farming communities.

4.2 Screening for impacts

The ESMF presents the analysis of impacts based on initial screening, analysis and consultation, and tools for the future screening of sub-projects, or of any additional Project activities that could be introduced in future. As a part of this process, the review of activities that will generate activities (Section 4.3) and the definition of Project impact boundary and criteria for intervention villages, based on impact area (Section 4.4) were developed. In other words, these analyses were the result of screening activities carried out by the Project as part of ESMF preparation.

Screening is generally done at two stages:

- **At early stages** - screening allows for initial engagement with community and other stakeholders; it is done to outline the impacts and relevant regulations and guidelines to be consulted, to help shape baseline data collection. At early stages it also helps to identify potential measures to be developed to address impacts and risks; and to determine what arrangements are needed to meet eligibility or compliance requirements; and
- **At later or advanced stages** - screening allows for more detailed planning based on more solid baseline data, understanding of proposed sub-projects or field-specific interventions, an assessment of impacts, consideration and decisions on activities or sub-activities (including proposals) to be implemented, with reference to local regulations. Later stage screening also utilises a 'negative list' of sub-projects or activities that will be excluded from Project support (Annex 3); and confirms what mitigations or safeguard measures are required (for example, preparation of a Livelihood Restitution Plan).

The Annex 3 provides the "negative list", a list of sub-Project activities that will not be funded by the Project based on the safeguard policy considerations, to reduce risk and avoid cumbersome interventions that are not commensurate with the level of impact. It is also based on lessons learnt and experiences gained in other similar Projects in Indonesia.

4.3 Project Activities Potentially Impacting the Environment and Communities

Potential risks and impacts were flagged in the earliest screening stage, noted in ESMF Section 2 in relation to IFC PS and World Bank OP triggers and applicable for both Indonesia and the Philippines. Further to this, screening for potential impacts was done to identify and better understand the Project activities that are considered the most likely to generate direct social, economic and/or cultural impacts, as set out in Table 11 below.

Table 11. Main Types of Project Activities that Will Generate Impacts

Type of project activity	Reference	More specific description of activities
Activities that introduce and strengthen enforcement of MPA zones and restrictions	Activities I.6, I.7, III.2	Compliance monitoring activities Changes in fishing areas and/or seasonal access and practices Changes in equipment used or allowed
Activities that introduce new fisheries management approaches	Activities I.1, II.2, III.4	Changes in fishing areas and/or seasonal access and practices Changes in equipment used or allowed
Activities that introduce alternative livelihood strategies or actions	Activities I.7, II.3, III.3	Land or other resources required New knowledge (processing, marketing, transport, tourism development etc)

4.4 Project Impact Boundary and Criteria for Identifying Impacted Areas

Section 3.2.1 outlines the overall identification of Project work areas and sets out the criteria used to select village sites for direct intervention. The initial screening involved considering the major areas in North Maluku and North Sulawesi, as well as the Southern Philippines in general, along with the analysis of Project activities that will generate most impacts. This leads to the identification of the areas where impacts are considered most likely to occur, namely in the population centres and residential areas (village and coastal/islands) surrounding the MPAs (existing or planned), as well as where the users of the fishing grounds reside. Further criteria was applied, as described in Section 3.2.1. Given the expansiveness of the fisheries areas, the overall Project boundary constitutes a very large area in reality, far greater than can be directly involved in Project activities with personnel on the ground. For the activities within Indonesia, the following estimates the impact boundary and numbers of affected peoples:

- In North Maluku province, the Project will work directly with approximately 20 villages (10% of total villages in the Project) located in 3 target districts (South Halmahera, Tidore Kepulauan, Pulau Morotai) and in or adjacent to 5 MPAs (Rao Island–Cape Dehegila, Pulau Mare, Kepulauan Guraici, Gugusan Pulau Widi, Pulu Makian and Pulau Moti).

- Additionally, the Project will support fisheries management by communities which will have an impact on approximately 220 villages in 5 districts (Ternate, Tidore Kepulauan, Halmahera Tengah, South Halmahera, Pulau Morotai). Overall, these five districts support a human population of 179,410 people, of which around 10% are fishers.
- In North Sulawesi, the Project will deepen existing work with 3 MPAs in 3 districts (North Minahasa, Sitaro and Sangihe) to conserve habitat and threatened species and support sustainable livelihoods under the BMU/IKI Project. The three districts have a total population of approximately 300,000 people, with approximately 38,000 living in or adjacent to the MPAs.
- With the pilot of an integrated land-sea management approach at the northern Sulawesi landscape of Bogani Nani, which includes the Bogani Nani-Wartabone National Park, and watersheds providing essential ecosystem services to 152,000 people living along the southern coast.

For the Philippines, estimates and description of impacted areas will be provided in the revised ESMF once sites are selected. The number of intervention villages or Barangay in the Philippines is yet to be determined.

In both countries however, a direct intervention in the scale of total impacted area is beyond the capacity of Project resources and thus the Project is required to delimit the areas where impacts are most likely significant, to prioritize and focus on:

- The population centres and residential areas (village and coastal/islands) surrounding the MPAs (existing or planned);
- The locations where the users of the fishing grounds reside (Malut, Philippines, Sulut/BN);
- The four intervention villages in or adjacent to the wildlife corridor (*kawasan pengungisan satwa*) within Bogonai Nani protected (terrestrial) area and near the proposed MPA/area for improved coastal management; and
- HCV landscape area, within the regency-wide approach.

The potentially impacted groups therefore include artisanal and subsistence fisher folk (men and women) and commercial operators, any of whom may be using traditional, modern or even destructive fishing methods. Specific focus should therefore be on:

- The fishing communities that rely wholly or mostly on the MPA/fisheries area for their livelihoods and any/or for any other key social or cultural activities;
- The fishing communities that rely wholly or mostly on the key species targeted for protection (via changed fisheries management regime), namely grouper and snapper fisher folk/companies; and
- Any populations or groups whose activities in the MPA/fisheries or Bogani Nani binerian corridor area on land and the planned 'Ridge to Reef' pilot areas will be stopped (banned or restricted), such as village communities or other entities such as fishing or tourism companies, for example.

Within these geographic and social boundaries for determining Project impacts, the Project applies the following criteria for selection of 24 target Project Intervention Villages in Indonesia, as agreed with the Fisheries agencies in each site:

- Village located in MPA/conservation target areas;
- Village development index consisting of “advanced, less developed and disadvantaged” village based on village infrastructure and facilities;
- Villages possessing resource development potential for diversification of livelihood, eco-tourism potential and fisheries product development; and
- Villages with potential for community acceptance/receptivity to the Project activities.

4.5 Assessment of Project Impacts

This section of the ESMF presents analysis of potential Project impacts according to each of the applicable IFC Performance Standards and World Bank ESS, with discussion of the main impacted groups, and the significance of the key impacts, as well as discussion of further (secondary) and cumulative environmental benefits. A matrix of key Project impacts on social, cultural, economic and environmental variables provided below (Table 12).

Table 12. Impacts and Mitigations, Based on Performance Standards (PS) and Environmental & Social Standards (ESS)

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
PS 1 / ESS1: Assessment and Management of Environmental and Social Risks (PS 1) / Environmental Assessment	<p>The Project activities under all outputs and work packages involve diverse stakeholders, interact with multiple social and environmental variables, and involve actions which cause both positive and negative impacts, requiring assessment and mitigation.</p>	<p>Activity I.1: Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods at two fisheries units in North Maluku (WCS, Pemda North Maluku, including DKP)</p> <p>Activity I.3: Develop science and modelling tools to inform fisheries management planning (WCS, EDF, Pemda including DKP)</p> <p>Activity I.6: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of existing MPAs in North Maluku (WCS, Pemda</p>	<p><u>Positive:</u></p> <p>Fisheries, coral and coastal benefits are noted under PS 6.</p> <p>In all landscapes, anticipated to be improvements in eco-systems services; reduced sedimentation and nutrient /waste run-off resulting from unsustainable land use practices; reduced marine pollution in the form of ocean plastics and diseased fish stocks; links to improved eco-system and human health.</p> <p>Improvements in population (human) awareness of conservation, NRM, sustainability and related behaviours.</p>	<ul style="list-style-type: none"> • Preparation of ESMF, with screening tools for assessment of impacts of individual activities or sub-projects • Provision of a negative list, to preclude activities with high severity or large scale impacts (> eg land requiring compensation; construction or activities requiring ESIA/AMDAL) • Preparation of guidance such as ECOPS /ESMP • Training for Project personnel

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>North Maluku, including DKP and Bappeda)</p> <p>Activity I.7: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)</p> <p>Activity II.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Sulawesi, including Bappeda, DKP, BKSDA)</p> <p>Activity II.4: Collaborate with government agencies, local communities and other relevant stakeholders to pilot an integrated management</p>	<p>Increased household income security and resilience, economic empowerment of women in fishing communities,</p> <p>Improved knowledge of and participation in value chains and alternative livelihood options, and improved business skills.</p> <p>Increased social coherence, cooperation, awareness of common interests.</p> <p>Strengthened participation and increased cooperation among communities on marine resource management and protection (e.g. coordinated community monitoring involving multiple villages).</p>	

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>(‘Ridge to Reef’) approach in the northern Sulawesi KLC#3 (WCS, Pemda, including Bappeda, DKP, BKSDA)</p> <p>Activity III.1: Conduct an initial assessment of potential Project site/s (Philippines)</p> <p>Activity III.2: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of selected MPAs in the Philippines</p> <p>Activity III.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (Philippines)</p>	<p><u>Negative:</u></p> <p>Potential short term decrease in fish catch/incomes, as it may be difficult to match the economic returns from unsustainable fishing practices. It is not clear when the expected benefits of fish stock and catch size increases from MPAs would be felt by communities whose access and activities in no-take zones and ‘restricted use (inshore) zones’ are affected.</p> <p>The communities have difficulties in meeting the technical requirements of certification schemes due to different knowledge systems.</p>	

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>Activity III.4: Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods in selected coastal fisheries (Philippines)</p> <p>Activity III.5: Assist relevant authorities in reducing illegal fishing and trafficking of ETP species at selected Project sites (Philippines)</p>	<p>The lack of participation of women and other vulnerable groups due to the prevailing social and cultural norms within the communities.</p> <p>Potential for conflict between affected parties and/or with authorities may be anticipated.</p> <p>Potential polarization of sub-groups within a community or between villages/areas, or manifesting as intergroup tensions. For example, local political and economic elites are able to direct unfair share of Project benefits for personal use the domination of opportunities to participate in Project activities by village or community elites, i.e. the</p>	

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
			unfair use of status and education to access Project benefits.	
PS 2 / ESS 2: Labor and Working Conditions	<p>The Project activities involve employment of personnel, engagement with people in their occupations as fisherfolk, and the potential involvement of community members or local contractors as labour for minor sub-projects to support alternative livelihood initiatives.</p> <p>Project activities may also involve peoples in whose communities child labour is present or common.</p> <p>Project may development partnerships with the</p>	<p>Activity I.7: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)</p> <p>Activity II.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Sulawesi, including Bappeda, DKP, BKSDA)</p> <p>Activity III.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood</p>	<p><u>Negative/Positive:</u></p> <p>Sub-projects related to alternative livelihood strategies can generate job opportunities for local people; employment terms and conditions may not meet national standards or involve exploitative terms or conditions.</p> <p>Partnerships with private sector, related to tourism, fisheries or copra processing, for example, may generate employment opportunities for which labour standard compliance will be required.</p> <p>In some cases, there are community traditions that involve children in</p>	<ul style="list-style-type: none"> Alternative income generation plans should pay attention to the involvement of children. Project meetings and documents (including tender documents), as well as briefing of parties involved, to include specific reference to laws and norms related to child labour. Tender documents or Project activity plans to include reference and support to meet legal requirements for working conditions.

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
	private sector, thus additional labour impacts are possible.	development strategies (Philippines)	household economic activities, but do not reduce, restrict or replace their participation in schooling or in normal childhood playtime activities. However, some children are already involved in fishing activities and therefore may be missing education; some of these activities are also potentially dangerous to health and safety. No influx of labour is anticipated in relation to this Project.	
PS 3 / ESS 3: Resource Efficiency and Pollution Prevention (and Management)	The Project may involve sub-projects that risk causing pollution to waterways or soil, in particular as an impact of sub-Project related	Activity I.7: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)	<u>Negative:</u> Sub-projects related to alternative livelihood strategies are likely to involve value adding to fish products/processing, and potential construction of minor facilities. Waste	<ul style="list-style-type: none"> As for PS1/ESS1

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
	to supporting alternative livelihoods.	<p>Activity II.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Sulawesi, including Bappeda, DKP, BKSDA)</p> <p>Activity III.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (Philippines)</p>	management, and water and power/electricity requirements for these may impact negatively on local ecosystems and community members.	
PS 4 / ESS 4: Community/ Health and Safety	The Project brings potential health and safety risks for community members involved in compliance monitoring activities, particularly where there are people involved in destructive fishing practices,	<p>Activity I.2: Assist relevant authorities in reducing illegal fishing and trafficking of ETP species in North Maluku province (WCS, Pemda North Maluku, including DKP)</p> <p>Activity I.7: Ensure that communities within or adjacent to existing MPAs are</p>	<p><u>Positive:</u></p> <p>Increased stakeholder awareness of protected area rules, sustainable fishing practices, and role of Pokmaswas should reduce or stop destructive fishing practices, reducing cases of injury.</p>	<ul style="list-style-type: none"> • Training modules for WCS team/partners, Pokwasmas, adat leaders, police, other officials and community members involved in monitoring activities include material on human rights, use of

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
	<p>and/or where there are existing conflicts.</p> <p>Some alternative livelihood activities or sub-projects may also have health and safety considerations, depending on their nature. For example, fish or coconut processing or production activities involving machinery/equipment can lead to injuries.</p>	<p>supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)</p> <p>Activity II.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Sulawesi, including Bappeda, DKP, BKSDA)</p> <p>Activity III.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (Philippines)</p> <p>Activity III.5: Assist relevant authorities in reducing illegal fishing and trafficking of ETP</p>	<p><u>Potentially negative:</u></p> <p>Risk of conflict and reduced social cohesion between groups and individuals, including potential for altercation and personal injury, if threats and intimidations escalate over restrictions on access to fishing grounds or other management policies.</p> <p>Certain alternative livelihood activities or sub-projects may also have health and safety considerations, depending on their nature. For example, fish or coconut processing or production activities involving machinery/equipment can lead to injuries.</p>	<p>force, conflict mediation and resolution.</p> <ul style="list-style-type: none"> • Training and materials to include explicit reference to the avoidance of gender-based violence and sexual harassment. • Community engagement officers trained to facilitate dialogue and address potential conflicts, appropriate to role. • SOP for field teams and Pokwasmas on handling dangerous situations/confrontations (includes personal safety and regulations to be emphasised with Pokwasma groups). • SMART patrol activities to include necessary safety equipment,

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		species at selected Project sites (Philippines)		including for marine safety.
PS 5 / ESS5: Land Acquisition & Involuntary resettlement (Restrictions on Land Use & Involuntary Resettlement)	The Project introduces and/or strengthens restrictions in access to natural resources areas that communities use for livelihood and/or cultural purposes; the Project may also involve (livelihoods) sub-projects that require land.	<p>Activity I.7: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)</p> <p>Activity II.2: Support MPA management through the creation of fisheries harvest control rules within appropriate MPA zones</p> <p>Activity II.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Sulawesi, including Bappeda, DKP, BKSDA)</p>	<p><u>Negative:</u></p> <p>Wide scale territorial restrictions on access to protected fishing grounds and restriction and / or bans in areas zoned for non-fishing within MPA areas.</p> <p>Fishing ground restrictions affect very wider areas (many Kabupatens) and unknown / un-reached users, so mitigation may not be possible.</p> <p>Potential minor land requirements to support alternative livelihood activities.</p> <p>Potential conflict associated with changes in fisheries management and</p>	<ul style="list-style-type: none"> • Comprehensive engagement strategy and materials developed to support communication with affected communities, with separate focus on the needs for: • MPA consultation processes • fisheries management (affected parties on a wide scale); and • Reef to Ridge (North Sulawesi only). • Preparation of Livelihood Restitution Plans (LRP) or similar guidance and detailed plans for diversifying or strengthening livelihood

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>Activity II.4: Collaborate with government agencies, local communities and other relevant stakeholders to pilot an integrated management ('Ridge to Reef') approach in the northern Sulawesi KLC#3 (WCS, Pemda, including Bappeda, DKP, BKSDA)</p> <p>Activity III.2: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of selected MPAs in the Philippines</p> <p>Activity III.3: Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (Philippines)</p>	<p>with MPA/demarcation of boundaries.</p> <p>Short and medium term impacts on fishing community incomes and food supply before fish stock enhancement and biodiversity improvement is felt.</p> <p>Potential elite capture in fish processing and trading activities.</p> <p>Potential lack of participation of women and other vulnerable groups due to the prevailing social and cultural norms within the communities.</p> <p><u>Positive:</u></p> <p>Enhanced business opportunities and economic empowerment among marine resource users (particularly women)</p>	<p>strategies in intervention villages.</p> <ul style="list-style-type: none"> Land size restrictions and the need for resettlement will be included in a negative list to screen any activities that would involve physical displacement. Preparation of guidance (Process Framework) to include Voluntary Land Donation mechanism.

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
			<p>through provision of livelihood support / strategies.</p> <p>Increased, or more secure long-term incomes from those dependent on marine resources for their livelihoods (e.g. fishers, marine tourism operators).</p>	
PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources / Natural Habitats (OP/BP 4.04) / Forests (OP/BP 4.36)	<p>The Project works in sensitive, fragile or biologically significant areas – marine, coastal and terrestrial. The Project’s objectives and activities are directly linked to conservation and sustainable natural resource management, with habitats of endangered species being potentially involved and impacts on forest resources</p>	<p>Activity 1.3: Develop science and modelling tools to inform fisheries management planning (WCS, EDF, Pemda including DKP)</p> <p>Activity 1.4: Enhance fisheries management planning through introduction of ‘climate-smart’ and ‘economic upside’ approaches (WCS, EDF, Pemda, including DKP)</p> <p>Activity 1.5: Enhance fisheries through targeted investment</p>	<p><u>Positive:</u></p> <p>In Indonesia, more than 415,000 hectares of MPA in North Maluku, and 238,000 hectares in North Sulawesi will benefit from enhanced management. At least 36,000 hectares of coral reefs, mangroves and seagrasses within these MPAs will benefit from enhanced management. At least two fisheries in North Maluku will benefit from enhanced management, with one likely to gain</p>	<ul style="list-style-type: none"> • There are Project activities built into the design that enhance impacts related PS 6, rather than mitigations, including: • Marine / biodiversity monitoring protocols to become SOP or policy instruments. • Involvement of multiple stakeholders in the monitoring and assessment of MPA, Ridge to Reef and

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
	also possible (North Sulawesi site).	<p>and finance (WCS, EDF, IIX, Pemda including DKP and Bappeda)</p> <p>Activity I.6: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of existing MPAs in North Maluku (WCS, Pemda North Maluku, including DKP and Bappeda)</p> <p>Activity I.8: Ensure that management of selected coastal MPAs is supported by sustainable financing mechanisms and agreements (WCS, CFA, Pemda North Maluku, including DKP)</p> <p>Activity II.2: Support MPA management through the creation of fisheries harvest</p>	<p>further support in attracting investment.</p> <p>In northern Sulawesi, enhanced integrated management, across a total area of approximately 500,000 hectares. The Bogani Nani landscape watershed feeds into marine and coastal ecosystems on the southern coast where in 2015 the PEA conducted marine surveys across 1,245 ha of coral reef.</p> <p>Similar impacts anticipated in the Philippines site once selected.</p> <p><u>Negative:</u> See other PS trigger/impact analyses.</p>	<p>fisheries management status/achievement.</p> <ul style="list-style-type: none"> Preparation of lessons learned/manuals on integrated approaches (such as Ridge to Reef, and on MPA and fisheries management for CTI).

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>control rules within appropriate MPA zones</p> <p>Activity II.4: Collaborate with government agencies, local communities and other relevant stakeholders to pilot an integrated management ('Ridge to Reef') approach in the northern Sulawesi KLC#3 (WCS, Pemda, including Bappeda, DKP, BKSDA)</p> <p>Activity II.5: Scope options for a new Marine Protected Area adjacent to the northern Sulawesi KLC#3 Ridge to Reef site</p> <p>Activity III.2: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and</p>		

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>management of selected MPAs in the Philippines</p> <p>Activity III.4: Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods in selected coastal fisheries (Philippines)</p> <p>All activities under Output IV</p>		
PS 7 / ESS7: Indigenous Peoples	The Project activities involve areas traditionally used and owned or claimed by indigenous peoples, and involves engaging with these people on activities that affect their institutions and livelihoods in particular.	<p>Activity I.1: Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods at two fisheries units in North Maluku (WCS, Pemda North Maluku, including DKP)</p> <p>Activity I.6: Collaborate with government agencies, local communities and other</p>	<p><u>Positive:</u></p> <p>Improved recognition of adat identity and respect for IP characteristics (TEK, language)</p> <p>Increased engagement with IP and other stakeholders including government and private sector, bringing indirect benefits such as increased</p>	<ul style="list-style-type: none"> • Assessment of IP presence, characteristics and specific impacts • Preparation of IPPF and IPP or similar • FPIC procedures • Training for Project personnel • Involvement of specialists to engage targeted IP to strengthen

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>relevant stakeholders to improve the protection and management of existing MPAs in North Maluku (WCS, Pemda North Maluku, including DKP and Bappeda)</p> <p>Activity III.2: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of selected MPAs in the Philippines</p> <p>Activity III.4: Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods in selected coastal fisheries (Philippines)</p>	<p>social cohesion, economic opportunities.</p> <p><u>Negative:</u></p> <p>Unequal access to resources (information, funds).</p> <p>Unequal power relations between local communities and other stakeholders in decision making.</p> <p>Misinterpretation, or even absence, of customary marine tenure and Indigenous fishing practices in the management plan due to the imposition of technical approaches.</p> <p>Potential conflict between customary laws and statutory law.</p>	<p>or revitalize TEK or other aspects to be determined through consultation</p> <ul style="list-style-type: none"> • Participation of affected IP in wider forums on CBNRM, building networks, confidence and knowledge • Increase socialization of relevant local regulations (for example Perda 2/2018 on plans for zoning small islands and coastal management, Maluku Utara).

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
			<p>Potential conflict associated with demarcation of land or marine boundaries, for MPAs and to support livelihood activities.</p> <p>Disputes between village government and indigenous institutions (<i>lembaga adat</i>) regarding authority over the management of fisheries and funds.</p>	
PS 8 / ESS8: Cultural Heritage / Physical Cultural Resources	The Project areas may potentially overlap with areas/sites of cultural heritage significance, which may or may not be recognized or registered with government authorities; in particular, some Project activities are likely to affect	<p>Activity I.6: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of existing MPAs in North Maluku (WCS, Pemda North Maluku, including DKP and Bappeda)</p> <p>Activity I.7: Ensure that communities within or</p>	<p>Cultural heritage sites or activities within the MPA or Ridge to Reef (affected areas) could include graves / bones, historical sites areas (including dive sites, ship wrecks), local IP story sites, or other spaces with significance to local communities.</p> <p>Potential minor earthworks for facilities in</p>	<ul style="list-style-type: none"> • Screening tools to include questions for Project personnel to identify such sites or issues • Procedure for handling cultural heritage issues or resources to be included in ESMF, including Chance Finds Procedure

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
	intangible cultural heritage such as traditional knowledge, practices and objects used in the	<p>adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)</p> <p>Activity II.2: Support MPA management through the creation of fisheries harvest control rules within appropriate MPA zones</p> <p>Activity II.4: Collaborate with government agencies, local communities and other relevant stakeholders to pilot an integrated management ('Ridge to Reef') approach in the northern Sulawesi KLC#3 (WCS, Pemda, including Bappeda, DKP, BKSDA)</p> <p>Activity III.2: Collaborate with government agencies, local communities and other</p>	<p>support of livelihood activities, could discover or disrupt cultural heritage.</p> <p>Local traditions that have destruction aspects (for example reef/fish bashing in North Makuku) and bans on traditionally used equipment with require sensitive strategies, to strengthen cultural heritage overall.</p>	<ul style="list-style-type: none"> • Involvement of additional specialists if needed, to engage targeted groups on sensitive cultural heritage issues

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		relevant stakeholders to improve the protection and management of selected MPAs in the Philippines		
ESS10: Stakeholder Engagement & Information Disclosure	The Project involves a diverse set of stakeholders from international level to village and sub-group level, spanning government, researchers, industry, media, fisherfolk, security authorities, all with an interest or ability to influence Project implementation and the achievement of Project objectives.	<p>Activity II.1: Support MPA management and stakeholder participation [in MPAs supported under BMU]</p> <p>Activity II.4: Collaborate with government agencies, local communities and other relevant stakeholders to pilot an integrated management ('Ridge to Reef') approach in the northern Sulawesi KLC#3 (WCS, Pemda, including Bappeda, DKP, BKSDA)</p> <p>Activity III.1: Conduct an initial assessment of potential Project site/s (Philippines)</p>	<p><u>Positive:</u></p> <p>Improved relations based on increased government capacity to engage stakeholders, especially impacted fishing communities, in MPA planning, enforcement and monitoring.</p> <p>Increased social capital and capacity among community and local organisations supported by the Project (including fishers' associations, cooperatives, womens groups, local civil society groups, traditional social structures).</p>	<ul style="list-style-type: none"> • Preparation of Stakeholder Engagement Plans, including database of stakeholders, analysis of interests and influences, preferred engagement methods and grievance handling mechanism [specific examples for socialization on certain issues and needs, e.g .for fisheries impacted stakeholders] • GRM to be cultural appropriate and tailored to each site • Project team to promote forums and other opportunities for cross-

PS / ESS	Trigger Analysis	Main Activities	General Impact Description/Key Impacts	Mitigation Approach
		<p>Activity III.2: Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of selected MPAs in the Philippines</p> <p>Activity III.4: Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods in selected coastal fisheries (Philippines)</p>	<p>Empowerment of local communities, including women, with a voice in local governance processes and improved collaboration.</p> <p>Strengthened participation and increased cooperation among communities on resource management and protection (e.g. coordinated community monitorings involving multiple villages).</p> <p><u>Negative:</u></p> <p>Misuse of power, Conflicts of interest and domination of access to information and opportunities (elite capture), for e.g. by Bupati, or at village level.</p>	learning between stakeholders

4.5.1 Most impacted parties

Based on the impact boundary and criteria outlined before the matrix of Project impacts above, along with the impacts identified, the groups expected to be potentially most (negatively) impacted by this Project:

- Artisanal and subsistence fisher folk (men and women), including those:
 - Who may be using traditional, modern or even destructive fishing methods;
 - Who may be indigenous (in particular, with ancestral ties, separate institutions and law, and high dependence on the affected area, for livelihood and/or identity) – in North Maluku (Indonesia) and the Philippines; and
- Women in target villages, as frequently responsible for a greater burden of labour and therefore vulnerable to increased workload, fatigue and health issues;
- Farmers, hunters (other livelihoods) in the [North Sulawesi] wildlife corridor.

Other stakeholders likely to be affected, albeit less than those outlined above, include:

- Fishing associations/members (provincial level; *Himpaun Nelayan SeIndonesia*, HNSI); and
- Commercial operators (in small scale tourism; fisheries; investors, such as investors in the Bogani Nani area that may be affected by future policy changes related to spatial plans, development approvals, for example).

4.5.2 Project Benefits (Positive Impacts)

Due to the innovative and deeply integrated Project design linking science, modelling, improved management and sustainable financing, in addition to the key impacts outlined in the Table 11, the Project will have several additional, beneficial social, ecological, economic and governance impacts in Indonesia and the Philippines. Furthermore, by having multiple partners with unique strengths delivering the work, the Project can move quickly and deploy specific capacities where and when needed.

- **Environmental benefits**

Environmental benefits will come from both the fisheries and MPA working packages of the Project as described above. In Indonesia, more than 415,000 hectares of MPA in North Maluku, and 238,000 hectares in North Sulawesi will benefit from enhanced management. At least 36,000 hectares of coral reefs, mangroves and seagrasses within these MPAs will benefit from enhanced management. At least two fisheries in North Maluku will benefit from enhanced management, with one likely to gain further support in attracting investment. The Project in turn will lead to fishers being incentivised to adhere

to management rules (such as through the equitable distribution of any economic surplus, or improved working conditions). Fisheries management regimes will draw on modelling to maximise the resilience of selected fisheries (including target species and/or fisheries habitats) to predicted future climate impacts. Overall, these measures are expected to benefit reef ecosystems more broadly. In recognising the impact of land use on coral reefs, WCS will pilot an innovative ('ridge-to-reef') integrated ecosystem management approach. The Project's incorporation of multiple sites is a strength, offering unique learning opportunities from sites with a range of social, ecological and governance conditions.

In Sulawesi, the Bogani Nani landscape watershed will benefit from enhanced integrated management, across a total area of approximately 500,000 hectares. The area feeds into marine and coastal ecosystems on the southern coast where in 2015 the PEA conducted marine surveys across 1,245 ha of coral reef. The surveys revealed a coral biodiversity richness higher than that in the UNESCO World Heritage Site of Bunaken NP, rich seagrass and mangrove ecosystems, home to dugong, whale shark and other threatened marine species; and also important for their carbon sequestration services. The beach provides vital nesting grounds for three turtle species (leatherback, olive ridley and green), as well as the endemic maleo, a megapode and flagship bird for the North Sulawesi Province. Benefits in both landscapes should include improvements in current issues of sedimentation and nutrient/waste run-off resulting from unsustainable land use practices, caused marine pollution in the form of ocean plastics, diseased fish stocks, poor human health and more.

It is expected that Interventions in the Philippines, likely to include both fisheries and MPAs, will generate ecosystem benefits comparable to Indonesia Project sites.

Benefits to be scaled through the CTI-CFF include a deeper understanding of IUU fishing, the design and delivery of regional-focused finance mechanisms, and capacity for climate-smart fisheries management.

- **Good governance benefits and capacity building**

All Project interventions are intended to bring about improvements to natural resource governance at village, district and provincial levels. At the community level, governance will be improved through the development of co-management institutions and capacity for fisheries and MPA managers as well as fishing communities. Within Indonesia, these co-management models may be scaled up within the target provinces, or beyond (either by the MMAF/DENR, or through inter-provincial 'WPP' Fisheries Management Area bodies).

Furthermore, strong benefits will be delivered through formal capacity building strategies targeting provincial authorities. Formal training modules including Introductory MPA management, MPA management planning/monitoring, Ecosystem Approach to Fisheries Management (EAFM) and Fisheries Management Planning will all be delivered to provincial partners in the Fisheries Agencies (DKP). Through its fisheries investment and MPA financing activities in North Maluku, the Philippines and at regional level, the Project will also bring new focus to corporate governance within both the private sector and government partners that WCS supports. Training and support will be provided to those entities selected for financing.

- **Social dynamics and gendered benefits**

Improved local stakeholder (intra group) relations can be anticipated, based on increased government capacity to engage stakeholders, especially impacted fishing communities, in MPA planning, compliance and monitoring. The strengthened participation and increased cooperation among communities on resource management and protection (e.g. coordinated community monitorings involving multiple villages) will be a positive effect of project intervention. Related to this, increased social capital and capacity can also be expected among community and local organisations supported by the Project (including fishers' associations, cooperatives, womens groups, local civil society groups, traditional social structures). Empowerment of local communities, including women, with a voice in local governance processes and improved collaboration.

Improved fisheries will also provide more abundant and higher quality marine resources that target beneficiaries can use for food and income. As part of livelihood activities and mitigation sub-projects, fishermen and women will be trained in ways to improve the handling of their catch and may have access to higher market values, especially through mud crab and sea cucumber livelihoods initiatives, which are expected to improve their income. Women in fishing communities will be more openly recognized for their important contributions to local natural resource-dependent activities and will have greater opportunities to participate in resource management decision-making processes. Men and women throughout the project sites will also have the opportunity to learn about and engage in new resource-based livelihood schemes, thus expanding their access to income-generating options and shifting dynamics of power in local relations in ways that can be positive for women.

- **Financial and Economic benefits**

As the Project is expected to have economic and ecological benefits through the improved management and resilience of fisheries, and spill-over effect and economic opportunities (e.g. tourism enterprises) from well-managed MPAs. Community livelihoods support under both fisheries and MPA strategies will see some communities benefit; this may be in the form of micro-enterprises, support to fishing associations, enhanced economic opportunities for women, or tourism-related business support in MPAs, as outlined in Table 9 above.

Under Outcomes I and IV, the Project will establish new financing arrangement for marine sites within the Coral Triangle region. Outcome I will see sustainable financing and investment frameworks developed for one defined fishery or related entity, and one MPA in North Maluku. The selected fishery will be supported by tailored private sector investments with scientific inputs provided by EDF and as brokered by IIX in Outcome I. These may be in the form of: 1. a fisheries investment package that uses market forces to assist transition to sustainability and increased incomes; or 2. a MPA finance mechanism designed to address funding gaps in MPA management and to compliment existing funding sources, such as government budgets. The selected finance packages will be shaped based on research about community and government priorities.

A third financing framework will be developed for a regional or sub-regional marine entity (e.g. a fishery, MPA, ecosystem or other), to be selected in consultation with the CTI-CFF and development partners. This can also be expected to bring positive changes which may benefit local communities

either directly through revenue sharing or indirectly through reduced costs (for example of compliance monitoring), or by freeing up other budgets. Whilst difficult to calculate tangibly at this stage, the activity impact will be positive. Enhanced law enforcement and reduction of IUU through IUU investigations, and improved management effectiveness of protected areas in Indonesia and Philippines will also likely have economic benefits, although those benefits may not manifest within the life of the Project and may be difficult to quantify.

4.5.3 Anticipated Project Risks (Negative Impacts)

Along with the benefits outlined above, there are also potential (negative) impacts to be anticipated and managed as part of this Project, as outlined below. The analysis is not exhaustive or applicable in all areas, but is to provide a frame and reference for the site-specific analyses to be carried out and documented through implementation plans with site level impact prediction detailing sub-activity and by area and groups affected. At the Project level, the following may be anticipated:

- **Land acquisition and access restrictions**

The development and enforcement of MPAs entails a process of zoning, with areas set aside for open fishing, for recreation including tourism-related activities, and a no-take zone. This typically requires changes in the access and use patterns of marine areas both along coast lines, including beaches, mangroves, reefs and inshore areas, as well as offshore areas that are used by various groups. In the case of the wildlife refuge corridor in Bogani Nani area (North Sulawesi), restrictions on use are already in force, however in introducing the 'Ridge to Reef' approach, there is also the possibility of MPA development and other terrestrial management changes may also come into force. Changes or restrictions in access to areas with natural resources are expected to affect the economic or livelihood activities of men and women in the area. For marine areas zoned as "no access" within the MPAs, the areas are negotiated with community representatives but the access restrictions will be applied to all and may be considered involuntary. A partial loss of livelihoods and food supply for fishermen as well as men and women involved in processing and marketing local catch, will therefore likely occur on a wide scale as a result of MPA establishment enforcement and in other species-specific fishing management practices.

Some minor land donations may be required for livelihood activities and owners will have a clear right of refusal. Evictions would potentially occur if there were communities dwelling in settlements suspended over the water in an MPA area, however in the Project area this appears not to be the case.

Alternative livelihood activities supported by the Project, may require small land areas, for example to establish facilities to support fisheries or agricultural produce, storage etc., thus potentially involving involuntary displacement. Potential risks could also result from the demarcation and recognition of land tenure, and related to this, the distribution of benefits, the sustainability and

selection of livelihood measures. Related to access restrictions and livelihood changes is the risk of food insecurity, in villages where people are entirely dependent on fisheries as their food source.

To address involuntary resettlement, the Project aims at restitution of the loss local / affected peoples experience through the restrictions put in place with Project support, but notes that the success of restitution depends also on the willingness and ability of the individual to seek alternatives and implement them successfully, as well as on the Indonesian and Philippines government's attention to the welfare of coastal peoples. Hence the Project design includes activities to provide adequate opportunities for individuals to address and reestablish their loss in livelihoods; the "adequacy" of these opportunities needs to be demonstrated, with appropriate planning, consultation, assessment of feasibility of proposed livelihood interventions, and monitoring.

- **Changes to community livelihoods**

Livelihood changes may arise in various forms, including type or location of activity, patterns and income levels, which may reduce income levels on a seasonal, temporary or permanent basis for certain groups. The introduction or increased enforcement of no-take zones in the MPA, and the increased emphasis on proper fish sizes for sustainable fisheries, as well as stricter regulation of equipment and fishing practices, may all impact on fishing incomes, particularly for those fishing families and businesses that have large portions of their incomes derived from the Project's target species (Snapper and Grouper). Example of changes include from changes in fishing grounds and gear used, as well as the shift to other income generating activities (fish/seafood processing, more time spent in terrestrial activities such as agriculture, trade or ecotourism-related activities, for example).

- **Reduced safety or increased security, tension or conflict levels**

Issues of safety, security and conflict may be caused or exacerbated within communities or between groups that are surveying and enforcing the laws on MPA areas and those that are misusing the areas. Infringements on use areas, such as coastal inshore areas once for community fishing use and now or in future to be reserved for recreation and tourism, may be ill-perceived by affected groups and create animosity between parties, leading to tension and in worst cases, violence.

For example, part of the baseline conditions in some areas there are small-scale enterprises in tourism (for example, diving), which must also interact with local fishers. There are potential issues between such tourism operators who may be allowed to develop small jetties but in a recreation zone within the MPA, fishing activities are not allowed there. The fishers know that fish are attracted to the jetties as habitat, and not being allowed to fish there is perceived as unfair and onerous burden of impact on them generating discontent.

In more severe examples, the compliance monitoring groups (called Pokmaswas in Indonesia) are dealing with illegal and destructive fishing practices such as bombing, cyanide and compressor use. Their intervention to fellow villagers, neighbouring groups they know, and / or to outsiders creates tension and in some cases puts them at risk of conflict or injury. Incidental confrontations during informal compliance monitoring activities, as well as on-land retaliation against community members who report destructive fishing, are types of incidents that can be anticipated, and may affect health, safety and security.

There are also related risks of inter-communal conflicts over benefits and access restrictions that are all related to the meaningful participation of Project affected people, in particular indigenous peoples. In North Maluku and in some potential sites in the Philippines, there are histories of conflict in the wider region. As such, these are contexts requiring additional awareness, sensitivity and potentially further local analysis and approaches in order to successfully implement Project activities for positive change.

- **Changes in social relations and dynamics**

Other changes in social relations can occur as an effect of Project activities, as noted previously these can be positive impacts such as increased coherence, cooperation, awareness of common interests; however, on the other hand, it can also manifest as jealousy over access to Project benefits, polarization of sub-groups within a community or between villages/areas, or tensions as outlined above. In communities that have a background dynamic of intergroup jealousy, or if there are widespread poverty or hardship, low education levels or other factors that are specific to a location, sometimes negative dynamics can be triggered when there is an opportunity for certain groups to be engaged in income generating activities or to receive or be in charge of an event (such as catering for a socialization meeting, or occasional employment in monitoring or education/socialization activities, for example). The risk of elite capture also exists; this refers to the domination of opportunities to participate in Project activities by village or community elites, i.e. the unfair use of status and education to access Project benefits. Where there are indigenous peoples, such as North Maluku and in the Philippines, issues of elite capture are likely to merge and may be more complex, as some peoples' status in local government, indigenous society and social organisations/institutions are overlapping.

- **Gender and child labor impacts**

Gender and child labor impacts are noted here for due attention, as the baseline and anticipated impact of changes in livelihood activities associated with the MPAs and fisheries activities may disproportionately affect women, as they are typically engaged in inner-shore, low tide gathering of seafood, as well as in the sale of fish catch by men. Bans on in-shore/coastal activities in the MPA may reduce women's household economic contributions and also interrupt women's/community social and cultural norms. Introduction of alternative income activities, including changes in fish handling to increased processing or different sales arrangements, for example, will foreseeably affect women and will require effort to consult and engage them in mitigation strategies.

Alternative income generation plans should pay attention to the involvement of children, where there are community traditions that involve children in household economic activities, but do not reduce, restrict or replace their participation in schooling or in normal childhood playtime activities. In some cases, boys as young as 13 years of age are already involved in fishing activities and even serve as temporary crew members on fishing vessels, especially during peak seasons. Some of these are potentially dangerous to health and safety, such as diving for lobsters or octopus using compressors for breathing, which can result in long-term paralysis and even death. Care should be taken that alternative livelihood activities introduced through the Project do not provide additional incentives to minors (young boys) to leave school for employment in fishing or other sectors. However, restrictions

in dangerous or illegal activities may have a positive impact on young men by reducing the risk of injury or death. Where alternative financing is brought in or partnerships are developed, for example in North Sulawesi, potentially in the copra industry, attention to occupational health and safety, as well as to gender and child labour, will be required.

- **Impacts on vulnerable groups**

Project and wider development policy impacts can occur disproportionately due to certain groups' limited access to information and lack of participation in decision making or Project activities, resulting in decisions that do not reflect their interests and may weaken their economic or social position, or their access to resources. Indigenous peoples, women, minority ethnic or religious groups, unpaid or undocumented workers (for example in fishing fleets), youth, are all potential vulnerable groups to be more clearly defined during the development of Project activities (including ESMF and ESMP preparation). Communities of people afflicted by or associated with leprosy are another marginal group they may be socially marginalized and excluded from participation in Project-related activities.

- **Environmental impacts as secondary effects of livelihood changes**

Secondary environmental impacts may also occur, for example if aquaculture or fish processing activities are introduced then there may be temporary and minor environmental impacts associated with the construction of any necessary facilities and their operation. For example, small scale construction and operation of aquaculture or related value adding activities may require water or may produce waste products. Land and resources for sub-Project's construction may affect marine/mangrove or terrestrial habitats, with vegetation clearing or introduction of new species. Extension services for aquaculture, mariculture and also for agriculture to support alternative livelihoods may all lead to increased use of pesticides and fertilisers, with related impacts on water and soil quality. Potential pollution or contamination could be anticipated to be localized and small scale, but requires prevention management, to ensure there is not leakage, for example to unprotected areas.

4.5.4 Discussion of Potential Impact Significance

This section of the ESMF attempts to assess the potential significance of the predicted impacts, so that the Project implementation team can focus effort and resources on the impacts – including areas, activities and groups – where impacts are expected to most significant, so as to prevent, minimize and mitigate negative impacts.

A scale of low-medium-high ranking is applied to assess the impact significance, using judgement based on known information to date, with reference to standard impact ranking schedules. Factors considered in significance include the number of people affected, nature (including reversibility/irreversibility), scale and duration of the impact.

Economic and Livelihood Impact Significance

Regarding economic and livelihood impacts, this is assessed as highly likely to be experienced to some degree in all Project areas, and is deemed of medium significance. Changes in fisheries management and access restrictions in new MPA locations will affect coastal communities especially, as well as in those that are just being established. The impact is significant as it affects as yet unknown numbers of people in a wide geographical area, and constitutes a long-term change, at least in terms of location for income generating activities. At the same time, the impact is predictable, and manageable, with Project interventions already identified to address the livelihood needs of affected persons. While the no-take zones are often the exact areas that local people use for their fishing activities, they do represent at least 2% of total MPA areas, and much wider areas are available for them to fish in, albeit at greater cost, time and effort, at least in the short to medium term. Theoretically, fish stock improvements in the wider area would compensate for any reduced income resulting from the access restrictions, however this would take some time to materialize and the perception of reduced catches should be anticipated¹³.

Other important access restrictions relate to the MPA areas that are zoned for recreation and tourism, often being coastal and inshore areas. In many parts of Indonesia, local communities - and in particular women and children, often among the poorest and most marginal households - use these areas for canoe fishing and foraging at low tide, as well as fishers using the areas at mid and high tide for fishing, especially in seasons when seas are rough further out, effectively prohibiting trips far off shore. The change in access to this inshore area thus potentially affects all fishermen, and may be equally significant as the access restrictions introduced by the no-take zones in the MPA concept. People conducting activities in the tidal zone, estuaries and mangrove areas could also be impacted by the Project. On the other hand, the no-

¹³ With regards to impacts of income diversification and general expected economic benefits from the successful implementation of MPAs and sustainable fishing activities, the 2017 Project document (KfW) section on risks notes that “the history of triple-bottom-line Projects like this—Projects that seek to conserve biological diversity, to improve the well-being of coastal communities, and to mitigate the impacts of and improve resilience to climate change—makes it clear that it is very difficult to generate and deliver enough tangible benefits (especially economic benefits) to change the way people use the resources around them, that it is very difficult to create sustained incentives for sustained changes in behaviour. One important risk noted by KfW is that fishermen and other coastal families associated with this Project may have unrealistic expectations about, for example, how fast MPA management will improve fish stocks inside and outside MPA boundaries, or the extent to which the Project can improve the value chain for specific coastal fisheries, or how likely it is that dive tourism will quickly and substantially increase if new MPAs are designated”. The Project document quotes a recent study by Wilderness Markets, for example, which looked at “a series of fishery value chain assessments to better understand the opportunities and constraints for private impact capital to flow into wild capture fisheries markets.” The report concluded: “Given the investments in developing sustainable fisheries pilots, we expected to identify a range of investment opportunities in each of the fisheries assessed. However, we did not find investment opportunities that could address the suite of challenges associated with improving financial and social outcomes, while also contributing to conservation outcomes, particularly in developing country fisheries”.

At the same time, through the ESMF consultations, and examination of other Project experiences, some potential investment opportunities – whether large scale or smaller scale for household level impact mitigation – have been identified as potentially feasible. Examples are fish handling supporting facility (e.g. cool box, freezer, ice slurry machines) – which shall lead to improved fish quality and value. The success of such investments would depend on a variety of factors, and therefore while feasible, caution in over-promising, along with a multi-pronged approach to livelihood developments, is advised.

take zone, which is approximately similar to the 2% core zone, is estimated to encompass, in general, 10% of the MPA area.

Economic and livelihood impacts have a potentially significant gender dimension, as women are often the ones involved in gleaning, collecting, salt-making, aquaculture or other activities in these coastal zone areas, including mangroves, whereas more often men are involved in offshore fishing activities. Although women are not always involved in commercial fish harvest, they often are integral to processing and marketing, as well as managers of the household economics of each Project location. In the KfW/BMU Project areas in other parts of Indonesia, many of the alternative livelihood activities being developed are targeting women. This is based on community preferences and suggestions, and involves a solid process of design, and is intended to empower women. Project activities in the Philippines will be designed collaboratively to ensure equitable participation, empowerment and access to benefits for women and women's groups in all project sites. As those sub-projects begin implementation, lessons on gender impact may also be relevant for this Project, both in Indonesia and Philippines. In all areas, the division of labour in fisheries in particular may vary and thus the impact of changes in economic activities in the Project intervention villages needs to be considered from a gender perspective on a site-by-site basis during Project implementation, to determine whether it is significant or not.

In sum, while there will be some new limitations on fishing due to MPA designation and, possibly, some changes in local fisheries rules and regulations (e.g., gear restrictions, catch-size limit, species-specific fishing regulations), as well as changes in coastal management from the Ridge to Reef approach in Bogani Nanti, but the Project should ultimately generate net tangible and non-tangible benefits over its seven-year duration that can incentivize better resource management. Those benefits will likely not transform a community's well-being or socioeconomic structure, but they are tangible and can be locally sustained beyond the seven-year life cycle—e.g., clearer rights to manage resources, intact coastal ecosystems that protect against storm surges and rising sea levels, improved handling and transport of fish, better market information and access (potentially through certification systems), and decreases in cost-per-unit-effort for fishermen not having to go as far or as long out to sea.

Safety, Security and Conflict Related Impact Significance

Regarding reduced safety or increased security, tension or conflict levels, in North Maluku especially and possibly the future Project site in the Philippines, the impact is considered highly likely to occur and of medium significance given its distribution, nature, duration and implications. The widespread reality of destructive fishing practices in all Project areas is being, or will be, handled to a large degree by community compliance monitoring groups at the front line, known as Pokmaswas. Direct intervention to criminal activity is on a limited basis, and the majority of incidences that they may intervene in, happen outside these shared activities. The purpose of the compliance monitorings is mainly to limit the movements of destructive fishers. In Indonesia there is a ministerial regulation whereby the Pokmaswas are trained in Standard Operating Procedures (SOP) which direct them to minimize contact with bomb fishers, and rather to focus on reporting the incidents. Nevertheless, in practice, Pokmaswas members and other community members (including those doing destructive fishing practices) are at risk of stigmatization, confrontation, and sometimes violence due to their activities, whether directly facing criminals at sea, or

through being known in their communities as the compliance monitoring groups who are trying to urge the correct fishing practices and zone use.

Social Dynamics and Indigenous Peoples Impact Significance

Changes in social relations and dynamics may occur as a result of Project activities, however this is assessed as medium likelihood and medium significance, considering the villages in which the Project activities are targeted appear to be functioning, relatively stable villages with reasonable incomes and education levels, relatively harmonious historical contexts, and also considering that nature of the changes can equally be positive. As such, the capacity of the villagers generally to absorb change and adapt to the interventions as opportunities is considered likely.

Revitalisation of indigenous cultures and natural resource management systems has been assessed as medium likelihood and low significance. In North Maluku and the Philippines sites there are likely to be indigenous knowledge systems or at least some forms of traditional ecological knowledge that could be investigated and revitalized with some external support of the appropriate expertise. Whilst the impact of strengthening local knowledge has an appeal, and could theoretically be highly significant, it to generate the potential positive impact in this area requires further assessment and effort relative to local interest and will.

Disturbance to cultural heritage has been assessed as medium likelihood and medium significance. The range of locations in which the Project will be implemented includes rich cultural diversity and potential in particular for non-material cultural values to be present in Project affected areas. These may be revitalized or disturbed, depending on how issues are identified and handled. The presence of historical and cultural artifacts, traditions and values that may be affected is important in terms of local cultural identities and may also be significant for wider (humankind) historical knowledge or contemporary and future potential, for example related to eco/cultural tourism.

Increased Vulnerability and Social or Economic Exclusion Impact Significance

Increased vulnerability and social or economic exclusion is assessed as medium likelihood and medium significance, to ensure teams are alert to this risk, although no actual groups at risk of increased poverty and exclusion from Project opportunities have been identified. The Project team is as yet unfamiliar with two intervention villages in North Maluku and with those in North Sulawesi, and the Philippines villages are also not yet known. The WCS engagement is consistently through village structures as the main channels, however to ensure that vulnerability is understood and potential exclusion is minimized, the teams need to actively seek to identify vulnerable groups or individuals within the village and take steps to ensure fuller access and participation.

Environmental Impact Significance

Improved awareness of conservation, as a concept and as an imperative for sustainable natural resource-based livelihoods for coastal communities, is considered highly likely to occur as a result of Project interventions, and of medium significance. The demand for information and the capacity to absorb and adapt behaviours, in the context of MPAs and sustainable fisheries activities, in the Project location would appear such that it is feasible for WCS to have a relatively strong or effective influence on peoples' conservation awareness. Information about protected species, and educational resources and activities that can entertain and inspire behavior change for conservation outcomes, can feasibly be implemented in all the Project locations with a positive impact.

Environmental impacts resulting from overall Project achievement relate to fish stocks, and species conservation, as well as to coral reef health and mangrove protection. Considering the objectives and baseline data, the significance of environmental impact would be medium or possibly high, considering the cumulative value of the activities, build on and expanding the marine protection areas geographically and in terms of quality, capacity, information dissemination to wider areas.

Environmental impacts as secondary effects of livelihood changes are considered of medium potential to occur and of low/minor significance. Examples of the impacts that could result from alternative income generating activities could include increased waste, consumption of water, generation of water run-off, potential water or soil contamination from pesticide and fertilizer and vegetation/land clearing. These impacts are predictable, limited in scale and magnitude, and easily managed.

CHAPTER 5. MANAGEMENT OF POTENTIAL RISKS AND IMPACTS

This section of the ESMF presents a set of interrelated approaches to the management of potential risks and impacts, comprising strategies for impact avoidance or prevention, steps in developing impact mitigation instruments and plans¹⁴ for village level activities including the environmental and social management protocols for these. There is also discussion of the opportunities to enhance positive impacts, to be further developed as part of the detailed planning and during Project implementation. The process for implementation of the ESMF is described, to support Project teams and external stakeholders in approaching social and environmental risks in a consistent manner. As an overall approach, the design of the Project is intended to avoid or prevent impacts; for impacts that are anticipated or that result from Project activities, there are formal steps and substantive activities outlined in this section, to manage and mitigate such risks.

5.1 Impact Management Framework

This section describes the procedures that will be adopted for managing the environmental and social impacts related to sub-projects implemented as part of the Project activities and as part of the impact mitigation measures. The approach includes a participatory planning process that seeks FPIC from affected individuals and communities, and procedures for the screening, assessment, monitoring, and reporting of environmental and social (E&S) impacts.

The following four main stages are at the core of the safeguard management approach. Each stage is subdivided into smaller steps, which partly overlap. The stages and steps are aligned with the generic Project cycle (pre-inception–preparation–implementation–monitoring and exit strategy).

1. **Stage 1: Consultation and Participatory Planning Process (part of the Stakeholder Engagement Plan – SEP):** The approach consists of the participatory identification impacted groups or individuals and supporting them in identifying acceptable mitigation measures, usually in the form of training, information and/or alternative livelihood activities. The SEP outlines procedures on how to inform, consult, engage, support, and monitor participating communities in a way that is culturally appropriate. A Process Framework outlines processes for Project field officers and affected parties to assess options and propose ‘sub-projects’ to improve livelihoods from existing, complementary or alternative economic activities. See Section 5.2.2 on mitigation approaches for more detail.
2. **Stage 2: Screening of Impacts and Categorization of Sub-Project Activities:** The groups’ proposals or proposed sub-activities are documented by field officers and processed by WCS for approval. Approval includes the screening done to exclude activities on a negative list (including any that are Category A and/or would require an ESIA), and to identify potential environmental and social impacts,

¹⁴ ESMP or Village Activity Plan to encompass ESMP, LRP and other safeguard requirements in a single document for each intervention village.

to help decide what type of safeguard measures or local permitting processes are required (categorization).

3. **Stage 3: Environmental and Social Risk Management:** Based on the identified impacts different safeguard instruments will be applied and permits acquired, for avoiding, mitigating and managing the environmental and social impacts of sub-projects. See Figure 9 for more detail.
4. **Stage 4: Environmental and Social Monitoring and Reporting:** Impacts and mitigation actions are reported from the affected groups to other Project stakeholders and to the respective government agencies and eventually to KfW.

Figure 9 shows the stages, their corresponding steps, and how the stages and steps are aligned with the Project cycle. Furthermore, it indicates which activities/processes are carried out at each stage and which safeguard instruments are used. This ESMF Section 8 also outlines the next steps, aligned with this, with indicative timeframes provided.

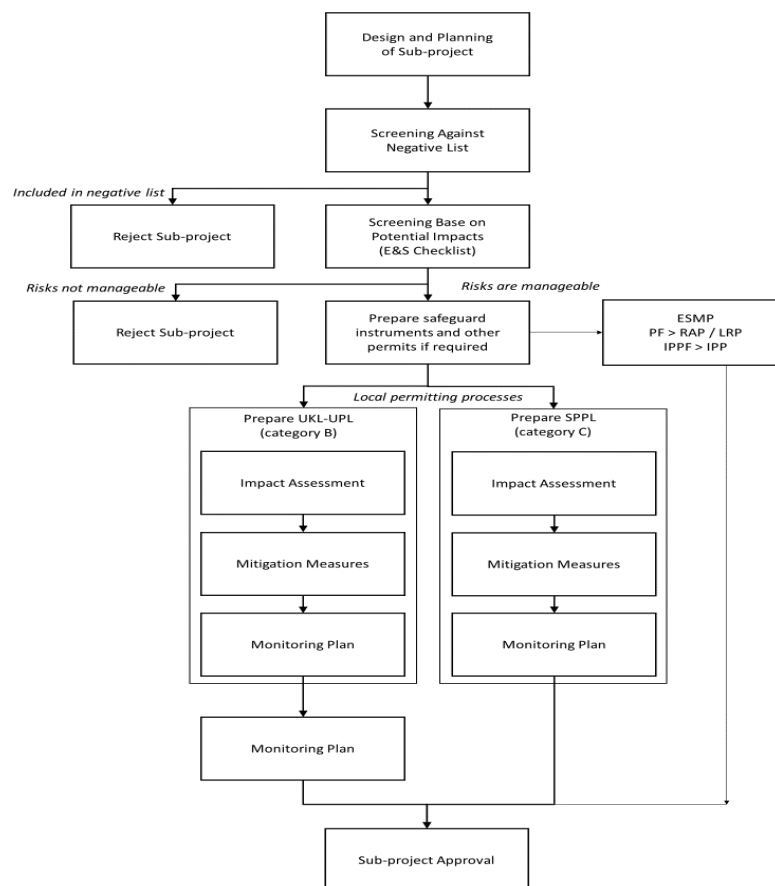


Figure 9: Overview of General Safeguards Implementation Approach for Sub Projects

Stage 1: Consultation and Participatory Planning Process

Chapter 6 on consultation and disclosure describes principles of engagement as well as techniques for consultation and procedures to ensure FPIC and participation of indigenous communities and vulnerable groups of people. At the community level, the WCS teams are responsible of identifying affected groups and facilitating their engagement with government, and ensuring appropriate impact mitigation processes are implemented.

Step 1.1: Identification of impacted groups

The field teams work with local community leaders, government and consultants if needed, to identify the residents and users of the areas where Project activities will be implemented, in particular where the MPA boundaries and fisheries management will be established or enforced. Through baseline data collection, interviews and FGDs, as well as consulting maps and secondary sources, the teams identify the impacted groups and apply criteria to identify the location, identity and characteristics of the most impacted and vulnerable groups. Within the intervention villages, the most impacted and most vulnerable groups are to be identified, using the criteria outlined in this ESMF (see section 4.5.1).

Step 1.2: Identification of livelihood needs and options

An FGD in intervention village areas will be carried out involving the groups identified in Step 1. The FGDs use rapid livelihood assessment approaches and tools, to verify and discuss baseline economic data, MPA impacts and options for livelihoods alternatives, to be conceptualized later as sub-projects. The objective is to explore potential for enhancing, complementing or developing alternative livelihoods, both maritime and terrestrial. The assessment teams should also consider issues related to marine and land tenure, conflicts and opportunities for collaboration between groups/locations, and existing government or other programs in the area, which could be utilised or learned from.

Step 1.3: Concept development of Sub-projects / Mitigation activities

Field teams will develop the details of the identified mitigation activities, including locations, parties involved, infrastructure, equipment and capacity building needs, with supporting information to enable the Stage 2 step of screening the activity for environmental and social impacts and risks, prior to the activity being approved.

Stage 2: Screening of E&S Impacts and Categorization of Sub-Project Activities

The screening and categorization process for activities to be financed under the Project is essential for approval prior to implementation. This must be explained to communities in the conceptual phase, to manage expectations and avoid the misunderstanding that any sub-projects discussed will automatically be feasible or approved. The screening stage provides a mechanism for ensuring that potential adverse environmental and social impacts are identified, assessed and mitigated, in a systematic way.

The following criteria will be considered during screening and categorisation process:

- Type of the Project;
- Location and size of the Project; and

- Anticipated negative impacts.

To avoid duplication, the ESMF follows the national legislative and regulatory frameworks regarding E&S safeguards (see also chapter 2). As the ESIA approvals in both Indonesia and the Philippines are a complex process, triggered by Projects with a scale of impact and risk that is considered beyond the capacity of this Project, Projects requiring EISA are included in the negative list, to be screened out and therefore will not be supported. Lesser impactful activities may however require local permits such as an UKL-UPL or an SPPL.

The screening process consists of four basic steps:

- **Screening against negative list:** The proposed sub-Project is checked against a negative list of environmental and social impacts. Proposed sub-projects including any of the activities mentioned in this list will not be funded by the Project.
- **Screening with use of the Environmental and Social Checklist:** The proposed sub-Project is analysed with the checklist of social and environmental characteristics and considerations, to support decision making regarding permitting requirements and categorisation (see Annex 7).
- **Screening against environmental permitting requirements:** Projects requiring local permits for environmental management (UKL-UPL and SPPL in Indonesia and ECC in Philippines) may be considered for support. WCS will not fund sub-projects that require a full AMDAL, i.e. sub-projects that would classify as Category A (or in some cases B+) under KfW and World Bank definitions.
- **Screening and categorization of sub-projects based on potential environmental and social impacts:** According to KfW Sustainability Guideline, the initial screening process will classify the Projects according to their potential environmental and social adverse impacts into either Category A, Category B+, Category B, or Category C, per the following definitions:
 - **Category C Projects:** Minimal or negligible adverse risks or impacts on human populations and/or the environment. Category C Projects must implement mitigation measures as foreseen in the ESCOP.
 - **Category B Projects:** Potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily managed through standard solutions and state of the art technology. Category B Projects must implement mitigation measures as foreseen in the site-specific ESMP.
 - **Category B+ Projects:** Substantial impacts and risks that occur in single areas and show a higher risk than category B Projects but not as diverse and unprecedented as for A Projects. Category B+ Projects should as a minimum undergo an “Rapid Environmental and Social Assessment” (Rapid ESA) for the identified risks and areas/topics of concern and address those through a fit-for-purpose site-specific ESMP tailored to the identified impacts and receptors. For some category B+ Projects full-fledged ESIA and ESMP can be required, especially if demanded by national law.

- **Category A Projects:** Diverse, significant adverse risks and impacts on human populations and/or the environment and that can't be managed through standard solutions and state of the art technology. Category A Projects need to undergo a full ESIA process per the KfW Sustainability Guideline, and are not supported under this Project.

Table 13. Indicative Categorisation of Potential Sub-projects

Project-Type	Category C (SPPL/ECC/no EIA) Low Risk	Category B (UKL-UPL/ECC) Medium Risk
Fish/agricultural product development (processing, packaging, storage)	<ul style="list-style-type: none"> • Handling and milling • Processing of plantation crops • Processing and packaging of fish (products such as fishballs, dried fish, crops, forest products) 	<ul style="list-style-type: none"> • Improving or developing small scale fish landing facilities • Micro cold storage • Development of plantation or crops in private or communal (non-state forest land) (seasonal: <3,000 ha, perennial: <3,000 ha) • Medium-scale NTFP production and processing (no threshold defined) • Breeding of natural plants and/or wildlife in captivity for trading (any size)
Rehabilitation/construction, operation and maintenance of facilities	<ul style="list-style-type: none"> • Construction of rural roads, eg for access to market (<10 km) and • Construction of bridges (<100 m length). 	<ul style="list-style-type: none"> • Small scale village level docking or harbour improvements • Construction of rural roads that require land acquisition (10–30 km length or 10-30 ha land acquisition) • Construction of bridges (100–500 m length) • Collaboration on copra mill refurbishment (possible in Bogani Nani, North Sulawesi)
Construction, operation and maintenance of small-scale facilities and buildings (ecotourism, processing, commercial and/or administrative)	<ul style="list-style-type: none"> • Construction of ecotourism facilities (building size: <5,000 m²) • Construction of processing facilities (building size:<5,000 m²) • Construction of commercial/administrative 	<ul style="list-style-type: none"> • Construction of ecotourism facilities (building size: 5,000–10,000 m²) • Construction of processing facilities (building size: 5,000–10,000 m²)

Project-Type	Category C (SPPL/ECC/no EIA) Low Risk	Category B (UKL-UPL/ECC) Medium Risk
	buildings (building size:<5,000 m ²)	<ul style="list-style-type: none"> • Ecotourism in protection/production forest (all sizes) • Development of (non-theme) recreational parks (<100 ha) • Tourist/visitor accommodation (all sizes)
Construction, operation and maintenance of micro-hydropower (e.g. for irrigation improvements)	<ul style="list-style-type: none"> • Small-scale micro-hydropower development 	<ul style="list-style-type: none"> • Use of water streams for micro-hydropower in protection or production forest (any size) • Construction of dam/reservoir (5-15 m height, or 5-50 MW or 10-200 ha)
Other	<ul style="list-style-type: none"> • Furniture production • Small handicraft production 	<ul style="list-style-type: none"> • Water bottling (any size) • Water consumption (e.g. for bottling) in production/protection forest (<30% of water discharge) • Water consumption/drinking water (50-250 l/sec from river/lake 2.5-250 l/sec from water spring 150 l/sec from groundwater) • Water processing installation (50-100 l/sec) • Fish ponds with (semi) advanced technology (<50 ha) • Handicraft industry (>30 employees)

Stage 3: E&S Risk Management - Preparing Safeguard Instruments and Permits

Following the screening and categorisation of sub-projects including planned mitigation activities, the specific E&S safeguards instruments are prepared and necessary permitting processes are undertaken. The anticipated safeguards instruments for these sub-projects include the following:

- **ESMP** for each site, with attachments to include permits and/or management protocols as follows:
 - **ESA (SPPL in Indonesia, ECC in Philippines)** for Category C Projects, i.e. low risk Projects.
 - **ESA and a site-specific ESMP** for Category B Projects, i.e. Projects with a medium risk potential.
 - **ESCOP** for minor infrastructure measures and earth works.
- **Process Framework (PF)** for whole Project and Livelihood Restitution Plans – LRPs) for each site
- **Indigenous Peoples Planning Framework (IPPF)** for whole Project and Indigenous Peoples Plan (IPP) for each site, if relevant
- **Stakeholder Engagement Plan (SEP)** for whole Project with site-specific sections, or for each site.

The ESMF, SEP and PF describe the participatory processes in which eligible communities are identified and supported in the development of sub-projects and mitigation activities including for alternative livelihoods. In case the activities of these groups will lead to a reduction or loss of livelihoods for community or non-community members, Livelihood Restitution Plans (LRP) and measures of Action will be developed as part of a single, integrated Village Activity Plan, also addressing the environmental and social management requirements for agreed activities. For activities affecting indigenous peoples, FPIC will be sought and specific plans for indigenous peoples' inclusion and benefit also developed. The application of the different instruments depends on the categorisation of sub-projects; each is described below, with reference to the applicable PS/WB ESF.

Preparations for Category C Projects - A rapid ESA will be carried out for Projects that are classified as category C under OP 4.01 and the KfW Sustainability Guideline. This corresponds to the development of an SPPL in Indonesia and ECC in Philippines.

Category C/SPPL/ECC Projects do not require a specific ESMP. Instead, ESCOP for minor infrastructure measures and earth works will be applied during construction and operation to ensure that adverse effects are avoided and/or mitigated. The ESCOP will be attached to the site's sub-Project plan and attached to the site/regional ESMP and (in case contractors are hired) to the bidding documents for the construction and operation of infrastructure. A generic ESCOP has been developed and attached to this ESMF. It must be updated during Project implementation and must be adapted to the specific conditions at the sub-Project locations and the specific nature of the sub-Project activities. See Annex 10.

Preparations for Category B Projects - An ESA must be carried out for sub-projects classified as category B under OP 4.01 and the KfW Sustainability Guideline. Under Indonesian regulation this conforms with requirements for the development of a UKL-UPL/ECC. The UKL-UPL/ECC documents will be included in the

Project plan and attached to the site's sub-Project plan and attached to site/regional ESMP and (in case contractors are hired) to the bidding documents for the construction and operation of infrastructure.

Apart from identifying environmental impacts, the UKL-UPL/ECC application needs to clearly propose mitigation measures for those impacts and define monitoring arrangements. In Indonesia, after finalising the UKL-UPL, a Project proponent must obtain an environmental permit from the relevant environmental agency which depends on where the Project is located:

- At district level, if the Project is located in one district;
- At provincial level, if the Project is located in two or more districts; and
- At national level at the KKP (Ministry of Marine Affairs and Fisheries), if the Project is located in two or more provinces.

Under Philippines regulation there is also conformance with the IFC and WB requirements, through the provisions in the Revised Guidelines for Coverage Screening and Standardized Requirements under PEISS¹⁵. In this Guideline's (Table 7) there is a description of the thresholds for Project screening and characterizing the types of Projects/activities requiring each level of assessment. For this Project's sub-activities related to livelihoods, it is foreseeable that an Environmental Clearance Certificate (ECC) may be required if (IFC) Category B or C. The ECC allows a Project to proceed to the next stage of Project planning, which is the acquisition of approvals from other government agencies and LGUs, after which the Project can start implementation. The Philippines Department of Environment and Natural Resources (DENR) provides a guide to online steps for the ECC application process at http://ecac.emb.gov.ph/?page_id=270/#ecc.

For this Project, a site-specific ESMP/Village Activity Plan with environmental and social management measures must be developed for Category B Projects. The sub-Project ESMP will build on the UKL-UPL application and must provide information on the baseline condition, mitigation measures to manage the identified adverse impacts. The sub-Project's ESMP must clearly identify responsibilities for the implementation and monitoring of these activities during the construction and operation phase. The ESMPs will form an integral part of the Project site work plan and will be attached to the bidding documents if contractors are hired for the construction and operation of any infrastructure.

Preparations for Category A/B+ Projects: WCS will not support or implement sub-Projects that require a full ESIA and related approvals/permitting process. This corresponds to Projects classified as category A and B+ per KfW regulations. Procedures and thresholds to screen whether a Project requires a full ESIA are presented Annex 13, noting that this is to help Project staff determine that such Projects are excluded, per the negative list in Annex 3.

¹⁵ <https://r7.emb.gov.ph/wp-content/uploads/2018/09/Revised-Guidelines-for-Coverage-Screening-and-Standardized-Reqts.pdf>

Preparation for /Developing the Environmental and Social Management Plans (ESMPs)/Village Activity Plans - PS 1 / ESS1

An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a Project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. An ESMP also includes the measures and actions needed to implement the measures. The Project ESMPs will be in the form of Village Activity Plans, addressing the requirements of the LRP, IPPF and ESMF, for detailed planning on livelihoods restitution, land acquisition/donation, special provisions agreed with indigenous peoples and environmental and social management actions for any of the above. To develop these plans, specifically, WCS will:

- Conduct assessment processes with consultations to determine in detail the impacted peoples and apply criteria to justify a focus on selected areas and/or groups;
- Identify the set of responses to potentially adverse impacts and develop these as plans for implementation at each site, elaborating the assessment of options identified in the ESMF to determine which are feasible for local conditions, what the affected peoples' preferences and contributions would be
- Determine requirements for ensuring that those responses are made effectively and in a timely manner, including activity-specific budgets, implementation arrangements (for example with local NGOS or universities as partners) and personnel responsibilities, so the ESMPs are used and monitored; and
- Carry out periodic monitoring with the participation of affected peoples and/or transparent reporting of monitoring results, with follow up effort to improve or expand mitigation efforts for wider Project achievements.

The ESMP/VAP will also set out the requirements to be followed by field partners or contractors, who will also be bound by the ESMF and ESMP/VAP requirements. An environmental and social checklist for sub Projects is provided in Annex 7. An indicative outline of the VAP is provided in Annex 8. Local permits such as UKL-UPL or SPPL or ECC for sub-projects (in Indonesia) or ECC (in Philippines) are to be attached to each VAP, and ESCOPs are required as part of the annexes (see Annex 9 for template for SPPL, Annex 10 on ESCOPs, Annex 11 on UKL-UPL preparation). Chance Finds Procedures for potential cultural heritage discoveries during sub-Project implementation, are provided in Annex 14.

Preparation for/Developing Process Framework to address Access Restrictions and Economic Displacement - PS 5 / OP 4.12

A Process Framework (PF) following requirements of PS 5 and ESS5 has been prepared as an annex to this ESMF. The PF (Annex 2) sets out the format for site specific Livelihood Restitution Plans (LRPs) to be developed, to provide detail on the specific livelihood restitution activities planned for affected areas. LRPs will be developed for each site either as stand-alone documents, or as specific sub-sections of the VAPs. Site by site finalisation of the data and determination of the Project affected peoples' and livelihood

restitution activities will be disclosed to the Project donors and through VAPs made available to affected groups and wider stakeholders through WCS website.

For all sites, it is necessary for WCS, in completing its baseline data, to define all potentially impacted persons, apply criteria (see Chapter 4) and judgement for determining which areas and people will be prioritised for livelihood interventions, to effectively and systematically address the economic impact of access restrictions in Project locations. A socioeconomic assessment and census of affected areas is conducted as part of the baseline in the areas identified as intervention villages (24 in total in Indonesia and number to be determined in the Philippines), defined with criteria set out in ESMF Section 4. The Project also commits to conducting comprehensive consultation and community agreement over access restrictions related to the MPAs and sustainable fisheries activities in line with the policy requirements (see Section 8 on next steps).

Livelihood restitution goal is for affected groups to experience “no net loss”, referring to the differential between baseline and the actual impact. As the MPA restriction would not likely affect the entire livelihood basis of an individual or household, the objective of the LRP/sub-projects for livelihood restitution are not full livelihood restitution but rather addressing the differential, or any loss caused by the Project. The Project therefore aims at restitution of the loss local/affected peoples experience through the restrictions put in place with Project support, but notes that the success of restitution depends also on the willingness and ability of the individual to seek alternatives and implement them successfully, as well as on the Indonesian government’s attention to the welfare of coastal peoples. Hence the Project needs will provide adequate opportunities for individuals to address and re-establish their loss in livelihoods; the “adequacy” of these opportunities needs to be demonstrated, with appropriate planning, consultation, assessment of feasibility of proposed livelihood interventions, and monitoring.

Preparation for / Developing IPPF and ensuring Indigenous Peoples and Free, Prior and Informed Consent (FPIC)- PS 7 /ESS7

Indigenous Peoples Planning Framework (IPPF) following requirements of PS 7 and ESS7 has been prepared as Annex 1 to this ESMF. The IPPF outlines the format for the later IPPs, which may be prepared if needed, as stand-alone documents or as part of the VAPs. As part of the concurrent BMU Project in Indonesia, WCS field team have been trained to identify and engage on indigenous peoples’ issues, using specialists as needed. Local mapping of indigenous peoples and their traditional ecological knowledge associated with the Project areas will be carried out in the first year of the Project in Indonesia, and second year for the Philippines. This will involve consultation processes including to identify and agree appropriate interventions, to be documented in the VAPs. Examples of the use of traditional ecological knowledge documented using various methods and facilitated for wider community awareness raising and community building, are included in the mitigation framework Table 14. Guidelines on FPIC are provided in the IPPF.

Preparation for / Developing Mitigations for Community Safety, Security and Conflict - PS 4 / ESS4

The approaches and activities set out in the mitigations framework Table 14 related to community compliance monitoring (Pokmaswas groups, in Indonesia and possibly in the Philippines) are primarily about increasing community safety, security – in particular, measures to avoid or address conflict. As set

out in the description of anticipated impacts, the issues identified as conflict may include tensions and 'issues' between groups at the community level, linked to jealousy (over participation in Pokmaswas, or other program benefits, for example). It may also include issues within or between villages as a result of dealing with incidents/reporting offenders to officials. A nuance in this is the difference between Pokmaswas dealing with offenders from own community (same village, neighbourhood or family) and in dealing with outsiders.

While there are examples of agreements in place between provinces, to handle issues of 'migrant' fishers, at the local level, the development of other mechanisms will be facilitated through the Project. Examples include: increasing effort to communicate conservation benefits, rules and the role of the Pokmaswas amongst village leaders and community members; developing village regulations related to the role of the Pokmaswas; promoting understanding of all citizen responsibilities under the law; facilitating decrees nominating the Pokmaswas; providing conflict prevention and mediation skills awareness and/or training to field personnel and to local government or other stakeholders as appropriate. One approach for consideration is the development of conflict awareness and handling/resolution capacity within regional working groups, and/or with the involvement of specialists from local universities or expert institutions.

Preparation for/Developing Stakeholder Engagement Plans

Site specific stakeholder mapping has been carried out as detailed in Chapter 6, and the Project team will develop a Stakeholder Engagement Plan (SEP) to guide and structure its analysis of, and interactions with, all categories of stakeholder for the Project duration. The objective of the SEP is to illustrate strategies and implementation efforts to engage relevant, influential stakeholders in all the Project activity processes. This is because collective interpersonal management, approaches, and interaction are required for meaningful stakeholder engagement. It is required by KfW, IPC PS and World Bank policy but also within Indonesian and Philippine cultures, which uphold friendliness and mutual cooperation as the key to build good interpersonal relationships. It is worth noting that the main point of engagement is building relationship; it means that engagement is a daily process that involves each individual in a Project to collaborate in building good, sincere relationships with all stakeholders at each level, which creates mutual understanding, trust, and respect.

Stage 4: E&S Monitoring and Reporting

This section of the ESMF will summarise key indicators and methods for monitoring potential mitigation measures that to be applied during the preparation and implementation of sub-projects. The roles and responsibilities of different stakeholders in implementing, monitoring and reporting on these activities are provided in ESMF Section 8, to be elaborated in the ESMP (presented for this Project as Village Action Plans – VAPs).

5.2 Overview of Mitigation Measures

Based on the E&S Risk Management process described in Step 3 above, the sub-Project proponents will define the appropriate instruments to plan and implement mitigation measures for potential environmental and social impacts. Mitigation measures and the management of potential social impacts will be addressed in the ESMP/VAPs, with ESCOP and/or UKL-UPL and SPPL (in Indonesia) or ECC (in Philippines) as appropriate.

The ESMF identifies potential social impacts resulting from Project activities and defines procedures for a participatory planning and implementation of these activities, elaborated in the SEP. Moreover, it describes procedures to ensure that vulnerable people and groups participate in the Project and are adequately compensated in case they suffer from negative impacts resulting from the program. The hierarchy of approaches – prevention, mitigation and compensation – is described below. The steps and procedures include development of specific, targeted plans (VAP, encompassing requirements for the ESMP, LRP and IPP) for mitigations through sub-projects as well as through the existing Project design activities.

WCS and any other partners or implementing agencies involved need to adopt the following approaches/steps in developing any additional measures that may be required under the unique circumstances present in their respective sub-projects:

- **Prevention:** This first step of designing a mitigation measure is aimed at finding alternatives to avoid the expected impacts. This may include alternative sites for Project implementation, alternative Project activities, or alternative technologies to achieve the same objective.
- **Mitigation:** In case alternative Project designs are not feasible, actions in response to the specific impacts will need to be defined. This may include institutional, technological, or social approaches. Mitigation may still be required for some alternatives, e.g. finding alternative sites will not necessarily eliminate the impact but only reduce it to a lower magnitude.
- **Compensation:** In case benefits arising from the Project do not exist and there are still residual impacts, compensation in kind or by other means may be used offset an adverse effect with a comparable positive one. It is not anticipated that any compensation be provided through this Project, however the Project's LRP aims at restitution of the loss local/affected peoples experience through the restrictions put in place with Project support. The Project will provide adequate opportunities for individuals to address and reestablish their loss in livelihoods; the "adequacy" of these opportunities needs to be demonstrated, with appropriate planning, consultation, assessment of feasibility of proposed livelihood interventions, and monitoring.

5.2.1 Impact Prevention Approach

To address the impacts outlined above, a range of priorities and options may be considered. The Project design includes several key activities which constitute impact avoidance strategies, and which are also expected to mitigate some of the anticipated impacts. In the Philippines, the site selection process will carefully consider legacy issues and conflict contexts, and plans to avoid high risk settings where security and safety risks may be excessive. Some key mitigative activities that are already built-in to the design are also some of the activities identified as likely to cause impacts:

- Ensuring that communities within or adjacent to existing MPAs are supported by livelihood development strategies (1.7; II.3; and III.3);
- Enhancing fisheries management planning through introduction of ‘climate-smart’ and ‘economic upside’ approaches (1.4); and
- Collaborating with government agencies, local communities and other relevant stakeholders to pilot an integrated management (‘Ridge to Reef’) approach in the northern Sulawesi (II.4).

That these approaches and activities are built in to the Project can be considered a sign of good planning, based on awareness of impacts, and of the need for a holistic approach with interventions that address some of the underlying issues and causes of behaviors that the Project seeks to change, in order to protect marine resources. The degree to which impacts may arise as a result of these activities will be determined largely by the approach taken to implementing the activity. During Project implementation, WCS and stakeholders will monitor activities in order to ascertain whether there are other activities causing environmental and social impacts, or if there are impacts that were not anticipated through this ESMF. The detail of the activity itself, who is involved, how, where and when, are all key determinants of an impact’s significance. Defining mitigation plans in detail, through the Village Activity Plans, may therefore consider the strategies, approaches and possible suited outlined in Table 11, to avoid negative issues and maximize the positive aspects of the activities already built into the design.

5.2.2 Impact Mitigation Approach

In addition to the impact prevention approach through Project design of beneficial activities, WCS commits to mitigating the potentially significant negative impacts arising from Project activities, through a range of approaches, which are to be developed in detail through consultation with affected intervention villages, as Village Activity Plans. The general mitigation commitments for key impacts are outlined in Table 14 and explained further below.

The “adequacy” of the provided measures needs to be demonstrated, for instance through a feasibility study or by proving that the suggested measures have been successfully applied elsewhere, in similar

situations, and are complementary and aligned with existing development programs of other actors in order to ensure continuity once project responsibilities have been fulfilled.

Table 14. Mitigations Framework

Impact / issue	Mitigation Approach	Explanation
General environmental and social preparedness	<ul style="list-style-type: none"> • Preparation of ESMF, with screening tools for assessment of impacts of individual activities or sub-projects • Provision of a negative list, to preclude activities with high severity or large scale impacts (> e.g. land requiring compensation; construction or activities requiring ESIA/AMDAL) • Preparation of guidance such as ECOPS /ESMP • Training for Project personnel 	<p>Following the guidance of the relevant policies and standards, Project applies good practices to avoid impacts through the design, and establishes processes and next steps for planning how impacts are mitigated, as well as seeking options to enhance any benefits. The Village Activity Plans (VAP) for each site will document consultations and agreement on sub-projects or activities to be implemented at the field level and include specific measures for impacts identified on a case-by-case basis.</p> <p>Key WCS team members receive training as needed, in indigenous peoples' rights, stakeholder engagement and Project grievance handling, as well as in gender and conflict awareness, to support all Project activities.</p>
Labour and working conditions	<ul style="list-style-type: none"> • Alternative income generation plans should pay attention to the involvement of children. Project meetings and documents (including tender documents), as well as briefing of parties involved, to include specific reference to laws and norms related to child labour. • Tender documents or Project activity plans to include reference and support to meet legal requirements for working conditions. 	<p>These mitigation commitments are at the systems level, however WCS teams are also sensitised to the issues through the ESMF process and as part of their field roles, they serve as observers and advocates, to ensure safe and appropriate working conditions for anyone involved in Project activities.</p> <p>As sub-projects are developed with the 24 intervention villages in Indonesia and others in the Philippines, Project staff also use checklists to assess impacts more specifically, including related to labour. Facilitation meetings and other activities are also to be used as opportunities to discuss issues such as child labour or other issues where the team can bring in information and awareness to the village level.</p>

Impact / issue	Mitigation Approach	Explanation
Health, safety, potential conflict, and human rights	<ul style="list-style-type: none"> • Training modules for WCS team/partners, Pokwasmas, adat leaders, police, other officials and community members involved in compliance monitoring activities include material on human rights, use of force, conflict mediation and resolution. • Training and materials to include explicit reference to the avoidance of gender-based violence and sexual harassment. • Community engagement officers trained to facilitate dialogue and address potential conflicts, appropriate to role. • SOP for field teams and Pokwasmas on handling dangerous situations/confrontations (includes personal safety and regulations to be emphasised with Pokwasma groups). SMART patrol activities to include necessary safety equipment, including for marine safety. 	<p>WCS will include general information on human rights, background checks and code of conduct in training modules for Project stakeholders, and in briefings for multi-stakeholder Working Group and/or prior to SMART patrol activities.</p> <p>Information on the Standards in the UN Code of Conduct for Law Enforcement Officials“ and the “Basic Principles on the Use of Force and Firearms by Law Enforcement Officials”, along with other supporting information, advice and practical examples as part of the training modules and briefings for people involved in relevant Project activities, such as community fisheries compliance monitoring, SMART patrol, and activities that involve engaging with people doing illegal activities (such as destructive fishing or wildlife trade).</p> <p>The ESMF also sets out commitments on handling cases where staff may be involved in unlawful activities.</p> <p>Facilitation meetings and other activities are also to be used as opportunities to discuss issues such as safety, conflict and other issues where the team can bring in relevant information and awareness to the Project stakeholders.</p>
Land acquisition, resource restrictions, changes in	<ul style="list-style-type: none"> • Comprehensive engagement strategy and materials developed to support communication with affected communities, with separate focus on the needs for: • MPA consultation processes 	<p>The Project will use a similar strategy and process used in other KfW-BMU Project areas in Indonesia to date, facilitating livelihoods analysis with the target community groups and developing sub-projects on site-by-site basis. Checklists and a “negative list” of activities that should not be considered for support under the Project are provided (see Annex 3). Options to be considered/developed with intervention villages include:</p>

Impact / issue	Mitigation Approach	Explanation
access and livelihoods	<ul style="list-style-type: none"> • Fisheries management (affected parties on a wide scale); and • Reef to Ridge (North Sulawesi only). • Preparation of Livelihood Restitution Plans (LRP) or similar guidance and detailed plans for diversifying or strengthening livelihood strategies in intervention villages. • Land size restrictions and the need for resettlement will be included in a negative list to screen any activities that would involve physical displacement. • Preparation of guidance (Process Framework) to include Voluntary Land Donation mechanism. 	<ul style="list-style-type: none"> • Developing home industries, fishing group or other small group activities in related or value-adding areas such as (for example), mangrove sweets (dodol), seaweed crackers, packaging, market access, facilitated sales agreements, etc. • Value adding on fish catches (storage, processing) • Developing potential of other commodities and services (birds nest, seaweed, tourism, or agricultural products, livestock, or entrepreneurial activities) • Developing aquaculture options (such as oyster farming, crab fattening, seaweed farming, cage culture, etc.) what and where, to be determined in conjunction with local governments) • Potential collaborations with private sector in these or other activities (options to be assessed, for example related to eco-tourism opportunities in selected areas, also related to product marketing, purchasing agreements, etc.) • Collaboration with and strengthening of government programs for fishing groups and/or other groups such as women, for example under the MMAF (Fisheries Agency) and KeMenDes (Ministry for Villages and its associated agencies at local level) • Partnering with other institutions such as NGOs, academia, research/think tanks and 'Diklat' divisions attached to government
Indigenous peoples	<ul style="list-style-type: none"> • Assessment of IP presence, characteristics and specific impacts • Preparation of IPPF and IPP or similar • FPIC procedures • Training for Project personnel 	Project personnel are trained to better understand indigenous peoples and FPIC requirements. To mitigate negative impacts and potentially enhance Project activities, the Project will also develop a knowledge base on indigenous systems, with a view to revitalizing local wisdom, to be linked to local awareness raising and education program on marine conservation. The traditional ecological knowledge, beliefs and practices of various groups in

Impact / issue	Mitigation Approach	Explanation
	<ul style="list-style-type: none"> • Involvement of specialists to engage targeted IP to strengthen or revitalize TEK or other aspects to be determined through consultation • Participation of affected IP in wider forums on CBNRM, building networks, confidence and knowledge • Increase socialization of relevant local regulations (for example Perda 2/2018 on plans for zoning small islands and coastal management, Maluku Utara). 	<p>each Project location will be documented; this can be approached as a relationship building and conservation-information exchange opportunity, also strengthening communities through developing shared identities, knowledge of the past and sense of place.</p> <p>To prevent or help mitigate existing or future tensions between groups in the intervention areas, the activities on indigenous knowledge and practices will be approached so as to build pride and respect within and between communities, and linked to livelihoods support by to also enhance collaboration. Supporting local IP leaders, youth and women to participate in other forums is also expected to strengthen IP community resilience.</p>
Stakeholder engagement needs	<ul style="list-style-type: none"> • Preparation of Stakeholder Engagement Plans (SEP). • GRM to be cultural appropriate and tailored to each site • Project team to promote forums and other opportunities for cross-learning between stakeholders 	<p>Stakeholders have varying needs for information, participation and processes for handling of grievances. SEP activities include developing a database of stakeholders, analysis of interests and influences, preferred engagement methods and grievance handling mechanism [specific examples for socialization on certain issues and needs, e.g. for fisheries impacted stakeholders]. The WCS team also proactively promotes information on the grievance mechanism set out in this ESMF and in SEP, and seeks opportunities to help stakeholders build their networks around issues supporting the Project objectives.</p>

Other options for activities or sub-projects that will help mitigate impacts are considered by the field teams also with reference to the ESMF and VAPs associated with the concurrent KfW-BMU Project. This may also be a useful reference to guide Project teams and stakeholders as to the types of the activities that would feasibly mitigate the key impacts, and may be developed as mitigating sub-projects in various locations.

5.3 Opportunities to Enhance Positive Impacts

A key tenant in the guiding policies and guidelines on environmental and social management is to maximise positive impacts of a Project intervention, both by design and in response to input from public consultation and from the monitoring of activities and their impacts over the course of the Project. Whereas the previous sections set out what is already planned in the Project design and additional impact mitigation measures that respond to identified impacts, this section introduces further new or additional options to be explored, to help address impacts, to be determined or agreed based on consultation and evolving context in each province. At the ESMF preparation stage, the following further opportunities to enhance the positive effects of the Project have been identified for consideration and attention during the development of VAPs:

- Increasing coordination and effort to integrate facilitation by different parties at the sub-district and village level on key issues such as village development plans, village level regulations, budgets, monitoring activities, compliance, conflict handling and market-access issues. With intentional effort, these could be better discussed across groups, better coordinated and eventually better resourced in an integrated manner. Project teams can provide support for facilitation or introducing resources/tools to help villages develop regulations in support of Project objectives.
- Specifically working with women to identify and alleviate potential negative project impacts, and prioritising appropriate opportunities for women to benefit from livelihoods sub-projects and increase their active involvement in decision-making bodies.
- Strengthening awareness of, and capacity for resolution of conflict associated with MPAs, by working to strengthen knowledge of conflict, and approaches to its prevention and management by local government, universities, religions and adat/indigenous organisations that have influence in, or may mediate or play a key role. In all Project areas, conflict over marine resource access and utilisation is prevalent such that a focused effort is warranted, to build capacity via a working group or a lead institution in this area. One option would be to involve other institutions that may be neutral and trusted, for example in training for the regional working groups or subgroups on community-based compliance monitoring, or directly in specific conflict interventions. A number of NGOs at the national or provincial level have experience in conflict mediation that could serve as partners or provide resources. A local centre or faculty within a local university may be engaged to develop a program or fulfill a capacity building and/or mediation role that can serve Project sites and a wider area.

- Developing Joint Agreements – for cooperation, with clear roles and work plans related to benefit sharing (of revenue generated in MPAs), to offer incentives to fishery-dependent communities to support eco-tourism or other sectors, to actively protect the MPA and to avoid or resolve conflicts related to marine resource usage or practices.
- Developing at the Province and/or sub-district levels, a regular fisheries and marine conservation forum, a formal working group or an ad hoc group to address multiple issues – MPA/conservation awareness, Pokmaswas needs, livelihoods, conflict and other implementation challenges encountered, as well as policy changes and routine or special budgets needed (for example to increase frequency of routine monitorings). The model currently being used in NTB Province will serve as an example for the North Sulawesi site, and possibly for North Maluku and the Philippines.
- Support for local innovations or interests that have a common or complementary objective, for example on coastal/target community waste management, on turtle conservation, or other ideas and priorities raised by the communities.
- Working together with the Fisheries Agency provides opportunities to help them improve their stakeholder engagement and communications approaches, and to better understand potential impacts of activities, especially social impacts.

5.4 Wildlife Trade and Policy Program (WTP)

A complement to the MPA Project is the WCS Wildlife Trade and Policy Program (WTP), which is noted here as part of the approach to Project implementation including impact mitigation. The WTP program aims to support the Government of Indonesia in their efforts to curb the illegal wildlife trade and unsustainable trade. The species WTP focuses their work on are: tigers, rhinoceros, elephants, pangolins, orangutans, gibbons, manta rays, sharks, hornbills, parrots, marine turtles, song birds and sea horses. The activities under this program are supported by high-quality data analysis and supplemented by online and physical market survey monitoring as well as research and assessment on policy and legal frameworks.

The two over-arching objectives of the WTP are to:

- Counter illegal wildlife trade through strengthening law enforcement capacity, intelligence-led approaches and improved inter-agency coordination; and,
- Strengthen the national policy, regulatory framework and data management systems for species conservation and wildlife trade as well as the implementation of CITES.

WTP works with government agencies such as the Indonesian Ministry of Environment and Forestry, the Ministry of Marine Affairs and Fisheries, the National Police, Customs and Quarantine. To support the KfW Project in conserving Indonesia's biologically diverse marine ecosystems and important fisheries, WTP will strengthen the criminal justice system to reduce the destructive fishing and illegal trade of marine species Indonesia and possibly the Philippines. This will be approached through capacity building and data

information support. WTP will be working closely with the law enforcement agency and community to synergize the coordination and communication among multi-stakeholders related to law enforcement, particularly supporting the follow up on Pokmaswas reports of destructive fishing and breaches of rules applying to MPAs. Furthermore, WTP will be working closely with the government in the national level to support the development and reform of the policies and regulations on marine species conservation and CTI through direct technical advice.

CHAPTER 6. STAKEHOLDER ENGAGEMENT, CONSULTATION AND DISCLOSURE

This section of the ESMF outlines the categories and types of stakeholders involved with the Project, as well as the Project's stakeholder mapping, consultation and disclosure activities and guidelines. Site specific stakeholder mapping has been carried out as part of Project planning, impact scoping and to fulfill safeguard requirements, with detail to be provided in the Stakeholder Engagement Plan. Overall Project stakeholder categories for both Indonesia and the Philippines are shown below:

Table 15: Categories of Project Stakeholders

No.	Broad category	Sub-category relevant in this Project
1.	Community	Indigenous (Customary/ Cultural) Religious Formal and informal leaders Women Groups (Fishing groups, Pokmaswas etc.) Youth (groups or leaders)
2.	Government	Village and sub-district government Sectoral Agencies Law Enforcement
3.	Non-Government Organisations (NGOs) and Civil Society	Environmental NGOs Social / Poverty NGOs Religious Orgs/NGOs Other NGOs Media Academia
4.	Private sector	Fisheries Tourism

Consultation and disclosure requirements have will be met by the end of September 2020 in Indonesia and in Q1 -Q2 of 2021 in the Philippines. In the meantime, consultations in the Philippines are also ongoing as part of site assessment and selection process there. Engagement, consultation and disclosure activities are also ongoing processes throughout the Project life cycle. As stated in the ESMF chapter on Impact Mitigation, the Project team will develop a Stakeholder Engagement Plan (SEP) to guide and structure its analysis of, and interactions with, all categories of stakeholder for the Project duration. The objective of the SEP is to illustrate strategies and implementation efforts to engage relevant, influential stakeholders in all the Project activity processes. Following the site selection and detailed activity design process for Philippines, a separate SEP will be developed for the Philippines.

A summary of consultation activities undertaken as part of the ESMF development process between July and September 2020 is provided in Table 16 below and notes from each session of public consultation are included as Annex 16.

Table 16: Summary of ESMF Consultation Undertaken to September 2020

Project area	Consultation event and location	Date	Number of participants by gender
North Sulawesi	Public Consultation (on-line)	29 September 2020	Male = 37, Female = 25
North Maluku		28 September 2020	Male = 54, Female= 18

6.1 Disclosure of the ESMF

The draft ESMF has been disclosed on WCS website (<https://indonesia.wcs.org/About-Us/Publications.aspx>) on 14 September 2020. Indonesian sub-national level stakeholder consultations were held online in September 2020 (see summary of participants and notes in Annex 16). Discussions during these consultations focused on the ease of use and implementation of the ESMF, suitability of impact assessment, adequacy of safeguard mitigation mechanisms, and training needs for stakeholders. Inputs from these consultations have been incorporated into the ESMF where feasible. Most input from consultation was incorporated in Chapter 5 on mitigation approaches, for example, to ensure attention to womens' roles and benefits of their participation, attention to safety of community compliance monitoring group members, suggestions on the involvement of tourism operators in project activities and the need for synchronicity and strong coordination with existing local government programs. Input to the Project grievance mechanism and organizational structure for ESMF implementation have also been incorporated in the following chapters.

6.2 Principles and methods for consultation

Some key principles for stakeholder engagement across all Project sites are provided below, followed by further guidance on consultation and disclosure activities:

- **Clear, accurate and timely communication:** The Project should provide information that is clear, accurate, relevant and timely, recognising the different communication needs and preferences of various stakeholders and that effective communication involves listening and talking;
- **Accessibility and Inclusivity:** The Project will seek out stakeholders potentially affected by, or interested in, the activities, processes, or decisions of Tripura II and provide them with whatever information they need to participate in a meaningful way;

- **Transparency:** Management should clearly identify and explain the engagement process, stakeholders' role in the engagement process, and communicate how their input was considered and how it informed the decision or Project; and
- **Measurability:** Evaluating engagement activities will assist in identifying effective stakeholder engagement methods and improve the quality of stakeholder engagement over time.

In practical terms, this means that Project personnel involved in stakeholder relationships, for formal and informal consultations will endeavor to:

- Provide clear, factual and accurate information in a transparent manner on an on-going basis to community stakeholders through free, prior and informed consultation;
- Listen and learning about local and social culture and wisdom;
- Provide opportunities for community stakeholders to raise issues, make suggestions and voice their concerns and expectations with regard to the Project;
- Engage with women, men, elderly, youth and vulnerable community members, indigenous people, as well as those in positions of authority and power;
- Provide stakeholders with feedback on how their contributions have been considered in the development of relevant assessments and plans;
- Build capacity among community stakeholders to interpret the information provided to them;
- Treat all community stakeholders with respect, and ensuring that all Project personnel and contractors in contact with community stakeholders do the same;
- Respond to issues and requests for permission; and
- Build constructive relationships with identified influential community stakeholders through appropriate levels of contact.

Consultation Methods and Tools

Communication during Project development and execution involves seeking and imparting information, and reaching agreements through dialogue. Table 17 below summarizes some of the most commonly used techniques for conveying information to the public and their respective advantages and disadvantages. The safeguards consultant may use any of these techniques in developing future consultation and engagement activities as part of the Stakeholder Engagement Plan.

Table 17. Techniques for Conveying Information to the Public

Technique	Key points	Advantages	Disadvantages
Printed materials	<ul style="list-style-type: none"> • Information bulletins, brochures, reports: Text 	<ul style="list-style-type: none"> • Direct 	<ul style="list-style-type: none"> • Demands specialized skills and resources

Technique	Key points	Advantages	Disadvantages
	<p>should be simple and non-technical and relevant to the reader</p> <ul style="list-style-type: none"> • Provide clear instructions on how to obtain more information • Use of local language/vernacular and imagery (info graphics that minimize text) 	<ul style="list-style-type: none"> • Can impart detailed information • Cost-effective • Yields a permanent record of communication • Greater uptake by targeted audiences 	<ul style="list-style-type: none"> • Not effective for illiterate stakeholders unless text is eliminated • May involve additional cost
Displays and exhibits	<ul style="list-style-type: none"> • Can serve both to inform and to collect comments. Should be located where the target audience gathers or passes regularly • Mobile displays, taken to target audiences in coastal areas 	<ul style="list-style-type: none"> • May reach previously unknown parties • Minimal demands the public 	<ul style="list-style-type: none"> • Costs of preparation and staffing • Insufficient without supporting techniques
Print media	<ul style="list-style-type: none"> • Newspapers, press releases, and press conferences can all disseminate a large amount and wide variety of information • Identify newspapers likely to be interested in the Project and to reach the target audience 	<ul style="list-style-type: none"> • Offers both national and local coverage • Can reach most literate adults • Can provide detailed information 	<ul style="list-style-type: none"> • Loss of control of presentation • Media relationships are demanding • Excludes illiterates and the poor
Electronic Media	<ul style="list-style-type: none"> • Radio, internet, social media, and video: Determine the coverage (social media, internet, or radio), the types of viewer; the perceived objectivity, and the type of broadcast offered. • Determine how to disseminate the social media hashtag / web address etc. to the audience. 	<ul style="list-style-type: none"> • May be considered authoritative • Many people have access to radio and cell phones • Social media is cheap 	<ul style="list-style-type: none"> • Disadvantages those without cell phones / internet access
Advertising	<ul style="list-style-type: none"> • Useful for announcing public meetings or other activities • Effectiveness depends on good preparation and targeting 	<ul style="list-style-type: none"> • Retain control of presentation 	<ul style="list-style-type: none"> • May engender suspicion

Technique	Key points	Advantages	Disadvantages
Formal information sessions	<ul style="list-style-type: none"> Targeted briefing: Can be arranged by Project sponsor or by request, for a particular community group, NGO etc. 	<ul style="list-style-type: none"> Useful for groups with specific concerns Allow detailed discussion of specific issues 	<ul style="list-style-type: none"> May raise unrealistic expectations
Informal information sessions	<ul style="list-style-type: none"> Open House, Site Visits, and Field Offices: A selected audience can obtain first-hand information or interact with Project staff. Visits should be supported with more detailed written material or additional briefings or consultations. 	<ul style="list-style-type: none"> Provide detailed information Useful for comparing alternatives Immediate and direct Useful when the Project is complex Local concerns are communicated to staff May help reach non-resident stakeholders 	<ul style="list-style-type: none"> Attendance is difficult to predict, resulting in limited consensus-building value May demand considerable planning Field offices can be costly to operate Only reach a small group of people

Source: World Bank Environmental Assessment Sourcebook, Number 266.4

6.3 Free, Prior and Informed Consent (FPIC)

The Project works in areas where indigenous peoples are present and likely impacted. The consultation and engagement requirements related to indigenous people are more specific than for other categories of stakeholders, in keeping with PS 7/ESS7. Circumstances requiring FPIC and contexts for FPIC considerations include:

- Project impacts on lands and natural resources subject to traditional ownership or under customary use
- Relocation of Indigenous Peoples from lands and natural resources subject to traditional ownership or under customary use
- Significant impacts on critical cultural heritage, or proposed commercial use of cultural heritage
- Applies to Project design, implementation and expected outcomes related to impacts affecting the communities of Indigenous Peoples

Project personnel have been guided to identify indigenous peoples on a site-by-site basis, through baseline work and other consultation activities. The indigenous people are understood as a specific category of stakeholder, understood as distinct from other local community members who may also be dependent on natural resources for their livelihoods, by the presence of a distinct identity and collective attachment to a territory or resource. In the context of this Project, emphasis is on indigenous groups that may be vulnerable as a result of Project activities.

FPIC requires good faith negotiations and a documented agreement. It is an ongoing process (not a single point in time), but does not require unanimity. The Project's Indigenous Peoples Planning Framework (IPPF) in Annex 1 provides further information and resources for FPIC.

CHAPTER 7. GRIEVANCE REDRESS MECHANISM (GRM)

This section of the ESMF outlines the Project's approach to defining and handling grievances about the Project and its activities or personnel. The Project requires clear processes for affected parties to communicate their concerns and grievances to WCS and if necessary, to KfW. The Grievance Redress Mechanism (GRM) for this Project is consistent with that established for the concurrent KfW-BMU Project in Indonesia, as the stakeholders are largely the same, and the system for using this mechanism is established. For the Philippines, some consultation will be required to develop local nuances, however the general approach is expected to be the same as outlined here.

This ESMF establishes a GRM which will allow people, communities or members of the affected vulnerable indigenous communities, and Project-Affected Persons (PAPs) to file complaints and receive satisfactory response in a timely manner. The GRM applies to the ESMF and the associated plans yet to be developed. Specific objectives of the GRM are to:

- Provide easy access to public especially the affected community members to file complaints and/or concerns on a particular activity or sub-Project;
- Identify and assess the nature of complaints and/or concerns and agree on solution as early as possible so that constructive inputs can be considered in the design of an activity or a physical investment;
- Avoid stalled activities or physical investment in the later stage due to the ignorance of complaints or disputes, leading to unmanageable disputes and high costs; and
- Obtain support from the impacted communities for the proposed activities or physical investment.

A grievance is defined as an issue, concern, problem or claim (perceived or actual) that an individual or community group wants WCS to address and resolve, e.g.:

- Concerns and specific complaints about Project activities being planned or implemented, personnel behavior or perceived incidents or impacts, damages or harm caused by the Project; and
- Concerns and specific complaints about access to the Project stakeholder engagement process and how grievances have been addressed.

Complaints regarding the effects of Project activities will be addressed with reference to standard operating procedures which will be drafted during Project inception. A two tier system for handling of Project-level grievances is established, with site/province level and national level responses, outlined in Sections 7.1 and 7.2 below.

Information about the GRM and its procedures, as well as their responses must be accessible by all people in different social levels. The GRM information will be conveyed to key government and village level authorities, as well as to heads of Pokmaswas (community compliance monitoring groups) and key

community figures in the Project intervention areas, such as religious leaders and heads of school, to enable a representative selection of community leaders to be informed about how complaints should be channeled and how they will be handled by WCS. Information on the GRM, including the key contact details for the field officers and site managers, will be displayed, for instance, on notice boards in the village hall or printed in leaflets and booklets available at village level and in key government offices (kecamatan). Importantly, information on the GRM will be conveyed through face-to-face meetings with key community figures to ensure they receive the necessary understanding and are familiar with the channels for conveying concerns, and how responses will be delivered. Discussion of the GRM will also be included in the agenda of community meetings, consultations, FGDs etc., to help disseminate information on the mechanism.

The principles of the mechanisms to be developed are:

- Persons with grievance(s) can file at no costs, through different forms of media, addressed to the relevant complaint handling unit or to a contact addresses or website dedicated specially for handling for the Project;
- The rights and interests of people participating in the Project will be protected;
- Person(s) with grievance(s) will be given non-threatening, equal, and fair treatment during the process of follow-up and dispute resolution, regardless of their origins, religion, citizenship status, social and economic background;
- Resolution of problems encountered by people as the effects Project implementation is carried out seriously and in an appropriate and timely manner, and ideally at the local level;
- Complaints are to receive a written response to their complaint within 14 days of it being registered, usually delivered by Project officers or through local government leaders if appropriate. For illiterate or poorly literate persons, Project officers are to coordinate with village leaders to ensure a verbal delivery of the letter content is conveyed to the complainant, and the necessary follow-up is facilitated;
- When the grievance remains unresolved at the local level (WCS in North Sulawesi and North Maluku), due to the area manager being unable to facilitate a resolution between the aggrieved party and others involved, the case will be escalated for handling by the national level management team (WCS Bogor);
- The GRM is to be in accordance with GoI rules and regulations; and
- Follow-up on complaints and resolution of any disputes will be made based on agreements reached among all involved parties through a well-informed consultation processes with facilitation by a competent, trustworthy and credible team; and
- Grievances are to be documented in a formal Project Grievance Log, reported on periodically, and used as a basis to analyze stakeholder concerns, patterns and opportunities for improvement in Project Implementation. An administrator at the site level is responsible for maintaining the Grievance Log, under supervision of the Site Manager. Coherence with the national level log is to be ensured by

national level manager ensuring the format and training for each of the site teams, to maintain the log on an ongoing basis.

7.1 Site/Province Level Grievance Redress Mechanism

The stages of grievance redress are:

Grievance Report Filed

- (1) Those who file complaints can be members of the community, people, a group of people, or institutions.
- (2) Complainants are those who have interest based on legal object entity of the complainants that can be proven with valid permit documents.
- (3) The complainants complete a Project Grievance Form that contains information about complainant's identity and description of the grievance.
- (4) The complainants must list their identity, address, phone number that can be contacted to clarify their identity and communication, as well as correspondences regarding the handling of the complaints.
- (5) Grievance can be filed directly to the Site/province manager or by submitting it in writing or verbally to the National Project manager at WCS Bogor.

Grievance Documentation and Administration

Every complaint must be documented and filed in the Database/Grievance Log. At this stage, a registration number will be assigned to each filed complaint. The Site/province Manager will issue a written complaint receipt for each complainant. The complaint's progress status can be monitored with the registration number. The process must be transparent, and the complainants must be well informed about it.

Grievance Material Verification and Validation

Complaints will go through preliminary verification to determine whether complainants are eligible to file complaint and it is done through verification of complainant's identity and other required documents. Further verification is conducted to determine if the material can be handled by site/province Program Manager. If not, the decision and reasons must be submitted in writing to the complainants. Verification and validation must be conducted immediately, not more than 14 days after complaints are received.

Grievance Handling

The site/province Program Manager can consult the provincial stakeholders to get input in handling grievance. If required, site investigation can be conducted to get further data and information about the filed complaint. The handling process must be done within 60 days since the complaints are received.

All processes must be documented well. Results of the handling and recommendations will be reported to the complainants. If a complaint is solved, a Report will be made. However, if a complaint has not been solved, further handling will be done by national level Program Manager.

7.2 National Level Grievance Redress Mechanism

The GRM is managed by the Program Managers in each of the regions and regularly monitored by the WCS National Program Manager in Bogor, Indonesia in coordination with the WCS Regional office in Singapore, for the Philippines. This process can be started if at the beginning, the complaint is not considered as a matter to be handled by site/province manager. The stages are the same as for the grievance redress mechanism at site level:

Grievance Documentation and Administration

Every complaint must be documented and filed in the Project Grievance Log (Database), maintained under the national Program Manager by the Project Safeguard Specialist. The Safeguard Specialist will filter grievances and follow the handling procedures outlined below, resolution steps through to resolution which is also to be recorded in the database. At the receiving stage, a registration number will be assigned to each filed complaint. Complaint status progress can be monitored with the registration number, and reporting on grievances can be verified using this system. For appeals, all supplementary documents, processes, and final recommendations must be submitted by site/province managers to National WCS Program Manager.

Grievance Handling

To handle grievances, the WCS team will filter to determine if it is related to the Project and its activities or personnel, or to a wider sectoral issue or is unrelated. WCS may consult (with government officials) to get input in handling grievances if needed, or if required, coordinate for site level investigation to be conducted as part of the follow up steps in handling the grievance, to gather further data and information about the filed complaint. The target for handling process and completion is within 60 days after the complaints are received. Results of the handling and recommendations will be informed to the complainant within the same timeframe. If a complaint is solved, a record is filed in the database, and collated through regular monitoring. National Program Manager also reviewed documentation to analyse any Project adjustments needed and lessons learned. The proposed Project GRM is illustrated in Figure 10 below.

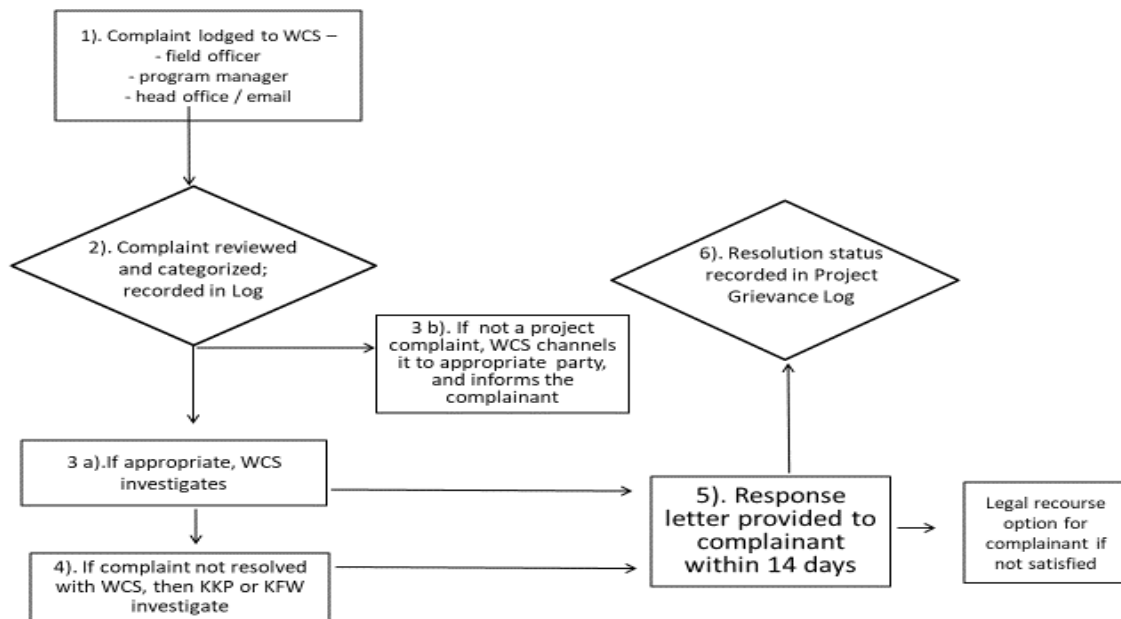


Figure 10. Project Grievance Redress Mechanism

CHAPTER 8. ESMF / SAFEGUARD IMPLEMENTATION ARRANGEMENTS

This section of the ESMF sets out the arrangements for ESMF implementation, including responsibilities of the different parties, with an emphasis on the Project implementation team, and the training and support needed to ensure capacity to implement the environmental and social management aspects of the Project. Budget and next steps are also outlined.

The general responsibility for the implementation of this ESMF and related safeguard instruments lies with the Project Manager and the country program of WCS. It will be responsible for the day-to-day organization and supervision of implementation of the measures recommended in this ESMF at the national level, as well as for overseeing the implementation of the different mitigation measures prescribed in this Framework for the site/regional Project teams. An overview of the relationships between Project actors and stakeholders is provided below for Indonesia, with the Philippines approach to be defined in early 2021.

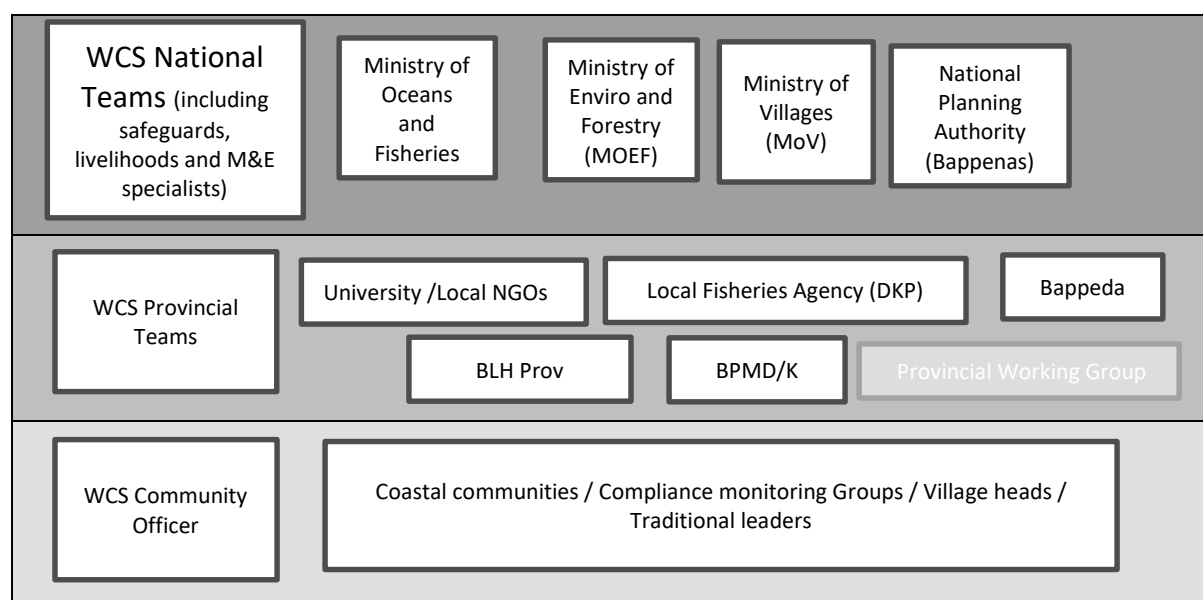


Figure 11: Overview of the Relationships Between Project Actors and Stakeholders (Indonesia)

8.1 Roles and Responsibilities

There is a Project Manager with responsibility for Indonesia, and an appointed WCS Regional team member in Singapore currently responsible for the Philippines, where a team and local partnerships will be developed during this Project. Within Indonesia there are two regional Program Managers (North Maluku and North Sulawesi) will be responsible for the day-to-day implementation of the measures recommended in this ESMF and for the VAPs yet to be developed. They are responsible on the regional

level, together with other Project activities. They will ensure that the regional team closely coordinates all Project activities with local stakeholders, and holds bi-annual consultations to inform the government and community of ongoing Project activities, seeking men and women's views, and respond to questions or grievances. The regional Program Managers will regularly report on the implementation of the ESMF to the Project Manager, in accordance with the Project M&E indicators in the Project Agreement and log-frame. The Table 18 below summarizes the ESMF responsibilities of each of the Project stakeholders.

Table 18. Roles and Responsibilities for ESMF Implementation

Entity	ESMF Responsibilities
WCS National Program Manager	<ul style="list-style-type: none"> • Overall supervision and oversight of the ESMF implementation
National Program Manager with technical input from the Safeguards specialist /Consultant	<ul style="list-style-type: none"> • Oversight of policy and technical aspects of E&S safeguards management; • Ensuring safeguard documents are aligned with national regulations and legislation; • Ensuring qualified and experienced personnel are available in the Project Areas; • Development of relevant reporting templates and mechanisms for E&S Safeguards compliance; • Coordinating with relevant Project Area focal points regarding the planning and implementation of the E&S assessment cycle in relation to the Project implementation schedule; • Provisioning the necessary technical assistance to facilitate the implementation, management, and monitoring of E&S safeguards; • Reviewing and approving screening reports, ESAs, baseline socio-economic data, and site-specific ESMPs; • Developing, planning, and implementing trainings on ESMF application, safeguard instruments, and environmental awareness.
Regional Program Managers (North Sulawesi and North Maluku)	<ul style="list-style-type: none"> • Ensuring that potential land tenure issues and competing claims are identified through review of existing grievances and Grievance Redress Mechanism (GRM) implementation during the pre-inception phase; • Ensuring, in close collaboration with the National, Program Manager that E&S screening is carried out for each sub-Project/activity prior to implementation; • Closely coordinating with the National Program Manager for review and approval of screening decisions and recommendations; • Ensuring, in close collaboration with the National Program Manager, the timely preparation of ESMP, baseline data collection, and IPPF for sub-projects/activities depending on the screening outcome; • Closely coordinating with the National Program Manager and Environmental Agencies to obtain any necessary clearances and environmental permits;

Entity	ESMF Responsibilities
	<ul style="list-style-type: none"> • Ensuring that relevant ESMP provisions are included in the design and in tender documents and in contractor/supplier agreements; • Ensuring ESMF and IPPF compliance during planning, construction, and operation; • Preparing and submitting regular E&S Monitoring and Progress Reports to the National Program Manager; • Closely coordinating with the National Program Manager to plan and deliver trainings and workshops on the Project's safeguards requirements and procedures to staff and contractors; • Developing a GRM in close collaboration with the National Program Manager, as well as ensuring that grievances are addressed at the appropriate level; • Raising awareness and disseminating and disclosing information on the GRM and the associated procedures at the Regional level; and <p>Ensuring adequate public consultation during E&S screening, ESMP and IPPF development, and encouraging community participation during sub-Project planning, management, and monitoring in close collaboration with the National Program Manager.</p>

8.2 Capacity Building

Proper safeguard implementation requires particular capacities in the team members, and an awareness of the knowledge and skills, including gaps, of the other stakeholders involved in the Project. An initial capacity building assessment process identified that the Project team needs to improve and strengthen the awareness, understanding and skills for communities, government (national/sub-national), partners and internal team members, particularly at new field sites. Based on this, technical advisors have been hired to provide on-the-job support for the teams. For the Philippines, further recruitment will take place, and a similar approach to capacity strengthening is envisaged as for Indonesia to be conducted a regular basis, structured as follows:

- Basic training on fisheries management and marine protected area. Basic training is mandatory training for key program personnel and stakeholders including local government (DKPs), universities, CSO and communities. Training material and content will vary with topics to address key Project issues related to fisheries management and marine protected area, and policy/law and its enforcement. The role of stakeholders, special approaches to ensure inclusion (awareness of gender and indigenous peoples' issues), and knowledge and a fundamental understanding of the potential environmental and social impacts should be included in some basic training.
- Technical training on various thematic materials. The training materials for each of the themes will be developed depending on the participants identified for specific courses. Target for participants for the technical training are: local land office personnel, representatives from various line agencies from the

Project target areas, field teams, civil society and consultants involved in the technical assistance. Topics for technical training are listed in the Table 19 below; the audience or participants and timing for these activities in the Philippines will vary, but the Outline will be implemented in Indonesia, as shown.

Table 19. Capacity Building and Training Program Outline

No	Activity	Target audience	Time
1	Training competency on Ecosystem Approach to Fisheries Management (EAFM)	Governments	Year 1
2	Technical guide on registration	Governments	Annually
3	Training on Open Standard for Practice of Conservation (OSCP)	Governments	Year 2
4	Training on MPA 101 (protected area management)	Governments	Year 1
5	Training on SMART Patrol	Governments	Year 1
6	Training on data monitoring and analysis	Governments	Year 2
7	Training for government law enforcement officers to conduct investigations, arrest, and prosecutions	Governments	Year 2
8	Initiation workshop on the establishment of monitoring system and monitoring task force for MPA, fish population and social economy	Governments	
9	Training on MPA design	Governments, Community	Annually
10	Training on stock assessment	Governments, Community	Annually
11	Training capacity building on Marine Spatial Monitoring and Evaluation Tools (SMART)		Year 2
12	Training for Compliance monitoring Groups	Community	Year 2
13	<p>Training capacity building for community group</p> <p>Training courses for the community depend on the types of businesses for which livelihood assistance will be provided based on livelihood surveys. Some of the businesses include community tourism, processed products, aquaculture, and fish catch capacity and quality improvements. The types of training should fit the needs of the community and the businesses that the community will develop.</p> <p>Examples of training courses related to the community tourism development are:</p> <p>Training on community-based tourism management</p> <ul style="list-style-type: none"> • Tour guide/interpreting training • Service delivery training • Handicraft training 	Community	Annually

No	Activity	Target audience	Time
	<ul style="list-style-type: none"> • Training on tourism service standards • Diving training • Training on tourism promotion and marketing • Training on the development of processed products <p>Group management training</p> <ul style="list-style-type: none"> • Business and financial management training • Business plan development training <p>Training on the production, marketing and packaging of processed products</p> <p>Aquaculture</p> <ul style="list-style-type: none"> • Aquaculture training • Training on handling aquaculture products • Training on strengthening aquaculture groups <p>Fishery product quantity and quality improvements</p> <ul style="list-style-type: none"> • Training on catch handling 		
14	Seagrass monitoring training	Internal team (field staff, enumerators)	Annually
15	Fish monitoring training	Internal team (field staff, enumerators)	Annually
16	Coral reef monitoring training	Internal team (field staff, enumerators)	Annually
17	Diving course	Internal team (field staff, enumerators)	Annually
18	Safeguard training	Internal team	Year 1
19	Training on communication strategy (how to develop brochure/journal, storytelling for campaign/film)	Internal team	Year 1
20	Training on English speaking and writing	Internal team	

8.3 ESMF Implementation Budget

An estimated budget requirement for the implementation of the ESMF is outlined in Table 20 which includes costs for safeguard implementation and monitoring activities, capacity building and livelihood programs for the 24 intervention villages in Indonesia, including data collection for monitoring and evaluation throughout the seven-year Project duration. The estimated budget will be revisited on a periodic basis and adjusted if needed, including once the Philippines site selection has been completed. The costs of revising the ESMF and implementing the ESMF in the Philippines will be additional to the costs set out below.

Table 20. Estimated ESMF Implementation Budget

No	Objectives	Description	Frequency	Estimated Cost (EUR)
1	Project Coordination Unit (PCU) staffing	Hire part-time consultant to develop guidelines for monitoring of safeguard activity and mitigation plan of the Project implementation Hire Safeguard Senior Officer for 5 years in PCU	Once	70,000
2	Capacity building and Training	Project to provide capacity building and training program for team/staff, government and local community	Annually	75,000
3	Develop Livelihood Restoration Plan (LRP)	Identifying and engaging partners to establish and implement alternative livelihoods programs for fishing communities who lose access significantly to develop and implementation of Livelihood Restoration Plan (LRP)	Once	40,000
4	Develop Village Action Plan (VAP)	Develop guidelines for supervision, monitoring and regular reporting include data collection for progress of Project activities include for developed Village Action Plan (VAP) as part of the ESMF	Once	40,000
5	Monitoring and Evaluation	Data collection for monitoring and reporting on social, economy and ecology (Baseline and End-line)	Annually	50,000

No	Objectives	Description	Frequency	Estimated Cost (EUR)
6		Conduct mid-term evaluation from external and independent monitoring evaluation for the hold project	Once	75,000
		Total (Estimated)		350,000

8.4 Next steps and Timeline

The process of overall Project implementation is based on cycles of annual workplans (AWP) developed between the national and regional (Provincial) teams to reflect targeted activities in line with the overall Project log-frame, as well as considering local developments, achievements and lessons learned through implementation and regular monitoring. After development of the ESMF, the next key activities for safeguard-related planning are related to developing 'sub-projects' alternative livelihoods for impacted persons/householders and supplementary income for Compliance monitoring Groups are detailed below.

Table 21. Next Steps for ESMF Implementation

No.	Item	Explanation	Timeframe
1.	Completing baseline data in 4 villages and defining impacts on indigenous peoples (IP) in the Project areas	An assessment of the presence of IP in North Maluku intervention villages and the wider impact area will be undertaken, using secondary sources and primary analysis (interviews, field visits) to Project areas, with an emphasis on the areas where WCS has not previously worked and is still developing its local stakeholder relations. In addition to identifying or confirming the presence of IPs in Project areas, some baseline information on their key characteristics and an assessment of the impacts on these groups will be developed, so that mitigations and consultations can be planned or adjusted as needed.	(Q4 2020 – Q2 2021)
2.	Completion of site assessment process in the Philippines	The first scoping report for this process was completed in July 2020 and further work is underway. The first scoping considered 7 areas whereas the next phase focuses on 1 area, as outlined in this ESMF (Bohol Sea); the analysis of risks and opportunities for both sides includes not only environmental and social factors, but also political and other risks. A final site recommendation is expected by end of 2020.	(Q4- 2020)
3.	Collection of baseline data including on IP in the Philippines sites	The baseline data collection for the site selected can commence once approvals are obtained with national and local authorities in the Philippines. It is possible that the data collection period be merged with consultations for a local resource diagnostic or participatory assessment of options for sustainable livelihoods alternatives, but this can not yet be confirmed. If conducted as separate (sequenced) activity like has been done in Indonesia, then the process will be as set out below, with some 3 – 6 month time lag on the timeframe indicated for items 4 below.	(Q1-Q2 2021)
4.	Updating ESMF to include revised and additional Philippines data	This ESMF document will be revised to reflect the Philippines site selection, including baseline profile, confirmation of activities and potential impacts and mitigations planned, as well as consultations with national and sub-national stakeholders.	(Q3 2021)

No.	Item	Explanation	Timeframe
5.	Consultations including FGDs in the intervention areas to develop sub-Project concepts, including specific consultations for FPIC if necessary	A series of FGDs will be held in some or all of the Project intervention villages in Indonesia and the Philippines, to deepen discussion and understanding of impacts and how they may be mitigated. The FGDs are to result in short lists of potential sub-projects, which the teams will analyse with support of the safeguard specialist/consultant to understanding potential impacts, as well as considering budget implications. Separate consultations with indigenous peoples will be held if needed, based on the IP assessment findings and recommendations, and also depending on the analysis of sub-Project options (if there are to be specific impacts or implications for IPs).	(Q4 2020-Q2 2021) Depends on Covid-19 and access to villages
6.	Workshops to finalise sub-projects, assess impacts and develop ESMPs	Project team will collaborate via internal workshops to assess the short lists of sub-Project options from the community consultations, resulting in final decision on sub-projects for implementation in 2020. An ESMP for each region, with initially two sub-projects per region, will be developed. The same regional ESMPs will be expanded to include additional sub-projects in subsequent years.	(Q1-Q2 2021)
7.	Develop VAP to address IPPF and PF requirements)	The Project's VAPs for the 24 intervention villages in Indonesia will be developed with information derived from the steps above, documented, reviewed and shared with affected peoples and with KfW. VAP to include documented evidence that sub-projects have been developed with IP input, to consider any specific needs and have their free, prior and informed consent (FPIC).	(Q1-Q2 2021)
8.	Implementing initial sub-projects	Beginning in Q2 2021, 2 sub-projects, for livelihood resettlement, will be implemented in each region, either with sub-contracted implementation partners leading the work in the field with WCS personnel facilitating other Project activities and safeguard processes (consultation, grievance handling etc), or with WCS personnel in lead roles for the sub-projects, depending on the skill sets required.	(Q2 2021 onwards)
9.	Monitoring and developing subsequent sub-projects	Based on the ESMF and the ESMPs, the impacts of the sub-projects and the effectiveness of any mitigations put in place will be monitored, and the results and experience from these will be used to inform the design and implementation of further sub-projects, until all 24 intervention villages are reached.	(Q1 2021, Q4 2021 – 2026)

No.	Item	Explanation	Timeframe
10.	Developing Grievance Log and communicating it to key stakeholder groups	Development, use and continuous improvement of the GRM, including the database or log of grievances will commence in Q1 2020, with Project teams providing information on GRM to key stakeholders as an agenda item in each meeting related to Project activities, and with records of this GRM socialisation maintained for M&E purposes.	(Q4 2020)
11.	Dissemination of VAPs to key stakeholders	Communication of the VAP to the key stakeholders (affected by or needing to be informed about) the sub-projects and their social and environmental management aspects, will occur once VAP are prepared. Dissemination will include online disclosure, as well as local language summaries provided in WCS offices and village offices.	(Q2 2021 and ongoing as further sub-projects / livelihoods mitigation activities are developed)
12.	Annual training plan implementation for Project personnel	Annual training activities are to be implemented based on an annual plan for Project team capacity building, as well as for other stakeholders as outlined in ESMF Section 8.	Annually
13.	Monitoring and evaluation (M&E) see next section)	The Project has a M&E Plan however the M&E required specifically for environmental and social impacts of Project activities, the ESMF and subsequent ESMPs are the key references as they provide more specific guidance to prevent and mitigate potential negative impacts. The mitigations require monitoring to ensure they are being done, and that they are having the intended effect. Monitoring frequency, and expected evaluation and adaption of impact mitigation actions are outlined in the ESMF Section 9.	Annually

CHAPTER 9. MONITORING AND EVALUATION

This section of the ESMF sets out the monitoring and evaluation (M&E) requirements related to Project activities that have been identified as having environmental and social impacts. While the Project has a M&E Plan linked to the Project design and results framework for activities in Indonesia, it does not include the M&E required specifically for environmental and social impacts of Project activities that will mitigate impacts, nor is it explicit about the activities that will be developed for the Philippines. An M&E Plan specific for project activities in the Philippines will be developed in Year 2, once proposed project activities have been approved. The ESMF and subsequent VAPs are the key references for M&E of the Project's environmental and social impacts, as they specific to the prevention and mitigation of potential negative impacts. The mitigations require monitoring to ensure they are being done, and that they are having the intended effect.

During the implementation of the activities, WCS will report regularly on preliminary results, findings and progress. KfW will report to the EU once a year on the activities financed under the Project. The report will also include an update of the Project indicators as Set out below and elaborated in more detail in the Project documents. These reporting obligations will be in line with the requirements of the Contribution Agreement. Independent verification of the data and with the PAP is to be done at mid-term and end of project.

9.1 Core Indicators for Development in ESMPs, IPP and LRP/VAP

The key monitoring framework for the Project overall M&E plan includes and utilises the standard core indicators for MPA classification in use by the Government of Indonesia, wherein the Project aims to improve each MPAs ranking (see section 3.1 on baseline). A similar approach of working within the Philippines system will be used if appropriate or alternatively, the MPA classifications system in Indonesia may be shared for use as a good practice in the Philippines.

The 10 core socio-ecological indicators shown in the table below will be developed through the ESMPs, IPP and LRP as appropriate, to become specific indicators relevant to each sub-Project. These will also be used by WCS, with appropriate data collection activities and timeframes (outlined in the M&E Plan) to feed the assessment of the MPA status, in collaboration with government and local stakeholders. If appropriate, they will be used in the Philippines or modified to accommodate local conditions, norms and regulations or guidelines there.

General monitoring methods are set out in the Project M&E Plan, including surveys for data collection, analyses and reporting, as shown in Table 23. Social and environmental monitoring methods may also include FGDs, interview, field observation, with evidence collected in forms of photographs, story/anecdotes, materials and records from sub-Project implementation or from consultation processes.

Table 22. Social-ecological Systems Monitoring for Coastal Fisheries: 10 Core Indicators

Variable	Indicator	Description
Actors		
Knowledge of social-ecological ecosystem	Knowledge of human agency	Human agency assesses whether respondents recognize that humans are causal agents of change in marine systems (Cinner et al., 2012). Theory suggests that when actors share common knowledge of social-ecological systems, including how human actions affect the social-ecological system, they be more likely to engage in successful management outcomes (Ostrom 2009). There is reasonable consensus that it is desirable to increase human agency to reduce inequality, injustice and the imbalance of power (Hicks et al., 2016).
Importance of resource	Fisheries dependence	When people are highly dependent on marine resources for their livelihoods, they are more likely to attach a high value to the sustainability of the resource and engage in management of a common resource (Ostrom, 2009). For example, high resource dependence is associated with 'bright spots' of fish biomass (Cinner et al., 2016).
	Number of livelihoods	The number of alternative livelihoods is an indicator of the pressure on natural resources, and the portfolio of household activities that can provide income and food security.
Governance System		
Operational rules	Rules description	Operational rules are those that directly guide behavior concerning a resource (Ostrom, 1990, Thomson and Freudenberger, 1997). Operational rules define: (1) who can access the resource; (2) how much individuals can harvest, when and where they may exploit the resource, and what tools they are permitted to use; and (3) who has to contribute money, labor, or materials to protect and maintain resources in the community.
Collective-choice rules	Political efficacy Fairness of decision making	Collective choice rules specify who can make, modify or revoke rules about managing common resources. Theory suggests that if resource users are involved in making and modifying rules it is more likely the rules will be considered legitimate and fair.
Interaction		
Harvesting	Catch per unit effort (CPUE)	The amount of resource extraction is critical to understanding social-ecological system dynamics (Ostrom, 2009). Locations with different CPUEs will likely indicate different fisheries pressure and management outcomes. For example, fisheries that depend on low CPUE may suggest high effort and concerns of unsustainable exploitation. Areas with high CPUE may suggest more sustainable and profitable fisheries.
Conflict	Perceived conflict	Conflict can arise over a variety of issues including distribution of costs and benefits of management, different priorities for management (e.g., conservation vs. livelihoods), the distribution of authority, noncompliance, etc. (e.g. Gurney et al., 2014). Understanding the frequency, severity, and reason for conflict is critical, given that conflict can jeopardize biological and social objectives
Outcomes		

Variable	Indicator	Description
Actors		
Social performance	Management effect on individual Management effect on community Fairness of management effects	We operationalize social outcomes with indicators focusing on local people's perceptions of the impacts of management. These indicators include perceived: (1) management effect on the individual; (2) management effect on their community; and (3) fairness of management effects.
Human well-being	Wealth (assets)	Material assets can be a useful indicator to identify the impacts of resource management on livelihoods and income generation. Further, improving community members' material wellbeing is often a key goal of many conservation and natural resource management activities.

Source: Gurney & Darling, 2017

The following points apply to the Project activities in both Indonesia and the Philippines and at each intervention site:

- The timely delivery of all compensation and restoration measures as agreed by the PAP and as outlined in the respective entitlement matrix has to be recorded through regular impact MRE (e.g. Excel sheet) and is to be verified by the PAP themselves. Third party involvement may be necessary to guarantee objectivity of data collection and transparency of the MRE process.
- Project will track the engagement of all the consultations with PAP, incl. proof of FPIC adherence;
- Project will track the awareness/understanding of the made agreements on engagement, compensation and restoration (aligned with the entitlement matrix and activity plans developed for each intervention village);
- Project monitoring and evaluation will report on the effectiveness, appropriateness and sustainability of the delivered measures to enable PAP in their own efforts to sufficiently restore their livelihoods to pre-displacement levels by measuring socio-economic changes against baseline conditions, with a focus on the most affected PAP;
- Project will measure stakeholders' overall satisfaction with the project, especially with the effectiveness of the LRP measures.

ESMF M&E will also follow the wider Project M&E Plan which has developed a mechanism, methods, tools and timeframe (frequency) for monitoring and evaluation plan of the Project implementation, outlined according to the 4 Outputs and 10 Work Packages. For environmental and social impact monitoring, focus will be on the Outputs 1 to 3, which have field activities in North Maluku, North Sulawesi and the Philippines. Specifically, the effects of community engagement and educational activities, livelihoods support and changes in fisheries practices will be monitored using the framework in Table 23.

Table 23. ESMF M&E Focus in Indonesia and the Philippines

Type of project activity	Reference	More specific description of activities	Potential Negative Impacts	Data collection Methods	Monitoring and Reporting frequency
Activities that introduce and strengthen enforcement of MPA zones and restrictions	Activities I.6, I.7, III.2	Compliance monitoring activities Changes in fishing areas and/or seasonal access and practices Changes in equipment used or allowed	Reduced fishing community incomes and food security Reduced safety, increased tension or conflict Changes in social relations and dynamics	Field observations and field reports – general and specific for VAPs Focus Group Discussions	Continuous observation and monthly field report
Activities that introduce new fisheries management approaches	Activities I.1, II.2, III.4	Changes in fishing areas and/or seasonal access and practices Changes in equipment used or allowed	Exclusion of women and vulnerable groups, increased marginalisation and domination by elites	Household surveys Checking and following up on local media reports on issues that may be linked to the activities and potential impacts	Six monthly / annually Mid-term and end of project survey (sample to be determined)
Activities that introduce alternative livelihood strategies or actions	Activities I.7, II.3, III.3	Land or other resources required New knowledge (processing, marketing, transport, tourism development etc)	Possible child labour Environmental impacts of livelihoods activities		On-going / continuous

9.2 Project-level Outcome indicators

The outcome of the Project is to contribute to the conservation of biologically diverse marine ecosystems and important fisheries through the creation and improvement of selected marine protected areas (MPAs) and MPA networks, improved management of some commercially and ecologically important (particularly small-scale fisheries), improved management linked to selected terrestrial ecosystems, underpinned by sustainable finance models. The indicators set out below have been developed for the Project activities in Indonesia, and will be revised and expanded once the Philippines aspects are defined.

Outcome indicator 0.1: # of hectares of ecosystems brought under effective participatory management		
Unit: ha	Baseline value Project start:0	Target value after the Project: 653,000 ha of Indonesian MPAs brought under effective participatory management
Means of verification: Records of MPA management plans, management effectiveness reports, provincial or MPA-level policies, Project and government records, legal gazettlements and notices		

Outcome indicator 0.2: # of livelihoods improved through enhanced ecosystem management		
Unit: # livelihoods	Baseline value Project start: 0	Target value after the Project: 12,300 fishers' livelihoods improved through enhanced fisheries co-management
Means of verification could include: Records of new/improved fisheries management plans and action plans, co-management structures, provincial policies, Project and government records, management effectiveness reports, legal gazettlements and notices, copies of management plans, economic assessments, survey results (e.g. from EDF's 'economic upside' work), time-series data of fishers' incomes generated from fishers' associations data/records, recording of CPUE + fish prices + volumes at selected fisheries landing sites, measuring the impacts of livelihood strategies and grants on household incomes (through grant/Project reporting), and examination of government community development datasets (e.g. PODES - 'village potential')		

Outcome indicator 0.3: # of integrated ecosystem/watershed management programs piloted		
Unit: #	Baseline value Project start: 0	Target value after the Project: 1 new program by year 6
Means of verification: Copies of legal frameworks and agreements created, including management plans, provincial policies, Project and government records, management effectiveness reports, legal gazettlements and notices, relevant technical reports (e.g. USAID-SEA)		

Outcome indicator 0.4: investment (USD) leveraged / capital raised to support transitions to sustainable fisheries management		
Unit: \$USD	Baseline value Project start: 0	Target value after the Project: >\$US\$0.5m-1.5m by year 6
Means of verification: Copies of funding commitments, agreements, MoUs, investment plans, evidence of on-ground spend, media Project records, agreements (e.g. CTI agreements), financial records		

ANNEXES

Annex 1. Indigenous Peoples Planning Framework - (separate document)

Annex 2. Process Framework – (separate document)

Annex 3. Negative List for sub-projects and activities (Check list for Screening)

No.	Activity or sub-Project that involves:	Yes	No
1.	New or expanded settlements, construction or facilities within protected forests and proposed protected forests.		
2.	Requirement for large scale land acquisition of currently-occupied state or indigenous land (for agriculture, plantations, etc.) by local people (individually or collectively)		
3.	Requirement for large scale land acquisition of currently occupied state or indigenous land (for agriculture, plantations, etc.) by parties other than local people (individually or collectively)		
4.	Causing the loss or damage to cultural properties, including sites of archaeological (prehistoric), paleontological, historical, religious, cultural and unique environmental/natural values		
5.	New road construction, road rehabilitation, road paving, or any form of pathway improvement within the existing primary natural forest and proposed protected forest, including mangrove areas		
6.	Large-scale construction that potentially has significant negative impacts on the surrounding environment and would require ESIA process and permits		
7.	Commercial logging operations in natural forests including mangrove areas		
8.	Conversion of High Conservation Value (HCV) forests		
9.	Purchase of logging equipment for use in natural forests including mangrove areas		
10.	Production, distribution, and trade of illegal pesticides		
11.	Production or trade of ozone depleting substances (ODS) with reference to gradual phasing at the international level		
12.	Production or trade of any product or activities deemed illegal under the laws of Indonesia or under international conventions and agreements		
13.	Production, trade, storage or transportation of hazardous chemicals in bulk, or use of hazardous chemicals for commercial purposes		

No.	Activity or sub-Project that involves:	Yes	No
14.	Trade of protected species or protected wildlife products		
15.	Trade of endangered plants or protected plant products		
16.	Any activity that may cause human health problems		

Annex 4. Stakeholder Engagement Plan Outline

The SEP will describe:

- (i) Outline the key stakeholders in the Project, distinguishing between Project-affected parties and other interested parties; for affected parties, indication of the nature and severity of the impact and degree of interest;
- (ii) describe the timing and methods of engagement with stakeholders throughout the life cycle of the Project;
- (iii) describe the range and timing of information to be communicated to Project-affected parties and other interested parties, as well as the type of information to be sought from them;
- (iv) be designed to take into account the main characteristics and interests of the stakeholders, and the different levels of engagement and consultation that will be appropriate for different stakeholders;
- (v) set out how communication with stakeholders will be handled throughout Project preparation and implementation.
- (vi) describe the measures that will be used to remove obstacles to participation, and how the views of differently affected groups will be captured.
- (vii) include differentiated measures to allow the effective participation of those identified as disadvantaged or vulnerable, if applicable. Dedicated approaches and an increased level of resources may be needed for communication with such differently affected groups so that they can obtain the information they need regarding the issues that will potentially affect them;
- (viii) refer to or elaborate on the grievance redress mechanism (GRM) outlined in the ESMF, with elaboration of methods planned to ensure affected parties are aware of GRM.

Annex 5. Baseline Data – Secondary sources, social data collection tools and sample of social data compilation (North Sulawesi) and village profile (North Maluku)

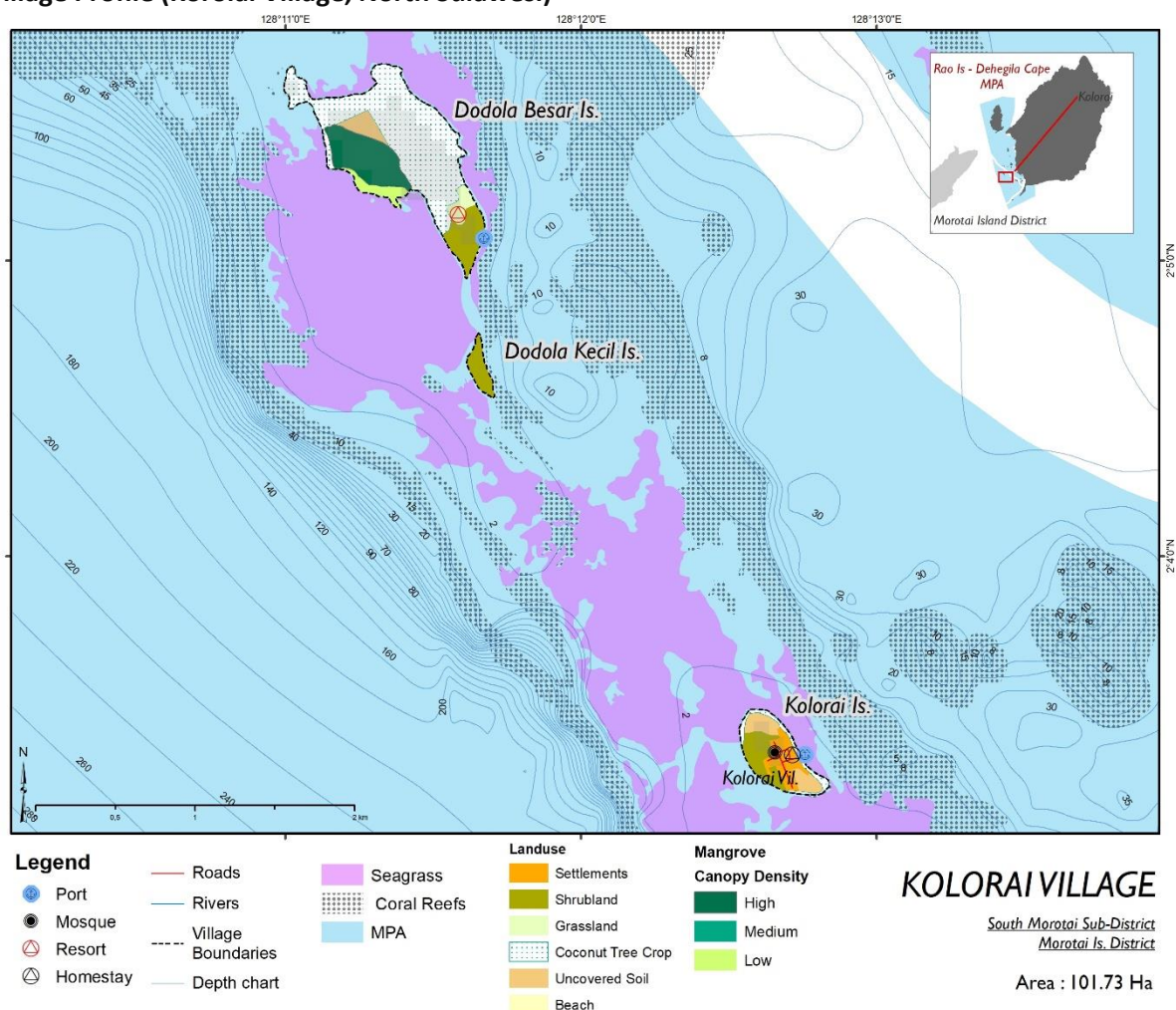
Secondary Sources for Ecological Baseline and Methods

- Hill, J., Wilkinson, C., 2004. *Methods for ecological monitoring of coral reefs*, Australian Institute of Marine Science, Townsville. doi:10.1017/CBO9781107415324.004
- WCS Indonesia. (2019). *Laporan Monitoring Ekosistem Terumbu Karang Pulau Panjang dan Pulau Saringgi*
- Bahari, Aditya S., A. Tarigan, S.A.R, Aviandhika, S., Rhismanda, A., Fitra, Aji S., (2019). *Monitoring Ekosistem Mangrove di Pulau Panjang, Kabupaten Sumbawa. Mataram: Wildlife Conservation Society dan BKPSDKP Sumbawa.*
- Tarigan, S.A.R., Aviandhika S., Himawan, C., Adiyoga, D., Kholilah, N., Suniri. (2019). *Monitoring Ekosistem Terumbu Karang di Pulau Liang dan Pulau Ngali Kab. Sumbawa. Mataram: Wildlife Conservation Society dan KCD DKP Kawasan Sumbawa – Sumbawa Barat.*
- Tarigan, S.A.R., Aviandhika S., Himawan, C., Adiyoga, D., Kholilah, N., Suniri. (2019). *Monitoring Ekosistem Terumbu Karang di Pulau Liang dan Pulau Ngali Kab. Sumbawa. Mataram: Wildlife Conservation Society dan KCD DKP Kawasan Sumbawa – Sumbawa Barat.*
- Wildlife Conservation Society dan Balai Kawasan Konservasi dan Pengawasan Sumber Daya Kelautan dan Perikanan Wilayah Sumbawa (2019). *Laporan Monitoring Ekosistem Lamun Pulau Panjang dan Pulau Saringgi, Kabupaten Sumbawa.*
- Wildlife Conservation Society. (2019). *Monitoring Ekosistem Mangrove di Kawasan Konservasi Perairan Daerah (KKPD) Minahasa Utara, Sitaro dan Tatoareng, Kabupaten Sulawesi Utara. Manado: Wildlife Conservation Society – Indonesia Marine Program.*
- Werner, T., Allen, G., (1998). *A Rapid Biodiversity Assessment of the Coral Reefs of Milne Bay Province, Papua New Guinea. Conservation International, Washington DC.*
- Yulianto, I., Prasetya, R., Muttaqin, E., Kartawijaya, T., Pardede, S.T., Herdiana, Y., Setiawan, F., Ardiwijaya, R.L., Syahrir, M., (2012). *Technical Guide for Monitoring Coral Reef Ecosystems, Seagrass and Mangrove. Wildlife Conservation Society dan Institute Of Natural and Regional Resources, Bogor, Indonesia*

Selection of data compilation - sample for North Sulawesi

province	mpa	district	sub district	no	village	position	male	female	total population	total_hh	ng dependence	sex_ratio	male_fisher
North Sulawesi	Sangihe KKPD (7 villages inside MPA)	Kepulauan Sangihe (4 sub districts)	1. Tatoareng (5,241 people)	1	Para I	inside	375	275	650	165	30.77%	136.36	200
				2	Taleko Batusaiki	inside	237	232	469	146	14.93%	102.15	70
				3	Para	inside	540	504	1044	267	14.37%	107.14	150
				4	Kahakitang	inside	316	319	635	201	14.17%	99.06	90
				5	Mahengetang	inside	393	315	708	121	9.89%	124.76	70
				6	Kalama	inside	651	506	1157	403	#VALUE!	128.66	NA
				7	Dalako Bembanahe	inside	389	369	758	598	#VALUE!	105.42	NA
			2. Manganitu Selatan		Bebalang	control	225	243	468	137	16.03%	92.59	75
			3. South Tabukan		Lesabe	fisheries	420	405	825	267	7.76%	103	64
			4. Tabukan Utara		Petta	fisheries	457	506	963	337	1.56%	90.31	15
			5. Tahuna		Sawang Bendar	fisheries	1019	1112	2131	532	0.94%	91.63	20

Sample Village Profile (Kolorai Village, North Sulawesi)



Province: North Maluku

Intervention Category: MPA and Fisheries

Village Overview:

Sub-district : South Morotai
 District/City : Morotai Island
 Area Coverage : -
 Coordinate point : 128° 10' 49,101" BT - 128° 12' 56,521" BT & 2° 3' 5,652" LU - 2° 5' 41,447" LU
 Total population : 540 people

Village Description:

1. Location/geography/demography

Kolorai Village is one of the villages included in the South Morotai Sub-district, Morotai Island. Access to Morotai Island, which can be reached by sea and air transportation. From the city of Ternate, Morotai Island can be reached directly using a regular scheduled boat with a travel time of about 10 hours. Meanwhile, by air, Morotai Island can be reached in 40 minutes from Sultan Babullah Airport, Ternate, to Pitu Airport (Leo Watimena) on Morotai Island. In addition, Morotai Island can also be reached through a combination of sea and land travel, by sea via the Ternate – Sofifi route by speedboat for 45 minutes or by ferry for 1.5 hours, followed by land via the Sofifi – Tobelo route. (North Halmahera) by car for 3 hours, then proceed by sea to Daruba (Capital District of Morotai Island in South Morotai) by speedboat (speedboat) for 1 hour or by ferry for 1.5 hours. The travel time by sea and land is slightly shorter than the regular scheduled boat travel time for Ternate-Morotai.

Geographically, Kolorai Village is a small island which is 35 km from the capital of South Morotai Sub-district, namely Daruba Village. The type of transportation used to get to Kolorai Village from Daruba City is by using speedboats or *ketinting*. Local people usually use *ketinting* or boats when carrying out activities such as buying and selling fish and other activities. Meanwhile, if there are tourists going to Kolorai Village, they can rent speedboats and can also use the *ketinting* by adjusting the schedule in advance because the schedule for traveling to Kolorai Village is not available every time.

Kolorai Village is categorized as underdeveloped villages based on the Developing Village Index. Several building and service facilities are available in Kolorai Village including educational facilities such as early childhood education, kindergarten, elementary and junior high schools. Meanwhile, female students who continue their high school education must leave the village to Daruba Village. Health facilities in Kolorai Village are Pos Kesehatan Desa (Poskesdes) and Pos Pelayanan Terpadu (Posyandu), while other public facilities are village offices, mosques and docks.

Communication facilities such as telephone and internet in Kolorai Village can be used by the community on a limited basis due to the lack of signal, however the Kolorai Village government provides Wi-Fi facilities that can be used by the community for certain activities.

2. Number of household heads: 147 household heads

Male: 296 people

Female: 244 people

(Source: BPS (Central Bureau of Statistics), South Morotai Sub-district in Numbers 2019)

3. Ethnic and Religion

The inhabitants of Kolorai Village consists of the Tobelo and Galela tribes. The colloquial languages used are Tobelo and Galela. All inhabitants in Kolorai Village are Muslim.

Livelihoods

1. Livelihoods

Most of the inhabitants of Kolorai Village work as fishermen with a total of 113 fishermen, but some also work as civil servants, laborers, craftsmen, stall owners and some work in the tourism sector such as homestay owners, guides and culinary seller.

2. Institutional

Kolorai Village has several institutions including formal and informal institutions. These institutions consist of Village Consultative Board (BPD), Village-owned Enterprises (BUMDes), Family Welfare Program (PKK), youth groups, fishermen groups, fishing cooperatives and POKDARWIS, craftsmen groups, fishery product processing groups, homestay groups, KJA (floating net cages) groups.

3. Main catch

The main catch of fishermen in Kolorai Village are snapper, grouper, trevally fish (*bobara*), tuna and skipjack fish.

WCS Intervention:

WCS started working in Kolorai Village in 2016 through a USAID SEA project in North Maluku. The forms of activities carried out by WCS in this village are in the form of socialization of the reserve of marine conservation areas, socio-economic surveys, fisheries scoping surveys, grouper snapper data collection, strengthening Tourism Awareness Group (POKDARWIS) institutions and increasing the capacity of POKDARWIS and POKMASWAS (Community-based Monitoring Group) training. WCS activities are still active in this village as of the time this report is being prepared (2020).

Village Potentials:

- Kolorai Village has complete coastal resource potential including coral reef ecosystems, mangroves and seagrasses.
- Kolorai Village is a Tourism Village, one of the Potential Villages including Dodola Island, which is a tourist icon for Morotai Island. Visitors can

Constraints:

- Electricity cannot be accessed operated for 24 hours
- The cold storage infrastructure has not been utilized optimally, because it is damaged.
- Transportation facilities to get to Kolorai Village are very limited, that is, there are only boats or *ketinting* that do not operate on time.

<p>enjoy various activities on Dodola Kecil Island and Dodola Besar Island, including beach tours with white sand, tracking mangroves, snorkeling, diving and there are also cottages that have been made by the Tourism Office.</p> <ul style="list-style-type: none"> • Apart from Dodola Island, there is also Kokoya Island with tourism potential, namely snorkeling and diving. • The people of Kolorai Village have a fairly high level of participation, especially in tourism and fisheries activities. • There is a group of craftsmen (plait) and also a group of people who are engaged in processing fishery products (shredded, salted fish, etc.). • There is a homestay to support tourism activities. • In the field of fisheries, there is the Jiko Rahmat Fisherman Group, this cooperative was formed by the community with program assistance from University of Gajah Mada (UGM) students. The Jiko Rahmat Cooperative is engaged in demersal fisheries. In the tourism sector, there is the POKDARWIS Rio Gam, which legally has been formed in 2020 based on the Decree of the Tourism Office Number 556/02 / SK-POKDARWIS / IV / 2020 with WCS assistance. • Kolorai Village is included in the Rao Island Marine Protected Area - Tanjung Dehegila which has been determined by the Minister of Marine Affairs and Fisheries through the Decree of the Minister of Marine Affairs and Fisheries Number 67 / KEPMEN-KP / 2020. 	<ul style="list-style-type: none"> • The community has not fully utilized tourism activities due to the lack of community capacity in managing tourism activities. • The use of fishery processing products and marketing of fish products is still limited. • There is a threat of abrasion in the Kolorai Village area
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Annex 6. Household Socio-economic Survey Tool with Consent Form

This tool will be translated for use in the Philippines. It commences with a respondent consent form and includes sections on demographic, social, economic and perception data.

LEMBAR PERSETUJUAN RESPONDEN SURVEI SOSIOEKONOMI MENGENAI PENGELOLAAN SUMBER DAYA ALAM KABUPATEN BOLAANG MONGONDOW SELATAN

PERSETUJUAN UNTUK BERPARTISIPASI

Apabila Bapak/Ibu/Saudara/i bersedia untuk berpartisipasi dalam penelitian ini, silakan tanda tangani formulir di bawah ini. Tanda tangan akan mengindikasikan persetujuan untuk berpartisipasi.

Tanda tangan responden: _____ Tanggal (hari/bulan/tahun):/...../2020
(Nama: _____)

Persetujuan Rekaman Audio

Apabila Bapak/Ibu/Saudara/i menolak untuk menandatangani formulir, tapi setuju untuk berpartisipasi dalam penelitian ini; informasi persetujuan Bapak/Ibu/Saudara/i akan direkam oleh pewawancara.

Saya setuju direkam audio: Ya _____ Tidak _____

Pengambilan foto kegiatan penelitian/responden

Foto dari responden terkait dengan penelitian mungkin diambil. Bapak/Ibu/Saudara/i berhak untuk menolak diambil fotonya. Silakan pilih salah satu pilihan berikut ini:

Saya setuju untuk diambil foto: Ya _____ Tidak _____

Jika Bapak/Ibu/Saudara/i memiliki pertanyaan terkait dengan penelitian ini, silakan hubungi:
Contact Person

Wildlife Conservation Society – Indonesia Program – Kantor Manado
Cluster Linow Blok F1/12 Perumahan Taman Sari Metropolitan, Kelurahan Paniki Atas
Kecamatan Mapanget, Kota Manado, Sulawesi Utara, 59000.

Atau

W. Peni Lestari
Wildlife Conservation Society – Indonesia Program
Jl. Tampomas No. 35 Babakan, Bogor Tengah, Bogor
Jawa Barat 16151. Telp (0251) 8342135

ID Kuesioner		Enumerator	
Kabupaten		Tanggal	
Kecamatan		Desa	
Dusun		Nama Responden	

A. DEMOGRAFI, MATA PENCAHARIAN, DAN MATERIAL GAYA HIDUP

A01 Darimana asal Anda? ☐ Desa ini ☐ Kabupaten ini ☐ Di luar kabupaten ini ☐ Indonesia ☐ Luar negeri

A02 Berapa lama Anda tinggal di desa ini? Tahun **A03** Umur? Tahun

A04 Pendidikan formal terakhir? Tahun **A05** Suku?

A06 Agama/kepercayaan? **A07** Status perkawinan? ☐ Belum kawin ☐ Kawin ☐ Duda/Janda

A08 Kepala Rumah Tangga? ☐ Ya ☐ Tidak **A09** Jenis kelamin? ☐ Laki-laki ☐ Perempuan ☐ Transgender

A10 Berapa organisasi masyarakat yang Anda ikuti? **A11** Bahasa yang digunakan*

* Tulis bahasa yang digunakan sehari-hari dan dikuasai oleh responden.

A12 Berapa orang yang tinggal di rumah Anda?*

Laki-laki dewasa:	Perempuan dewasa:	Anak laki-laki:	Anak perempuan:
-------------------	-------------------	-----------------	-----------------

*Masukkan semua orang di rumah/anggota keluarga yang berbagi makanan

A13 Apa pekerjaan yang Anda dan orang lain di rumah Anda lakukan untuk mendatangkan makanan atau uang?*

* Berikan tanda centang pada aktivitas yang dilakukan oleh responden dan orang lain dalam rumah tangga. Tulis jumlah orang yang bekerja dan urutkan berdasarkan pentingnya pekerjaan tersebut dalam menyediakan ketahanan pangan bagi rumah tangga.

Aktifitas	“√” mata pencaharian ANGGOTA RT	#orang dalam RT		Urutan kepentingan bagi rumah tangga*
		Perempuan	Laki-laki	
Menangkap ikan dan <i>gleaning</i>				
Penjual ikan (biasanya istri nelayan)				
Pengepul hasil perikanan				
Pengepul olahan perikanan				
Budidaya perikanan air asin				
Budidaya perikanan air tawar				
Pengepul hasil pertanian				
Pertanian (tanaman tahunan dan musiman)				

Penambang (galian lubang dan terbuka)				
Pemburu				
Pengambil HHBK (Hasil Hutan Bukan Kayu)				
Karyawan (terima gaji bulanan)				
Pariwisata dan kerajinan tangan				
Informal (buruh, pedagang, tukang, dll)				
UKM				
Buruh migran (TKI/TKW)/ <i>Remittance</i>				
ASN				
Lainnya.....				
.....				
(jumlah jenis pekerjaan)				# orang yang bekerja

A14 Material Gaya Hidup dan kepemilikan aset. Centang semua item atau fasilitas yang dimiliki oleh rumah tangga responden.

Radio/cassette player <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	DVD /VCD Players <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Handphone (bukan smartphone) <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Smartphone/tablet <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Kipas angin <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____
Air keran dalam rumah (tap) <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Mesin cuci <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Komputer/laptop <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Kulkas/freezer <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Sapi/ Kambing/ Babi/ Domba (Ternak) <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____
Televisi <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Parabola <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	Toilet duduk <input type="checkbox"/> Ya <input type="checkbox"/> Tidak Jumlah: ____	MCK <input type="checkbox"/> Umum <input type="checkbox"/> Pribadi Jumlah: ____	Kompor <input type="checkbox"/> Kayu bakar = ____ <input type="checkbox"/> Minyak tanah = ____ <input type="checkbox"/> Gas = ____ <input type="checkbox"/> Lainnya = ____
Material atap <input type="checkbox"/> Bambu/Alang-alang <input type="checkbox"/> Kayu <input type="checkbox"/> Seng <input type="checkbox"/> Genteng <input type="checkbox"/> Lainnya :	Material dinding <input type="checkbox"/> Bambu/Alang-alang <input type="checkbox"/> Kayu <input type="checkbox"/> Bata <input type="checkbox"/> Semen <input type="checkbox"/> Lainnya	Material lantai <input type="checkbox"/> Pasir/tanah <input type="checkbox"/> Kayu <input type="checkbox"/> Semen <input type="checkbox"/> Keramik <input type="checkbox"/> Lainnya	Listrik <input type="checkbox"/> Tenaga surya <input type="checkbox"/> Generator <input type="checkbox"/> PLN/ PLTD <input type="checkbox"/> Tidak ada <input type="checkbox"/> Lainnya: ____	Transportasi <input type="checkbox"/> Motor = ____ <input type="checkbox"/> Mobil = ____ <input type="checkbox"/> Perahu = ____ <input type="checkbox"/> Lainnya : ____

A.15 Pembuangan Limbah Domestik

Cair <input type="checkbox"/> sungai <input type="checkbox"/> lubang peresapan <input type="checkbox"/> septik tank	<input type="checkbox"/> selokan <input type="checkbox"/> Lainnya:	Padat <input type="checkbox"/> Timbun <input type="checkbox"/> sungai <input type="checkbox"/> Bakar <input type="checkbox"/> TPA <input type="checkbox"/> Lainnya :
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B. INFORMASI PERIKANAN – KHUSUS NELAYAN

B01 Berapa lama Anda menjadi nelayan?	<div style="border: 1px solid black; height: 40px; margin: 0 auto;">Tahun</div>	B02 Kepemilikan kapal	<input type="checkbox"/> Milik sendiri <input type="checkbox"/> Sewa <input type="checkbox"/> ABK <input type="checkbox"/> Pinjam		
B03 Tipe kapal	<input type="checkbox"/> 1. Tanpa mesin <input type="checkbox"/> 2. Mesin luar/ tempel <input type="checkbox"/> 3. Mesin dalam <input type="checkbox"/> 4. Ketinting	B04 Daya mesin	<div style="border: 1px solid black; height: 100px; margin: 0 auto;">PK</div>	B05 Kapasitas	<div style="border: 1px solid black; height: 100px; margin: 0 auto;">GT</div>
B06 Jumlah dan kapasitas palka (box)		<input type="checkbox"/> Jumlah <input type="checkbox"/> Kg			

B07 Alat tangkap apa yang Anda gunakan?

Alat tangkap	'V' alat yg dipakai	Target ikan	Lokasi menangkap ikan	Waktu (Bulan)	Jumlah Kru (orang)
Bagan perahu					
Bubu					
Gleaning					
Pancing ulur					
Jaring Insang Hanyut					
Jaring Insang Lingkar					
Panah					
Pancing layang-layang					
Pancing Ulur					
Jaring lingkar dengan satu kapal					
Pukat Pantai					
Rawai Dasar					
Pancing Tonda					
Lainnya					
.....					
..					

B08 Alat tangkap mana yang **PALING PENTING** untuk rumah tangga Anda?

B09

Apa Anda pernah menggunakan alat lain?

☐ Ya
☐ Tidak

B10

Jika ya, kenapa berhenti?

B11

Apa Anda pinjam uang untuk biaya operasional?

☐ Ya
☐ Tidak

B12

Jika ya, dari siapa?

B13

Apa Anda membawa es?

☐ Ya
☐ Tidak

B14

Jika ya, bagaimana Anda memperolehnya?

B15

Mana yang lebih penting untuk Anda?

☐ Kuantitas ikan
☐ Kualitas ikan
☐ Keduanya
☐ Tidak tahu

B16

Ikan jenis apa yang nilai ekonomisnya lebih tinggi untuk Anda?

☐ Ikan demersal
☐ Ikan pelagis
☐ Hiu dan pari
☐ Ikan karang
☐ Semuanya
☐ Tidak tahu
☐ Lainnya.....

B17

Kemana Anda menjual ikan hasil tangkapan?

☐ Penjual ikan (istri)
☐ Pasar lokal
☐ Lelang ikan
☐ Pengepul ikan
☐ Eksportir
☐ Lainnya.....

B18 Saya menyadari bahwa hasil tangkapan Anda kadang banyak dan kadang sedikit, tetapi rata-rata berapa banyak ikan yang Anda tangkap?

Alat tangkap:	Hasil tangkapan			Biaya operasional per trip (Rupiah)*	Sistem bagi hasil*
	Minimum	Rata-rata	Maksimum		
Hasil <input type="checkbox"/> kg <input type="checkbox"/> ekor					
Upaya (#jam perjalanan & menangkap ikan)					
Total nilai/harga (Rp)					

*Tanya responden detail biaya operasional. Untuk sistem bagi hasil, bedakan pendapatan kotor dan bersih.

B19 Ikan apa yang Anda tangkap dan kapan?

Jenis Ikan (family)	Jan		Feb		Mar		Apr		Mei		Jun		Jul		Ags		Sep		Okt		Nov		Des		Harga rendah per kg (IDR)	Harga tinggi per kg (IDR)
	R	G	R	G	R	G	R	G	R	G	R	G	R	G	R	G	R	G	R	G	R	G	R	G		
	a	d	a	r	a	r	a	r	a	r	a	r	a	r	a	r	a	r	a	r	a	r	a	r		

			t	i	t	i	t	i		i	t	i	t	i	t	i	t	i	t		t	i	
			a	d	a	d	a	d		d	a	d	a	d	a	d	a	d	a		a	d	

*0=Tidak ada. 1 = Ada. * = Musim puncak

B20	Dari hasil tangkapan Anda, berapa yang dimakan, dijual atau dibagikan ?	% Makan	% Jual	% Bagi

B21 Jika hasil tangkapan Anda berkurang sebanyak 50% dalam **setahun**, apa yang akan Anda lakukan?

(Biarkan responden menjawab, jangan berikan pilihan. Jawaban boleh lebih dari satu)

- ☐ Menangkap ikan seperti biasa
 ☐ Lebih sering melaut
 ☐ Pindah lokasi penangkapan
 ☐ Ganti alat tangkap
 ☐ Mengurangi upaya & ganti pekerjaan lain

- ☐ Berhenti menangkap ikan
 ☐ Lainnya (jelaskan): _____

B22	Apakah ada nelayan dari desa/daerah lain yang menangkap ikan di wilayah ini?	<input type="checkbox"/> Ya <input type="checkbox"/> Tidak	B23 Jika Ya, darimana?	

B24 Biasanya seberapa sering keluarga Anda makan ikan hasil tangkapan Anda atau nelayan di desa Anda?

- ☐ Lebih dari 1X per hari
 ☐ 1X per hari
 ☐ Lebih dari 1X per minggu (2-6 hari)
 ☐ 1X per minggu
 ☐ ≤ 1X per bulan

C. INFORMASI PERTANIAN – KHUSUS PETANI

C01	Berapa lama Anda menjadi petani?	Tahun	C02	Kepemilikan lahan	<input type="checkbox"/> Milik sendiri <input type="checkbox"/> Sewa <input type="checkbox"/> Petani Penggarap
C03	Jenis pertanian apa yang Anda kerjakan?	<input type="checkbox"/> Sawah basah <input type="checkbox"/> Tanaman tahunan (cengkeh, kelapa, coklat, kopi) <input type="checkbox"/> Tanaman musiman (cabai, jagung, tomat, sayur) <input type="checkbox"/> Semuanya			
C04	Bagaimana keterlibatan pihak lain dalam mengelola lahan Anda?	<input type="checkbox"/> Sendiri <input type="checkbox"/> Kelompok (mapalus) <input type="checkbox"/> Buruh tani			

C05 Alat pertanian yang digunakan ?

Alat pertanian	'v' alat yg dipakai	Jenis pertanian	Lokasi perkebunan
Tradisional			

Pacul/cangkul			
Garu tanah			
Sabit/parang			
Ketam/ani-ani			
Bajak sapi/kerbau			
Lainnya			
Modern			
Cultivator			
Rotavator			
Traktor			
Mesin penanam padi			
Mesin pemanen padi			
Penanam benih/taju			
Gerejag/gebotan			
Mesin penggiling			
Lainnya			

C06 Mana yang lebih penting untuk Anda? ☐ **KUANTITAS** tanaman ☐ **KUALITAS** tanaman ☐ Keduanya ☐ Tidak tahu

C07 Tanaman jenis apa yang nilai ekonomisnya lebih tinggi untuk Anda? ☐ Sawah basah ☐ Tanaman tahunan (cengkeh, kelapa, coklat, kopi) ☐ Tanaman musiman (cabai, jagung, tomat, sayur) ☐ Semuanya ☐ Tidak tahu ☐ Lainnya.....

C08 Kemana Anda menjual hasil pertanian? ☐ Pasar ☐ Pengepul ☐ Dijual di desa ☐ Perusahaan (Cargil, Bimoli) ☐ Lainnya.....

C09 Saya menyadari bahwa hasil panen Anda kadang banyak dan kadang sedikit, tetapi rata-rata berapa banyak hasil panen yang anda peroleh

Jenis Pertanian	Luas Lahan (Ha)	Biaya operasional (Rupiah)*	Hasil panen (kg)	% Makan	% Jual	% Bagi
Kelapa						
Kopra						
Dll.						
Total nilai/harga (Rp)						

*Tanya responden detail biaya operasional (mulai dari tanam-panen hingga penjualan) dengan detail hasil pertanian responden.

C10 Tanaman apa yang anda tanam dan kapan ?

Jenis tanaman	Bulan												Harga rendah per kg (IDR)	Harga tinggi per kg (IDR)
	1	2	3	4	5	6	7	8	9	10	11	12		
Kelapa														
Cengkeh														
Kakao														
Jeruk														
Dll.														

*0=Tidak ada. 1 = Ada. * = Musim puncak

Jika hasil pertanian utama Anda berkurang sebanyak 50% dalam **setahun**, apa yang akan Anda

C11 lakukan?

(Biarkan responden menjawab, jangan berikan pilihan. Jawaban boleh lebih dari satu)

☐ Menanam seperti biasa ☐ Lebih banyak pupuk ☐ Buka lahan baru ☐ Ganti tanaman

☐ Ganti pekerjaan ☐ Lainnya (jelaskan):
lain (alternative) _____

C12	Apakah ada petani dari desa/daerah lain yang bertani di desa/wilayah ini?	<input type="checkbox"/> Ya <input type="checkbox"/> Tidak	C11	Jika Ya, darimana?	
------------	---	--	------------	--------------------	--

C13	Apakah Anda menggunakan teknik bercocok tanam terasering di lahan yang miring?			
	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak		
C14	Sistem pertanian apa yang Anda gunakan untuk bercocok tanam?			
	<input type="checkbox"/> Monokultur	<input type="checkbox"/> Agroforestry	<input type="checkbox"/> Hidroponik	<input type="checkbox"/> Vertikultural <input type="checkbox"/> Lainnya
C15	Jenis pupuk apa yang biasa Anda gunakan?			

<input type="checkbox"/> Pupuk Anorganik	<input type="checkbox"/> Pupuk Organik	<input type="checkbox"/> Lainnya		
C16	Sistem pengairan yang digunakan			
<input type="checkbox"/> Irigasi	<input type="checkbox"/> Air hujan	<input type="checkbox"/> Embung (danau buatan)	<input type="checkbox"/> Lainnya	

D. INFORMASI PERTAMBANGAN – KHUSUS PENAMBANG EMAS

D01	Berapa lama Anda menjadi penambang?	Tahun	D02	Kepemilikan tambang	<input type="checkbox"/> Sendiri <input type="checkbox"/> Orang lain <input type="checkbox"/> Bersama <input type="checkbox"/> Lainnya.....
D03	Apa peran anda dalam aktivitas pertambangan di lokasi tersebut?	<input type="checkbox"/> Pemodal <input type="checkbox"/> Pekerja <input type="checkbox"/> Keduanya			
D04	Alat pertambangan yang digunakan	<input type="checkbox"/> Alat berat <input type="checkbox"/> tradisional			

D05 Alat pertambangan yang digunakan (menyesuaikan pertanyaan di atas) ?

Alat pertambangan	Jenis tambang	Lokasi tambang	Periode	Jumlah Kru (orang)
Linggis				
DII,				

D06 Kemana Anda menjual hasil pertambangan? ☐ Pengumpul ☐ Toko ☐ Lainnya.....

D07 Berapa lama dalam setahun Anda melakukan aktivitas penambangan? Bulan apa?

Berapa banyak hasil yang Anda peroleh dalam satu tahun? (gram)

Apakah ada penambang dari desa/daerah lain yang menambang di wilayah ini? ☐ Ya ☐ Tidak **D09** Jika Ya, darimana?

D10 Teknik apa yang Anda gunakan dalam mengambil bahan tambang?
☐ Tambang galian ☐ Tambang terbuka ☐ Sungai (dulang) ☐ Lainnya lubang

D11 Bahan apa yang Anda gunakan dalam proses ekstraksi/pemisahan emas?
☐ Sianida ☐ Mercury ☐ Lainnya

D12 Dimana Anda melakukan proses ekstraksi?

D13 Dimana Anda membuang limbah aktivitas pertambangan?
☐ Sungai ☐ Lubang ☐ Lainnya penampung

E. INFORMASI HASIL HUTAN BUKAN KAYU – KHUSUS PENGAMBIL HHBK

D01	Berapa lama Anda menjadi pengambil HHBK?	Tahun	D02	Lokasi mengambil HHBK (sebutkan nama Desa)
D03	Jenis HHBK apa yang diambil ?				

Jenis HHBK	Alat pengambil HHBK	Lokasi HHBK	Jumlah Kru (orang)
Kayu Bakar			
Rotan			
Madu			
Damar			
Woka			
Gaharu			

D04	Jenis HHBK apa yang nilai ekonomisnya lebih tinggi untuk Anda?	<input type="checkbox"/> Madu <input type="checkbox"/> Rotan <input type="checkbox"/> Damar <input type="checkbox"/> Kayu bakar <input type="checkbox"/> Woka <input type="checkbox"/> Gaharu <input type="checkbox"/> Tidak tahu <input type="checkbox"/> Lainnya.....
D05	Apa tujuan anda mengambil HHBK?	<input type="checkbox"/> Dijual <input type="checkbox"/> Dipakai sendiri <input type="checkbox"/> Lainnya.....
	Kemana Anda menjualnya? (sebutkan nama dan lokasi)
D06	Jenis HHBK apa yang anda ambil dan kapan (setahun terakhir) ?	

Jenis HHBK	Bulan												Harga rendah (IDR)	Harga tinggi (IDR)	Satuan
	1	2	3	4	5	6	7	8	9	10	11	12			

*0=Tidak ada. 1 = Ada. * = Musim puncak

D07	Apakah ada yang mengambil HHBK dari desa/daerah lain di wilayah ini?	<input type="checkbox"/> Ya <input type="checkbox"/> Tidak	D08	Jika Ya, darimana?	
D09	Berapa jarak dari rumah ke tempat Anda biasa mengambil HHBK?				
<input type="checkbox"/> 1 km ≥		<input type="checkbox"/> 1 – 3 km		<input type="checkbox"/> 3 – 5 km	<input type="checkbox"/> 5 – 8 km <input type="checkbox"/> 8 km ≤
D10	Seberapa sering Anda pergi mengambil HHBK?				
<input type="checkbox"/> 1 minggu sekali		<input type="checkbox"/> 2 minggu sekali		<input type="checkbox"/> 3 minggu sekali	<input type="checkbox"/> sebulan sekali <input type="checkbox"/> Lainnya

F. INFORMASI PERBURUAN SATWA LIAR – KHUSUS PEMBURU					
F01	Berapa lama Anda menjadi pemburu?	Tahun	F02	Lokasi berburu(Sebutkan detail lokasi)

F03	Alat perburuan yang digunakan ?													
Jenis hewan buruan	Alat berburu	Jumlah Alat	Lokasi berburu	Waktu (Bulan)	Jumlah Kru (orang)									
Anoa														
Babirusa														
Babi hutan														
Tikus														
Yaki														
DII,														
F04	Hasil buruan jenis apa yang nilai ekonomisnya lebih tinggi untuk Anda?			<input type="checkbox"/> Anoa <input type="checkbox"/> Tikus <input type="checkbox"/> Kuskus <input type="checkbox"/> Babi hutan <input type="checkbox"/> Babirusa <input type="checkbox"/> Yaki <input type="checkbox"/> Rangkong <input type="checkbox"/> Kelelawar <input type="checkbox"/> Penyu/telur penyu <input type="checkbox"/> Maleo/telurnya <input type="checkbox"/> Lainnya.....										
F05	Apa tujuan anda berburu?			<input type="checkbox"/> Dikonsumsi <input type="checkbox"/> Dijual <input type="checkbox"/> Hobi <input type="checkbox"/> Upacara Adat <input type="checkbox"/> Obat <input type="checkbox"/> Lainnya.....										
F06	Kemana anda menjual hasil buruan?		 Sebut nama dan lokasi										
F07	Bagian tubuh mana dari hewan buruan yang Anda jual?			<input type="checkbox"/> daging <input type="checkbox"/> tengkorak <input type="checkbox"/> cangkang <input type="checkbox"/> taring <input type="checkbox"/> kulit <input type="checkbox"/> utuh										
F08	Jenis buruan apa yang anda ambil dan kapan ?													
Jenis Hewan Buruan	Bulan												Harga rendah (IDR)	Harga tinggi (IDR)
	1	2	3	4	5	6	7	8	9	10	11	12		
*0=Tidak ada. 1 = Ada. * = Musim puncak, per bagian														
F09	Apakah ada orang lain yang berburu dari desa/daerah lain di wilayah ini?			<input type="checkbox"/> Ya <input type="checkbox"/> Tidak		F10	Jika Ya, darimana?							

F1 1	Seberapa sering anda beburu?	/Minggu	/Bulan	/Tahun
G. INFORMASI PEMBUDIDAYA – AIR TAWAR/AIR LAUT				
G0 1	Berapa lama Anda menjadi pembudidaya?	Tahun	G0 2	Dimana lokasi Anda melakukan budidaya? --- (sebutkan nama desa/tempat)
G0 3	Kepemilikan	<input type="checkbox"/> Karyawan <input type="checkbox"/> Milik sendiri <input type="checkbox"/> Sewa <input type="checkbox"/> Bagi Hasil <input type="checkbox"/> Lainnya.....		
G0 4	Apa teknis budidaya ikan yang Anda gunakan?	<input type="checkbox"/> Kolam air tawar <input type="checkbox"/> Tambak <input type="checkbox"/> KJA <input type="checkbox"/> Kolam air deras <input type="checkbox"/> Lainnya		
G0 5	Apa komoditas yang Anda budidayakan?	<input type="checkbox"/> Ikan karang <input type="checkbox"/> Ikan air tawar <input type="checkbox"/> Lobster <input type="checkbox"/> Teripang <input type="checkbox"/> Lainnya		
G0 6	Darimana Anda mendapatkan benih budidaya?	<input type="checkbox"/> Alam <input type="checkbox"/> Hatchery <input type="checkbox"/> Lainnya		
G0 7	Berapa retang usaha budidaya per siklus?	<input type="checkbox"/> <3 bulan <input type="checkbox"/> 3-6 bulan <input type="checkbox"/> >6 bulan		
G0 8	Apakah anda melakukan pinjaman untuk kegiatan budidaya?	<input type="checkbox"/> Ya <input type="checkbox"/> Tidak		
G0 9	Jika Ya, dari siapa Anda mendapatkan pinjaman?	...		
G1 0	Mana yang lebih penting untuk Anda?	<input type="checkbox"/> KUANTITAS ikan <input type="checkbox"/> KUALITAS ikan <input type="checkbox"/> Keduanya <input type="checkbox"/> Tidak tahu		
G1 1	Kemana Anda menjual ikan hasil tangkapan?	<input type="checkbox"/> Penjual ikan (istri) <input type="checkbox"/> Pasar lokal <input type="checkbox"/> Lelang ikan <input type="checkbox"/> Pengepul ikan <input type="checkbox"/> Eksportir <input type="checkbox"/> Lainnya.....		
G1 2	Saya menyadari bahwa hasil tangkapan Anda kadang banyak dan kadang sedikit, tetapi rata-rata berapa banyak ikan yang Anda tangkap?			
Jenis Budidaya:		Hasil panen (kg)		Biaya operasional per siklus (Rupiah)*
.....		Minimum	Rata-rata	Maksimum
.....				
Hasil <input type="checkbox"/> kg <input type="checkbox"/> ekor				
Upaya (#jam perjalanan & menangkap ikan)				
Total nilai/harga (Rp)				
*Tanya responden detail biaya operasional. Untuk sistem bagi hasil, bedakan pendapatan kotor dan bersih.				

G1 3	Jika Anda adalah pemilik, apakah anda mempekerjakan orang lain?	<input type="checkbox"/> Ya <input type="checkbox"/> Tidak
G1 4	Jika Ya, berapa orang yang anda pekerjakan?	<input type="checkbox"/> ... Laki-laki <input type="checkbox"/> ... Perempuan
G1 5	Jika hasil panen tidak begitu bagus dalam setahun, apa yang anda lakukan?

H. INFORMASI PENGEPUL – PERIKANAN AIR TAWAR/PERIKANAN AIR LAUT/PERTANIAN/PERTAMBANGAN/PERBURUAN

H0 1	Berapa lama Anda menjadi pembudidaya?	Tahun
H0 2	Darimana Anda mengambil atau mendapat sumber daya yang akan dijual?	--- (sebutkan nama desa/tempat)
H0 3	Sumber daya apa yang Anda kumpulkan?	<input type="checkbox"/> Hasil perikanan air laut <input type="checkbox"/> Hasil perikanan air tawar <input type="checkbox"/> Hasil pertanian <input type="checkbox"/> Hasil pertambangan <input type="checkbox"/> Hasil perburuan
H0 4	Berapa banyak biasanya sumber daya yang Anda beli? (sesuai dengan H02-perbulan/desa)	Desa A ... kg, Desa B ... kg,
H0 5	Berapa harga saat Anda membeli sumber daya?	
Desa/Asal	Harga Beli Terakhir	Satuan
H0 6	Apakah Anda menjual sumber daya yang anda beli dalam bentuk olahan?	<input type="checkbox"/> Ya <input type="checkbox"/> Tidak
H0 7	Jika Ya, dijual dalam bentuk apa?	

I. PERSEPSI MENGENAI SUMBER DAYA ALAM

I01 Menurut Anda apakah **jumlah sumber daya alam yang biasa Anda manfaatkan** berubah dalam 5 tahun terakhir?
(Jika jawaban '**tidak**' centang tidak berubah. Jika jawaban ya, tanya **bagaimana perubahan tersebut?** Centang satu jawaban)

☐ Sangat berkurang
☐ Berkurang
☐ Tidak berubah
☐ Bertambah
☐ Sangat bertambah
☐ Tidak tahu

I02 Menurut Anda apa yang menyebabkan terjadinya perubahan tersebut?

.....

I03 Apa yang dapat dilakukan untuk **meningkatkan jumlah sumber daya alam yang biasa Anda manfaatkan?**
(Biarkan responden menjawab, jangan berikan pilihan. Jawaban boleh lebih dari satu)

☐ Batasi jumlah perahu (nelayan)
☐ Batasi akses nelayan/pemburu/penambang/HHBK dari luar
☐ Batasi upaya tangkap/berburu/menambang/pengambil HHBK
☐ Tutup area

☐ Tegakkan aturan
☐ Batasi penggunaan bom
☐ Batasi penggunaan racun
☐ Batasi jaring payang/rawl

☐ Edukasi
☐ Batasi jumlah pengunjung
☐ Tidak ada
☐ Tingkatkan pengawasan

☐ Tidak tahu
☐ Lainnya

104 Apakah tindakan pengelolaan (faktor manusia) disebutkan? ☐ Ya ☐ Tidak
(diisi oleh enumerator)

105 Menurut Anda apakah **kondisi lingkungan di lokasi sumber daya alam yang biasa anda manfaatkan** berubah dalam 5 tahun terakhir?
(Jika jawaban '**tidak**' centang tidak berubah. Jika jawaban ya, tanya **bagaimana perubahan tersebut**? Centang satu jawaban)

☐ Sangat memburuk
☐ Memburuk
☐ Tidak berubah
☐ Membaik
☐ Sangat membaik
☐ Tidak tahu

106 Menurut Anda apa yang menyebabkan terjadinya perubahan tersebut?

107 Apa yang dapat dilakukan untuk mempertahankan atau memperbaiki kondisi lingkungan di lokasi sumber daya alam yang biasa anda manfaatkan?
(Biarkan responden menjawab, jangan berikan pilihan. Jawaban boleh lebih dari satu)

☐ Batasi jumlah perahu (nelayan)
☐ Batasi akses nelayan/pemburu/penambang/HHBK luar
☐ Batasi upaya tangkap/berburu/menambang/pengambil HHBK
☐ Tutup area

☐ Tegakkan aturan
☐ Batasi penggunaan bom
☐ Batasi penggunaan racun
☐ Batasi jaring payang/rawl

☐ Edukasi
☐ Batasi jumlah pengunjung
☐ Tidak ada
☐ Tingkatkan pengawasan

☐ Tidak tahu
☐ Lainnya

108 Apakah tindakan pengelolaan (faktor manusia) disebutkan (diisi enumerator)? ☐ Ya ☐ Tidak

J. TINGKAT KEPERCAYAAN, PERSEPSI MENGENAI ATURAN, MODAL SOSIAL DAN FAKTOR MANUSIA

101 Bagaimana tingkat kepercayaan Anda terhadap orang-orang berikut ini? (Centang **satu** pilihan untuk setiap kelompok)

Aktor	Sama sekali tidak (0%)	Sebagian kecil percaya (>50%)	Separuh percaya separuh tidak (50%)	Sebagian besar percaya (>50%)	Percaya 100%	NA
Tokoh agama						

Tokoh masyarakat (tokoh adat, orang yang dituakan)						
Penduduk desa ini						
Aparat Desa dan BPD						
Kelompok pengelola SDA (dari desa)						
LSM						
Pemerintah						
Babinsa/Babinkamtibnas						
Pengepul (perikanan, pertanian, dll)						

J02 Secara umum, seberapa besar Anda mempercayai sumber informasi berikut ?

Sumber	Sama sekali tidak (0%)	Sebagian kecil percaya (>50%)	Separuh percaya Separuh tidak percaya (50%)	Sebagian besar percaya (>50)	Percaya (100%)	NA
Internet – media sosial						
Program berita dan berita televisi						
Radio						
Koran						
Majalah						
<i>Newsletter</i> atau selebaran						
Organisasi lingkungan						
Buku						
Keluarga dan teman						
Korespondensi pemerintah						
Dokter						
Ilmuawan						
Guru						
Industri						
Organisasi masyarakat setempat						
Lainnya 1						
Lainnya 2						

J03 Saya tertarik untuk mempelajari aturan dan tradisi penangkapan sumber daya alam di sini. **(A)** Apakah ada lokasi dilarang menangkap ikan/menambang/mengambil HHBK/berburu, alat tangkap yang dilarang, dll? **(B)** Siapa yang membuat aturan?, **(C)** Apa orang masih menangkap ikan di sini? Jika ya, berapa orang? (Pastikan semua baris dalam kolom terisi sebelum pindah ke kolom berikutnya).

Aturan	(A) Deskripsi aturan, kapan aturan ada, dll	(B) Siapa yang membuat aturan?	Apa aturan adil?	Alasan?	(C) Apa orang masih melanggar aturan? (centang satu kotak)	Frekuensi pelanggaran?
Lokasi dilarang menangkap ikan/berburu/mengambil HHBK/menambang/bertanam/membuka lahan <input type="checkbox"/> Ya <input type="checkbox"/> Tidak		<input type="checkbox"/> Nelayan lokal/ masyarakat desa <input type="checkbox"/> LSM <input type="checkbox"/> Pemerintah <input type="checkbox"/> Lainnya..... <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Sangat tidak adil <input type="checkbox"/> Tidak adil <input type="checkbox"/> Tidak ada pendapat <input type="checkbox"/> Adil <input type="checkbox"/> Sangat adil		<input type="checkbox"/> Tidak ada <input type="checkbox"/> Beberapa <input type="checkbox"/> Separuh <input type="checkbox"/> Sebagian besar <input type="checkbox"/> Semua <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Tidak ada <input type="checkbox"/> Mingguan <input type="checkbox"/> Bulanan <input type="checkbox"/> Beberapa kali per tahun <input type="checkbox"/> Tidak tahu
Alat tangkap yang dilarang? <input type="checkbox"/> Ya <input type="checkbox"/> Tidak		<input type="checkbox"/> Nelayan lokal/ masyarakat desa <input type="checkbox"/> LSM <input type="checkbox"/> Pemerintah <input type="checkbox"/> Lainnya..... <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Sangat tidak adil <input type="checkbox"/> Tidak adil <input type="checkbox"/> Tidak ada pendapat <input type="checkbox"/> Adil <input type="checkbox"/> Sangat adil		<input type="checkbox"/> Tidak ada <input type="checkbox"/> Beberapa <input type="checkbox"/> Separuh <input type="checkbox"/> Sebagian besar <input type="checkbox"/> Semua <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Tidak ada <input type="checkbox"/> Mingguan <input type="checkbox"/> Bulanan <input type="checkbox"/> Beberapa kali per tahun <input type="checkbox"/> Tidak tahu
Waktu dilarang menangkap ikan/berburu/mengambil HHBK/menambang/bertanam/membuka lahan <input type="checkbox"/> Ya <input type="checkbox"/> Tidak		<input type="checkbox"/> Nelayan lokal/ masyarakat desa <input type="checkbox"/> LSM <input type="checkbox"/> Pemerintah <input type="checkbox"/> Lainnya..... <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Sangat tidak adil <input type="checkbox"/> Tidak adil <input type="checkbox"/> Tidak ada pendapat <input type="checkbox"/> Adil <input type="checkbox"/> Sangat adil		<input type="checkbox"/> Tidak ada <input type="checkbox"/> Beberapa <input type="checkbox"/> Separuh <input type="checkbox"/> Sebagian besar <input type="checkbox"/> Semua <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Tidak ada <input type="checkbox"/> Mingguan <input type="checkbox"/> Bulanan <input type="checkbox"/> Beberapa kali per tahun <input type="checkbox"/> Tidak tahu

Spesies yang dilindungi/tidak boleh ditangkap? <input type="checkbox"/> Ya <input type="checkbox"/> Tidak		<input type="checkbox"/> Nelayan lokal/ masyarakat desa <input type="checkbox"/> LSM <input type="checkbox"/> Pemerintah <input type="checkbox"/> Lainnya..... <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Sangat tidak adil <input type="checkbox"/> Tidak adil <input type="checkbox"/> Tidak ada pendapat <input type="checkbox"/> Adil <input type="checkbox"/> Sangat adil		<input type="checkbox"/> Tidak ada <input type="checkbox"/> Beberapa <input type="checkbox"/> Separuh <input type="checkbox"/> Sebagian besar <input type="checkbox"/> Semua <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Tidak ada <input type="checkbox"/> Mingguan <input type="checkbox"/> Bulanan <input type="checkbox"/> Beberapa kali per tahun <input type="checkbox"/> Tidak tahu
Lainnya..... <input type="checkbox"/> Ya <input type="checkbox"/> Tidak		<input type="checkbox"/> Nelayan lokal/ masyarakat desa <input type="checkbox"/> LSM <input type="checkbox"/> Pemerintah <input type="checkbox"/> Lainnya..... <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Sangat tidak adil <input type="checkbox"/> Tidak adil <input type="checkbox"/> Tidak ada pendapat <input type="checkbox"/> Adil <input type="checkbox"/> Sangat adil		<input type="checkbox"/> Tidak ada <input type="checkbox"/> Beberapa <input type="checkbox"/> Separuh <input type="checkbox"/> Sebagian besar <input type="checkbox"/> Semua <input type="checkbox"/> Tidak tahu	<input type="checkbox"/> Tidak ada <input type="checkbox"/> Mingguan <input type="checkbox"/> Bulanan <input type="checkbox"/> Beberapa kali per tahun <input type="checkbox"/> Tidak tahu

- Adakah dampak pengelolaan sumber daya alam terhadap **MASYARAKAT**? ☐ Ya ☐ Tidak
- J04** (Jika responden menjawab tidak, tanyakan pertanyaan berikut 'jadi pengelolaan tidak memiliki dampak positif atau negatif pada masyarakat?' Jika jawaban masih tidak, lanjutkan ke pertanyaan H08. Jika responden menjawab ya, lanjutkan ke H05-H07.)
- J05** Apa dampak positif pengelolaan pada **MASYARAKAT**?
- J06** Apa dampak negatif pengelolaan pada **MASYARAKAT**?
- J07** Dengan mempertimbangkan dampak negatif dan positif, secara keseluruhan bagaimana dampak pengelolaan sumber daya alam terhadap komunitas ini? (Centang **satu** jawaban)
- ☐ Sangat buruk ☐ Buruk ☐ Netral ☐ Bagus ☐ Sangat bagus
- Apa dampak pengelolaan sumber daya alam bagi **ANDA**? ☐ Ya ☐ Tidak
- J08** (Jika responden menjawab tidak, tanyakan pertanyaan berikut 'jadi pengelolaan tidak memiliki dampak positif atau negatif pada Anda?' Jika jawaban masih tidak, lanjutkan ke pertanyaan H12. Jika responden menjawab ya, lanjutkan ke H09-H11.)
- J09** Apa dampak positif pengelolaan sumber daya alam pada **ANDA**?
- J10** Apa dampak negatif pengelolaan sumber daya alam pada **ANDA**?
- J11** Dengan mempertimbangkan dampak negatif dan positif, secara keseluruhan bagaimana dampak pengelolaan sumber daya alam terhadap Anda? (Centang **satu** jawaban)
- ☐ Sangat buruk ☐ Buruk ☐ Netral ☐ Bagus ☐ Sangat bagus
- J12** Siapa yang paling **diuntungkan** dari pengelolaan sumber daya alam dan **KENAPA**?
- J13** Siapa yang paling **dirugikan** dari pengelolaan sumber daya alam dan **KENAPA**?
- J14** Apakah distribusi dampak negatif dan positif pengelolaan sumber daya alam di sini adil?
- ☐ Sangat tidak adil ☐ Tidak adil ☐ Netral ☐ Adil ☐ Sangat adil ☐ Tidak tahu
- J15** Kenapa ?
- J16** Apakah pengelolaan memiliki dampak pada **JUMLAH** hasil sumber daya yang Anda akses? Jika ya, bagaimana dampaknya pada hasil sumber daya yang Anda akses ?
- ☐ Semakin sedikit ☐ Sedikit ☐ Tidak berubah ☐ Banyak ☐ Semakin banyak ☐ Tidak tahu

- J17** Apakah pengelolaan mempermudah atau mempersulit upaya Anda untuk mengakses hasil sumber daya alam (jarak, upaya dan waktu)?
- ☐ Lebih sulit ☐ Sulit ☐ Netral ☐ Mudah ☐ Lebih mudah ☐ Tidak tahu
- J18** Apakah pengelolaan memengaruhi reliabilitas hasil yang Anda peroleh selama ini? Jika ya, bagaimana pengaruhnya? (Centang **satu** jawaban)
- ☐ Sangat tidak reliabel ☐ Tidak reliabel ☐ Tidak berubah ☐ Reliabel ☐ Sangat reliabel ☐ Tidak tahu
- J19** Apakah Anda mendukung/setuju dengan pengelolaan sumber daya alam di sini? p
- ☐ Sangat tidak mendukung ☐ Tidak mendukung ☐ Netral ☐ Mendukung ☐ Sangat mendukung
- J20** Kenapa?
- Apakah saat ini Anda terlibat dalam pembuatan keputusan penggunaan Sumber Daya Alam?
- J21** Misalnya, apakah Anda terlibat dalam pertemuan tentang pengelolaan SDA? Jika Ya, bagaimana? (Enumerator menentukan tingkat keterlibatan)
- ☐ Tidak terlibat ☐ Pasif = ikut pertemuan tapi tidak bicara ☐ Aktif = ikut berbicara dalam pertemuan ☐ Pemimpin/ ketua
- J22** Apakah Anda setuju dengan pernyataan berikut: (Centang satu pilihan)
“Orang seperti saya (responden) memiliki pengaruh dalam pengelolaan Sumber Daya Alam”?
- ☐ Sangat Tidak Setuju ☐ Tidak Setuju ☐ Tidak Ada Pendapat ☐ Setuju ☐ Sangat Setuju
- J23** Apakah pernah ada Proses Pembuatan keputusan pemanfaatan dan pengelolaan Sumber Daya Alam di desa Anda? (Jika ya, lanjut ke pertanyaan berikut, jika tidak lanjut ke H25)
- ☐ Ya ☐ Tidak
- J24** Apakah menurut Anda **PROSES PEMBUATAN** keputusan pemanfaatan dan pengelolaan Sumber Daya Alam adil?
- ☐ Sangat tidak adil ☐ Tidak adil ☐ Tidak ada pendapat ☐ Adil ☐ Sangat adil ☐ Tidak tahu
- J25** Kenapa?
- J26** Apakah di sini ada konflik pemanfaatan Sumber Daya Alam? Jika Ya, seberapa sering konflik terjadi? (Centang satu pilihan)
- ☐ Tidak ada konflik ☐ Per minggu ☐ Per bulan ☐ Lebih dari 1X per tahun ☐ Kurang dari 1X per tahun
- ☐ Tidak tahu

J27 Deskripsi an konflik?

J28 Pendapatan bulanan RT (Rupiah) **J29** Pengeluaran bulanan RT (Rupiah)

* Jika responden mengalami kesulitan menjelaskan pengeluaran rumah tangga per bulan, minta ia untuk bercerita mengenai jumlah uang yang digunakan untuk membeli makanan, listrik, air, sewa rumah, pendidikan anak, kesehatan, kegiatan sosial, dll. Pastikan bahwa yang dicatat adalah **PENDAPATAN & PENGELUARAN BERSIH** rumah tangga, bukan **TURNOVER or CAMPURAN** biaya operasional melaut atau pekerjaan lain.

J30 Berapa pendapatan Anda ketika Anda tidak melaut/berburu/menambang/mengambil HHBK (Rupiah)? Rp/bulan **J31** Apa Anda memiliki tabungan di bank? ☐Ya ☐Tidak

J32 Apakah Anda bisa mengajukan pinjaman? ☐Ya ☐Tidak

J33 Jika Ya, tolong lengkapi informasi terkait dengan pinjaman dalam 5 tahun terakhir berikut ini:

	Sumber pinjaman*	Jumlah pinjaman (Rp)	Lama cicilan (bulan)	Bunga (% tahun)	Tipe jaminan ²	Tujuan pinjaman ³
1						
2						
3						

Pilih jawaban berikut

- 1) Teman & keluarga; Rentenir; Juragan/pemilik kapal; Kelompok nelayan; Bank; Lembaga keuangan; Lainnya
- 2) Rumah; Tanah; Kapal/Motor/Mobil; Lainnya; Tidak ada jaminan
- 3) Kebutuhan sehari-hari; Mencari ikan, Sekolah; Usaha Kecil Menengah; Bayar hutang; Lainnya

J34 Fasilitas kesehatan mana yang digunakan oleh Anda dan keluarga? ☐ Poskesdes ☐ Puskesmas ☐ Rumah Sakit ☐ Perawat/ bidan ☐ Dokter umum ☐ Dukun ☐ Lainnya.....

J35 Asuransi kesehatan yang Anda gunakan ☐ BPJS Kesehatan ☐ BPJS Ketenagakerjaan ☐ Asuransi nelayan/Simantep ☐ Lainnya.....

J36 Kami tertarik untuk tahu apa yang Anda rasakan tentang hidup Anda di sini. Dengan mempertimbangkan semua hal, apakah tingkat kepuasan hidup Anda berubah selama tiga tahun terakhir?
(Jika responden bilang 'tidak,' centang tidak berubah. Jika responden bilang ya, tanyakan bagaimana tingkat perubahan yang ia rasakan. Centang **satu** pilihan.)

☐ Sangat memburuk
 ☐ Memburuk
 ☐ Tidak berubah
 ☐ Membaik
 ☐ Sangat membaik

J37 Jika ada perubahan, apa tiga hal utama yang menjadi penyebab perubahan ini?

1. _____

2. _____

3. _____

J38 Misalnya karena alasan tertentu Anda harus pindah dari desa ini, bagaimana perasaan Anda ketika meninggalkan desa ini?

☐ Sangat sedih
 ☐ Sedih
 ☐ Netral
 ☐ Senang
 ☐ Sangat senang

J39 Apakah Anda pernah mendengar tentang perubahan iklim, el Nino, atau pemanasan global? ☐ Ya

☐ Tidak ☐ Tidak tahu (Jika Ya lanjut ke pertanyaan H37, jika Tidak terimakasih banyak)

J40 Tolong jelaskan. (Centang semua jawaban yang diberikan oleh responden. Jangan berikan pilihan ke responden)

<input type="checkbox"/> Kekeringan – tidak cukup hujan	<input type="checkbox"/> Banjir – terlalu banyak hujan	<input type="checkbox"/> Ketinggian air laut naik	<input type="checkbox"/> Suhu lebih hangat
<input type="checkbox"/> Penyakit bertambah	<input type="checkbox"/> Tangkapan ikan sedikit	<input type="checkbox"/> Banyak badai & cuaca ekstrem	<input type="checkbox"/> Lainnya.....
<input type="checkbox"/> Kebakaran Hutan	<input type="checkbox"/>		

TERIMA KASIH

Annex 7. Environmental and Social Check Lists for Sub-Project Screening (E&S Checklist)

1. Sub-Project Information		
Sub-Project title:		
Location:		
Physical target:		
General specifications:		
2. Parameters for Rapid Environmental Assessment (REA)		
<ul style="list-style-type: none"> • Answers to the screening questions can be either “Yes”, “No”, or “N/A”. N/A signifies that a particular impact/issue is not relevant in the context of the sub-Project. • Remarks column: Specify environmentally sensitive or critical areas, indicating if sub-Project is only adjacent or within the area. 		
Screening questions	Yes, No, N/A	Remarks
2.1 Sub-Project Location		
1. Is the sub-Project siting consistent with the protected area zoning?		
2. Is the sub-Project siting consistent with land use zoning of the area?		
3. Is the subProject area adjacent to or within any of the following environmentally sensitive areas or critical areas?		
a. All areas declared by law as national parks, watershed reserves, wildlife preserves and sanctuaries. (protected area, buffer zone of protected area, special area for protecting biodiversity)		
b. Areas set aside as aesthetic potential tourist spots; areas reserved by appropriate authorities for tourism development.		
c. Areas which constitute the habitat for endangered or threatened species of indigenous Indonesian Wildlife (flora and fauna).		
d. Areas of unique historic, archaeological, or scientific interests; includes national historical landmarks, geological monuments, and paleontological and anthropological reservations as may be designated or determined by relevant governmental institutions.		
e. Areas which are traditionally occupied by customary communities or tribes:		
• Ancestral lands of customary communities		
• All areas that are occupied or claimed as ancestral lands or ancestral domains by <i>Masyarakat hukum adat</i> communities or certified as such.		
f. Areas frequently visited and/or hard-hit by natural calamities (geologic hazards, floods, typhoons, volcanic activity, etc.):		

<ul style="list-style-type: none"> • Areas frequently visited or hard hit by earthquakes: all areas subjected to earthquakes of at least intensity VII in the Rossi-Forel scale during the period 1949 until the year of reckoning of areas identified as such by the Indonesian relevant agency such as Meteorology and Geophysics Agency (<i>Badan Meteorologi dan Geofisika</i> [BMG]) 		
<ul style="list-style-type: none"> • Flood-prone areas: low-lying areas usually adjacent to large active water bodies experiencing regular or seasonal inundation as a result of changes in mean water level of these water bodies. 		
<ul style="list-style-type: none"> • Areas prone to volcanic activities: all areas identified as such by the centre for volcanology and geological hazard mitigation (<i>Pusat Vulkanologi dan Mitigasi Bencana Geologi</i>). 		
<ul style="list-style-type: none"> • Areas located along fault lines or within fault zones: This refers to all areas identified as such by the centre for volcanology and geological hazard mitigation 		
<ul style="list-style-type: none"> • Drought-prone areas: all areas identified as such by the relevant Indonesian agency. 		
g. Areas with critical slopes; all lands with slope of 50% or more not classified in this listing as environmentally critical; also cover alienable and disposable forest lands and unclassified forests.		
h. Areas classified as prime agricultural lands; all irrigated and irrigable areas and other areas.		
i. Recharge areas of aquifers; sources of water replenishment where rainwater or seepage actually enters the aquifers: Areas under this classification shall be limited to all local or non-national watersheds and geothermal reservations.		
j. Water bodies characterized by one or any combination of the following conditions:		
<ul style="list-style-type: none"> • Tapped for domestic purposes; 		
<ul style="list-style-type: none"> • Within the controlled and/or protected areas declared by appropriate authorities; 		
<ul style="list-style-type: none"> • Which support wildlife and fisher activities (wetland, estuarine). 		
k. Mangrove areas characterized by one or any combination of the following conditions:		
<ul style="list-style-type: none"> • with primary pristine and dense young growth; 		
<ul style="list-style-type: none"> • adjoining mouth of major river systems; 		
<ul style="list-style-type: none"> • near or adjacent to traditional productive fry or fishing grounds; 		
<ul style="list-style-type: none"> • which act as natural buffers against shore erosion, strong winds and storm floods; 		
<ul style="list-style-type: none"> • on which people are dependent for their livelihood. 		

l. Areas declared as mangrove swamp forest reserves by the relevant Indonesian entity.		
2.2 Potential Environmental Impacts: Will the Project likely cause the following impacts:		
2.2.1 Physical Environment		
2.2.1.1 Land		
1. Destabilization of slopes due to earthworks at the construction site?		
2. Erosion of river banks due to clearing/excavation operations?		
3. Soil erosion before compaction and lining of canals?		
4. Leaching of soil nutrients and changes in soil characteristics due to excessive application of irrigation water?		
5. Soil salinization due to insufficient drainage?		
2.2.1.2 Hydrology		
6. Redistribution of river flow or decrease in water flow rate downstream?		
7. Reduction of downstream water supply during peak seasons?		
8. Soil erosion and siltation leading to decreased stream capacity?		
9. Water logging along completed section of the irrigation canal as observed after heavy rains?		
10. Obstruction of water flow due to aggregation of garbage at check gates/control gates		
2.2.1.3 Water Quality		
11. Deterioration of surface water quality due to the following:		
a. Increased sediment run-off from the construction site?		
b. Improper disposal of sanitary and solid wastes from workers' base camps?		
c. Contamination from oil, grease and fuel spills?		
d. Excessive application of fertilizers and pesticides leading to discharge of agro chemical contaminated waters from the service area?		
e. Salinization due to over pumping of groundwater, insufficient drainage?		
12. Will the Project and/or its component infiltrate in community water source?		
2.2.1.4 Air Quality		
13. Deterioration of air quality due to the following impacts arising from heavy equipment operations and other construction works:		
f. Dust suspension?		
g. Noxious gas and/or particulate emissions?		
h. Noise generation?		

<i>2.2.1.5 Biological Environment</i>		
14. Tree cutting or vegetation clearing?		
15. Dislocation, disruption or other disturbance to terrestrial wildlife?		
16. Impediments to movements of animals?		
17. Loss of precious ecological values (e.g. result of encroachment into forests/swamplands or historical/cultural buildings/areas, disruption of hydrology of natural waterways, regional flooding, and drainage hazards)?		
18. Localized damage and/or disturbance to ecologically significant/economically important flora and fauna in forest areas/other critical habitats or agricultural crops		
19. Smothering or other adverse effects on aquatic species?		
20. Will the Project make use of non-native, invasive and/or alien species?		
21. Will the Project involve harvesting of major and/or minor forest /marine products?		
22. Will there be modification of habitats such as change of forest/ crop species?		
23. Is the Project area vulnerable to wild fire?		
<i>2.2.1.6 Social Environment</i>		
24. Disfiguration of landscape in historical/cultural areas?		
25. Dislocation or involuntary resettlement of people along the right-of-way?		
26. Loss of private land rights/ownership/property of the right-of-way of the Project?		
27. Encroachment of informal dwellers along the irrigation canals/dikes?		
28. Increase in cropping intensity or cropping area?		
29. Loss of income from crop damage along the right-of-way?		
30. Exposure of workers to emergency or hazards of flash floods?		
31. Obstruction of public access through the construction area, delaying people movement and transport of farm/local products?		
32. Generation of solid waste and sanitary waste in construction camps and work sites?		
33. Increased health risk from the increase in the population of rodents, insects or other vectors of disease during construction?		
34. Increase in incidence of waterborne or water related diseases?		
35. Non-participation of customary communities in sub-Project planning to implementation?		
36. Gender issues (non-participation of women and other marginalized sectors in sub-Project planning to implementation)		

3. Key Issues Identified			
1.			
2.			
3.			
4. Sub-Project Categorisation			
AMDAL/Cat. A/B+ <input type="checkbox"/>	UKL-UPL/Cat. B <input type="checkbox"/>	SPPL/Cat. C <input type="checkbox"/>	No EA required <input type="checkbox"/>
<u>Guidance Notes once Checklist is completed</u> <ul style="list-style-type: none"> • Checklist needs to be signed and dated by Project Staff. • For those issues, marked YES, check (i) if the proposed investment is listed in the negative list of sub-Project activities which is ineligible for financing and must be dropped and no further action is required related to safeguards, (ii) if item marked YES is not in the list, ensure appropriate mitigation measures are contained in the site-specific ESMP (UKL-UPL or SPPL) for each item marked YES. 			

Annex 8. Environmental and Social Management Plan Outline

1. Introduction

Provide an overview of the sub-Project, environmental and social context and the purpose of this ESMP.

2. Project Description

Describe the sub-Project, any construction works required, the activities associated with the communities in particular. Include Project components that may have an environmental or social impact, including:

- Types of materials required during construction (aggregates, fresh water)
- Source and transportation of materials during construction
- Waste management (solid and liquid waste) during construction and operations
- Hazardous materials management
- Labour management practices
- Proposed improvements or benefits resulting from the subProject which will accrue to the local community, environment and economy.

Provide an overview of Project timeline.

Include a map of the general area.

3. Environmental and Social Baseline Specific to the Sub-Project Area

Describe the Project location and land use (agricultural land, residential), closest dwelling(s), water body including near shore and off shore areas used by the PAPs, natural habitats (protected areas, significant or relevant ecosystems, flora and /or fauna in the area.).

Describe the community, formal and community leadership structures, describe any unique aspects of culture and language. Describe the existing social services such as education, health, law and order as well as economic activities (commerce, trading).

Provide information on existing land/marine titles if available. The social context should also describe occupations and sources of livelihood, gender roles and issues, land tenure and connections to land/natural resources, and the socio-economic conditions, including any commentary on poverty, vulnerability due to gender, ethnicity or culture group, age or disability in the community, resource allocation and access and income distribution, where relevant.

4. Legal and Institutional Context

Provide an overview of the relevant laws, regulations and policies and how this ESMP provides the relevant information in support of an environmental approval.

Provide an overview of how the ESMP meets the requirements of the KfW Sustainability Guideline and associated safeguard policies.

Provide an overview of the key institutions with jurisdiction over the subProject.

5. Significant Impacts and Mitigation

Provide an overview of the significant environmental and social impacts associated with the sub Project and indicate how the Project will manage these to incorporate applicable safeguards policy and regulatory requirements.

6. Organisation and Management Structure

Identify and define the responsibilities and authority of the various persons and organisations that will be involved in the sub-Project.

7. Management Measures

List the key environmental and social impacts, per relevant Project phase, and indicate recommended management measures and responsibility for ensuring measures are met. An example table is provided below, however as each site will develop its own mitigation plans, including Livelihood Restitution Plans, the ESMP section on management measures should be adapted, and address: approach to mitigation, target groups, agreed activities, targets, methods for implementation, timeframe and resources.

Activity	Impact/Risk	Mitigation Measure	Responsibility for Mitigation	Comments

Annex 9. Template for Preparing SPPL (simple environmental permit for low risk or impact sub-projects)- Indonesia

The format provided below is for the preparation the **Statement of Environmental Management and Monitoring (SPPL)**. It meets the minimum requirement and can be developed further. It complies with the Regulation of the Minister of Environment No. 16/2012 (Indonesia) which can be referred to for further guidance.

I/We, the undersigned:

Name(s):

Designation:

Address:

Phone no.:

Acting as the person(s) who is (are) in charge for the environmental management of the following Project/activity:

Name of Project/activity:

Location/address of the Project/activity site:

Type/nature of Project/activity:

Size/capacity of services:

Expected environmental impacts:

1.

2.

3.

The following measures are planned to mitigate the impact and meet the requirement of the environmental management and monitoring:

1.

2.

3.

We confirm that we are committed and ready to implement all the measures as described above. We will comply with the requirements imposed by the related authority. We understand that we are subject to the inspection and supervision of the government environmental agency or other assigned agencies.

(City/location, date)

Stamp (Rp 6,0000)

Signature and printed name(s)

Number of registration/acceptance by
the city/district environmental agency

Date

Name and signature

Annex 10. Example of Environmental and Social Code of Practice (ESCAP)

This generic Environmental and Social Code of Practice (ESCAP) has been developed for minor impact and small-scale civil works interventions, such as the construction of ecotourism infrastructure and facilities, aquaculture or agricultural processing facilities, crop processing facilities, and infrastructure for the production, packaging, and marketing of other home industry products. The generic ESCOP must be updated after program inception and selection of Project sites to reflect the specific circumstances of the sub-Project activities and locations.

The ESCOP aims to minimise the potential negative impacts resulting from these activities and addresses issues related to human and environmental safety. The ESCOP will be attached to the ESMP for each site and sub-projects. In case contractors are hired for the construction of small-scale civil works, the ESCOP will be included in all bidding and contract documents.

Issue	Environmental Prevention/Mitigation Measure
Noise during construction	<ul style="list-style-type: none">• Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance;• Noise levels should be maintained within the national permissible limits/standards and limited to restricted times agreed to in the permit;• Use noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines);• Minimize transportation of construction materials through community areas during regular working time; and• Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the Project site and residential areas to lessen the impact of noise to the living quarters.
Soil Erosion	<ul style="list-style-type: none">• Implement suitable design (e.g., establish appropriate erosion and sediment control measures);• Use mulch, grasses or compacted soil to stabilize exposed areas; and• Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas once work is completed.
Air quality	<ul style="list-style-type: none">• Minimize dust from exposed work sites by applying water on the ground regularly;• Do not burn site clearance debris (trees, undergrowth) or construction waste materials; and• Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals

Issue	Environmental Prevention/Mitigation Measure
Water quality	<ul style="list-style-type: none"> • Activities should not affect the availability of water for drinking and hygienic purposes; • No construction materials, solid wastes, toxic or hazardous materials should be poured or thrown into water bodies for dilution or disposal; and • The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of river beds or flooding of settlements.
Solid and hazardous waste	<ul style="list-style-type: none"> • Collect and transport construction waste to appropriately designated/hazardous waste controlled dump sites; • Maintain waste (including soil for foundations) at least 300 meters from rivers, streams, lakes and wetlands; • Use secured area for refueling and transfer of other toxic fluids distant from settlement area and ideally on a hard/non-porous surface; • Train workers on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials; and • Collect and properly dispose of small maintenance materials such as oily rags, oil filters, used oil, etc.
Occupational and Community Health and Safety	<ul style="list-style-type: none"> • Provide personal protective gear for workers as necessary (gloves, dust masks, hard hats, boots, goggles); • Keep worksite clean and free of debris on daily basis; • Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas; • Ensure adequate toilet facilities for workers from outside of the community; • Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs. Do not allow children to play in construction areas; • Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning; and • Each construction sub-Project to have a basic first-aid kit with bandages, antibiotic cream, etc.
Other	<ul style="list-style-type: none"> • No cutting of trees or destruction of vegetation other than on construction site; • No hunting, fishing, capture of wildlife or collection of plants; • No use of unapproved toxic materials including lead-based paints, unbonded asbestos, etc.; and • No disturbance of cultural or historic sites.

Issue	Environmental Prevention/Mitigation Measure
General	<ul style="list-style-type: none"> • Maximize natural light and ventilation systems; minimize artificial light needs; use large windows for bright and well-lit rooms; • Provide adequate area for treatment, waiting area and patient's hall, etc.) rooms, all of which should be well ventilated; and • Include facilities for proper disposal of health and biological wastes (syringes, blood, etc.).

Annex 11. Template for Preparing UKL-UPL (environmental permit for low/medium risk or impact sub-projects)

This template is to support the preparation of an **Environmental Management Plan (UKL)** and **Environmental Monitoring Plan (UPL)** which describes the impact of the planned activities on the environment and how these will be managed. As an integral part of the UKL-UPL, the Statement of Assurance for Implementation of UKL-UPL will be attached using the template example shown in this annex. This format complies with the Regulation of the Minister of Environment No. 16/2012 which can be referred to for further guidance.

Chapter/Sub Chapter	Contents/Remarks
Statement Letter from Project Proponent	
	<i>The statement letter will state their accountability to ensure that the Environmental Management Effort (UKL) and Environmental Monitoring Effort (UPL) will be implemented according to the regulation. This statement Letter should be signed on a stamp duty.</i>
1. Description of Project Proponent	
1.1 Company/ Organization Name	
1.2 Name of Person in Charge or Institution/ Division in Charge	<i>Name of Project management entity, their job description for the Project Activities, which should include:</i> <ul style="list-style-type: none"> <i>Division for the preparation and implementation of Project Activities.</i> <i>Division for the operations and maintenance of the Project Activities after the work is completed.</i> <i>Division for environmental management and monitoring.</i>
1.3 Address, Phone and Fax, Website and Email	<i>Clear address of the named Organization related to the Project Activities.</i>
2. Project Description	
2.1 Project Activities Name	<i>Name of Project Activities in a clear and complete manner.</i>
2.2 Project Location	<ul style="list-style-type: none"> <i>Location of the Project Activities: Kelurahan/Village, District/city, and Province where the Project Activities and its facilities take place.</i> <i>Location of the Project Activities should be drawn in a map using an adequate scale (for example, 1:50.000 or larger as needed).</i>
2.3 Project Scale	<i>An estimation of Project scale and type of Project Activities (using accepted measurement units), e.g., area size, production capacity, number of facilities, etc.</i>

2.4 Component of Project Activities in brief outline	<p><i>A brief and clear explanation on any component of the Project Activities, which have potential environmental impacts. Work components should be divided based on stages as follows:</i></p> <ul style="list-style-type: none"> <i>• Pre-construction, for example: mobilization of workforce and materials, transportation, etc.</i> <i>• Construction, for example the use of ground water, laying out of utility pipes, etc.</i> <i>• Operations and Maintenance: Post-construction, for example: clearing of excavated waste material, etc.</i>
3. Potential Environmental Impact	
	<p><i>Explain in a brief and clear manner about any Project Activities with potential direct or indirect environmental impacts, type of impacts, which might occur, magnitude of impacts, and other matters needed to describe any potential environmental impacts on the natural and social environment. Such descriptions can be presented in tabulation, with each column representing each of the aspects. A description of the size or magnitude of the impacts should be accompanied with measurement units based on applicable laws and regulations or specific scientific analysis.</i></p>
4. Environmental Management and Monitoring Program	
4.1 Environmental Management Effort	<ul style="list-style-type: none"> <i>• The Environmental Management Effort (UKL) consists of the management activities, as well as the party in charge, frequency of management, implementation schedule, and types of mechanisms (e.g.: procedures for management, methods, etc.) in order to mitigate the environmental impacts identified Section III above.</i> <i>• The plan can be presented in a table format, which at minimum contains the following columns: type of impact, source, magnitude, threshold, management plan, and frequency of interventions, party in charge, and other remarks.</i>
4.2 Environmental Monitoring Effort	<ul style="list-style-type: none"> <i>• The Environmental Monitoring Effort (UPL) consists of the plan itself, party in charge, frequency of interventions, implementation schedule, and types of mechanisms (e.g. procedures for monitoring, methods, etc.) in order to monitor the environmental management plan described in Section 4.1 above.</i> <i>• The plan can be presented in a table format, which at minimum contains the following columns: type of impact, source, magnitude, threshold, management plan, and frequency of interventions, party in charge, and other remarks. In this monitoring plan, the thresholds should comply with the prevailing laws and regulations which are applicable according to the environmental impacts as already identified in Section III above.</i>
5. Signature	<ul style="list-style-type: none"> <i>• After the UKL-UPL document is prepared and complete, the Project Manager should sign and put an official seal on the document.</i>
6. References	<ul style="list-style-type: none"> <i>• Insert various references used in the preparation of UKL-UPL.</i>

7. Attachments	<ul style="list-style-type: none"> • <i>Attach any relevant documents or information to the UKL-UPL, e.g. tables displaying the monitoring results, and others.</i>
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Annex 12. Voluntary Land Donation process and record of agreement

In accordance with community customary practices, villagers may choose to voluntarily contribute land or assets without compensation. This can often be justified because the sub-Project may provide a direct benefit to the affected people; provisions for voluntary land donations (VLDs) are outlined below.

1. **Scope of voluntary land donation.** VLD is applied for beneficiary communities with no involuntary land acquisition and based on community-driven demand. VLD will be accepted when small areas of private land and assets where the affected users of the assets and land have agreed to give their land and other assets as a voluntary contribution to the sub-Project. No individual or family will lose more than **10%** of their land. Smallholder of residential land with area of 300 m² or less will not be allowed for VLD. Additionally, the land portion to be voluntarily donated shall be free of houses, structures or other fixed assets. For this type of sub-Project, the Village Head should prepare a report showing that the land users have been fully informed about the sub-Project, and about their right to refuse to give their land and other assets without compensation. This report will be called the **“Voluntary Land Donation Report,”** as per the MPA Project ESMF and PF.
2. **Voluntary contribution is an act of informed consent.** sub-Project staff will assure that voluntary contributions are made with the prior knowledge that other options are available including compensation in replacement values, and are obtained without coercion or duress. PAPs have the right to refuse to donate assets and receive their entitlement and compensation for their land and assets lost. They will be fully informed of their rights and access to grievance mechanisms described in this ESMF and the PF.
3. **Due Diligence.** The voluntary land donation due diligence will be documented in the sub- Project investment’s feasibility assessment report and will incorporate at a minimum the following:
 - a) Verification and documentation that land required for the Project is given voluntarily and the land to be donated is free from any dispute on ownership or any other encumbrances;
 - b) Verification that no individual household will be impoverished by the land donation (i.e., no more than 10% of total land holding donated) will require that community development groups negotiate livelihood restitution measures such as reduction in operation and maintenance fees or sharing of cultivable land of other beneficiary community members;
 - c) Verification that land donation will not displace tenants or bonded labor, if any, from the land;
 - d) Meaningful consultation has been conducted in good faith with all potential land donors. Documented verification that land donors are in agreement with the sub-Project and its benefits. Separate discussions to be held with women and community groups as required to facilitate meaningful participation; and

- e) Assurance that a community mechanism for investment activity implementation is operational and has a fair system of grievance redress, as well as a system for Project monitoring and reporting.
4. **Documentation.** Sub-Project staff will document the voluntary land donation due diligence report in each beneficiary community that requires donation of private land. They will ensure completion of the written consent form for land donation (see sample below), The donation will be verified by two witnesses who are community leaders but not the direct beneficiaries of the investment activity, to ensure that the land was voluntarily donated without any form of duress. The voluntary land donation due diligence information will be verified during sub-Project detailed design and updated as necessary.
 5. **Voluntary Land Donation Monitoring.** The voluntary land donation issues will be monitored by sub-Project staff and the KfW periodically review the land donation agreement forms and randomly interviewing the donors. During review missions, WCS will verify that land donation due diligence has been conducted in accordance with the above procedures.
 6. **Grievance Redress Mechanism.** Anticipated grievances may relate to coercion for land donation or a donation of more than 10% of private land holding, leading to impoverishment. Any complaint will go to the grievance redress mechanism (GRM) established for the sub- Projects.

Province / Region:	
District:	
Sub-district:	
Village:	
Sub-Project ID:	

Name of land owner:	KTP/ID Number:	Beneficiary of the Project: Y/N		
Sex:	Age:	Occupation:		
Address:				
Description of land that will be taken for the Project:	Area affected:	Total landholding area:	Ratio of land affected to total land held:	Map code, if available:
Description of annual crops growing on the land now and Project impact:				
	Details	Number		
Trees that will be destroyed				
Fruit trees				
Trees used for other economic or household purposes				
Mature forest trees				

Other		
Describe any other assets that will be lost or must be moved to implement the Project:		
Value of donated assets:		

By signing or providing thumb-print on this form, the land user or owner agrees to contribute assets to the sub-Project. The contribution is voluntary. If the land user or owner does not want to contribute his/ her assets to the Project, he or she should refuse to sign or provide thumb print, and ask for compensation instead.

Date:

Date:

Village head signature

*Affected persons'
signature (both husband
and wife)*

Annex 13. Thresholds and activities requiring ESIA

The list of activities that potentially require a full ESIA (World Bank and KfW Projects of category A and in some cases B+) is provided here to support the screening process for sub-Project activities. The list below is based on Indonesian Minister of Environment Regulation No. 05/2012. As the list is non-exhaustive, the Regulation needs to be consulted during sub-Project preparation. For the Philippines requirements, the regulation to be consulted during sub-Project preparation, to verify if an Environmental Compliance Certificate (ECC) is required, is outlined in the Revised Guidelines for Coverage Screening and Standardized Requirements under Philippine EIS System and its annexes (Annex A – Project Thresholds for Coverage Screening and Categorization; Annex B – Decision Chart for Determination of Requirements for Project Modification; and Annex C – Pro-Forma Project Description for Certificate of Non-Coverage (CNC) Applications). The link for this information is: http://eia.emb.gov.ph/?page_id=652.

Activities potentially requiring a full ESIA are excluded from Project support (see Annex 3, negative list)

All Projects located at the border inside a protected area—regardless of type of scale—require an AMDAL (Regulation No. 5/2012, Article 3) in Indonesia or an ECC in the Philippines. Activities that are implemented adjacent to a protected area but support the conservation of said area as well as activities involving the cultivation within a fixed area (assuming that it does not reduce the function of the protected area) do not require an ESIA.

Technical thresholds for other activities that may lead to sub-projects requiring a full ESIA (AMDAL) in Indonesia are below.

General activities requiring AMDAL	Detailed criteria requiring AMDAL	Potential sub-projects to assess	Page in MoEF Reg. No. 05/2012
Earth-moving activities	>500,000 m ³ of earth moved	Agroforestry	2
Utilization of water from lakes, rivers, springs, or other surface water sources	>250 l/sec	Water bottling, ecotourism, micro-hydropower	2
Groundwater extraction	≥ 50 l/sec (from one or more wells in the region <10 ha)	Water bottling, ecotourism, micro-hydropower	2
Building construction	Building size: >10,000 m ² or Land area: >5 ha	Processing facilities, ecotourism	3
Development of plantation area (with or without processing unit)	Seasonal: >2,000 ha Annually: >3,000 ha	Agroforestry	5
Wood product utilisation from natural forests	Any kind of activity	Handicrafts, wood products	7

General activities requiring AMDAL	Detailed criteria requiring AMDAL		Potential sub-projects to assess	Page in MoEF Reg. No. 05/2012
Construction of dam/reservoir or other water bin type	>15 m height		Micro-hydropower	19
Construction of flood channels or river normalisation	Large city/metropolitan area	>5 km or >500,000 m ³	Micro-hydropower	21
	Medium-sized city	>10 km or >500,000 km ³		
	Rural area	>15 km or >500,000 km ³		
Road construction/improvement	Road construction/improvement in rural areas: ≥5 km length with ≥40 ha land acquisition		Road construction	22
Construction of bridge	Length of bridge: ≥500 m		Road construction	23
Construction of drainage channels in settlements (primary and/or secondary)	Large city/metropolitan area: ≥5 km Medium-sized city: ≥0 km		Processing facilities, ecotourism, agroforestry	25
Construction of water transmission network	≥10 km		Micro-hydropower	25
Development of power transmission networks	>50 kV		Micro-hydropower	31
Construction of power plants	≥10 MW (at one location)		Micro-hydropower	32
Development of recreational parks	>100 ha		Ecotourism	34
Water management of hazardous and toxic materials–biological waste treatment	Any kind of activity		Processing facilities, ecotourism	41

Annex 14. Chance Find Procedure (Cultural Heritage)

A chance find is archaeological, historical, cultural, and/or remain material encountered unexpectedly during physical investment construction or operation. A chance find procedure is a physical investment-specific procedure which will be followed if previously unknown cultural heritage is encountered during physical investment activities. Such a procedure generally includes a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of the IFC PS, World Bank OPs and national laws; and to train physical investment personnel and physical investment workers on chance find procedures.

Objectives:

- To protect physical cultural resources from the adverse impacts of physical investment activities and support their preservation.
- To promote the equitable sharing of benefits from the use of Physical Cultural Resources (PCR).

Procedure:

If the proposed activity discovers archaeological sites, historical sites, remains, and/or objects, including graveyards and/or individual graves during excavation or construction, the following procedure shall be followed:

- (i) Halt the construction activities around the chance find;
- (ii) Delineate and fence the discovered site or area;
- (iii) 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;
- (iv) Forbid any removal of the objects by the workers or other parties;
- (v) Notify all physical investment personnel of the finding and take the preliminary precaution of protection;
- (vi) Record the chance find objects and the preliminary actions;
- (vii) Notify the responsible local authorities and the relevant Institute of Archaeology immediately (within 24 hours or less);
- (viii) Responsible local authorities would oversee 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; these include the aesthetic, historic, scientific or research, social, and economic values;

- (ix) Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the physical investment layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restitution, and/or salvage;
- (x) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities;
- (xi) The mitigation measures could include the change of proposed Project design/layout, protection, conservation, restitution, and/or preservation of the sites and/or objects;
- (xii) Construction work at the site could resume only after permission is given from the responsible local authorities concerning safeguard of the heritage; and
- (xiii) The physical investment proponent is responsible for cooperating with the relevant local authorities to monitor all construction activities and ensure that the adequate preservation actions are taken and hence the heritage sites protected.

Annex 15. Indicator Output and Outcome for Monitoring and Evaluation Plan

Based on the long-term goals and specific objectives of this Project it is necessary to set indicators that will serve as benchmarks in monitoring, evaluating and reporting the results of the development of activities that take place from the beginning of the first year until the Project is completed.

In detail, these indicators are as follows: Output I: Improve management of selected coastal fisheries and MPAs in the Indonesian province of North Maluku							
Working Package A	Establish new fisheries management systems in North Maluku						
Indicator I.1a	# of fishers directly benefiting from improved management of their fisheries						
Baseline value	Not provided on the log frame – pending 17 July meeting with site program teams						
Target value							
	Site	Y1	Y2	Y3	Y4	Y5	Y6
	North Maluku						
	North Sulawesi						
	Year 6 (2026): Target value: 12,300 fishers						
Data Collection	Survey and/or FGD, project activity record, Annual project Report, End/Final Project Report						
Frequency	Monthly, Quarterly, Annually						
Responsible	North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku, Cross-cutting Program Manager, Fisheries Coordinator						
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers						
Milestone Output I	Milestone 1 (M.I.1): By Year 2, fish catch documentation systems are operating in North Maluku Milestone 2 (M.I.2): By Year 3, evidence base and enabling conditions and business plans to support MPA financing in North Maluku are in place Milestone 3 (M.I.3) By Year 6, improved fisheries productivity and economic yields are evident and supported by sustainable fishing practices and finance models in North Maluku						

Activity I.1	Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods at two fisheries units in North Maluku (WCS, Pemda North Maluku, including DKP)																											
Indicator Act I.1	# of participatory fisheries management and sustainable fisheries practices and livelihoods at two fisheries units in North Maluku																											
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams																											
Target	<table><tr><th>Site</th><th>Y1</th><th>Y2</th><th>Y3</th><th>Y4</th><th>Y5</th><th>Y6</th></tr><tr><td><u>North Maluku</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><u>North Sulawesi</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							Site	Y1	Y2	Y3	Y4	Y5	Y6	<u>North Maluku</u>							<u>North Sulawesi</u>						
Site	Y1	Y2	Y3	Y4	Y5	Y6																						
<u>North Maluku</u>																												
<u>North Sulawesi</u>																												
Data Collection	Survey and/or FGD, project activity record																											
Frequency	Monthly																											
Responsible	North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku, Cross-cutting Program Manager, Fisheries Coordinator, Livelihood Specialist																											
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers																											

Activity I.2	Assist relevant authorities in reducing illegal fishing and trafficking of ETP species in North Maluku province (WCS, Pemda North Maluku, including DKP)																											
Indicator Act I.2	# of incidents of illegal fishing and trafficking reduced of ETP species in North Maluku																											
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams																											
Target	<table><tr><th>Site</th><th>Y1</th><th>Y2</th><th>Y3</th><th>Y4</th><th>Y5</th><th>Y6</th></tr><tr><td><u>North Maluku</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><u>North Sulawesi</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							Site	Y1	Y2	Y3	Y4	Y5	Y6	<u>North Maluku</u>							<u>North Sulawesi</u>						
Site	Y1	Y2	Y3	Y4	Y5	Y6																						
<u>North Maluku</u>																												
<u>North Sulawesi</u>																												
Data Collection	Survey and/or FGD, project activity record																											
Frequency	Monthly																											

Responsible	WTP Program Manager, North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity I.3	Develop science and modelling tools to inform fisheries management planning (WCS, EDF, Pemda including DKP)
Indicator Act I.3	<i># of science and modelling tools to inform fisheries management planning</i>
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams
Target	One Modelling tools on fisheries management planning
Data Collection	Survey and/or FGD, project activity record
Frequency	Semi-annually, Annually
Responsible	Cross-cutting Program Manager, North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity I.4	Enhance fisheries management planning through introduction of ‘climate-smart’ and ‘economic upside’ approaches (WCS, EDF, Pemda, including DKP)
Indicator Act I.4	<i># of fisheries management plans that use approach with “climate-smart” and “economic upside”</i>
Baseline	Absence of database vessel registration; 0 vessel under size 5 GT have formal permit
Target	One fisheries management planning use approach on “climate-smart” and “economic upside”
Data Collection	Survey and/or FGD, project activity record
Frequency	Every months
Responsible	Cross-cutting Program Manager, North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku

Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers
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Activity I.5	Enhance fisheries through targeted investment and finance (WCS, EDF, IIX, Pemda including DKP and Bappeda)
Indicator Act I.5	<i># of investment and finance</i>
Baseline value	Not provided on the log frame – pending 17 July meeting with site program teams
Target value	Not provided on the log frame – pending 17 July meeting with site program teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Every months
Responsible	Cross-cutting Program Manager, North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Working Package B	Improve and expand new MPA networks in North Maluku																											
Indicator I.1b	# of hectares of MPAs in North Maluku brought under effective participatory management / improved management																											
Baseline value	Baseline value: 129,828.75 hectares MPAs																											
Target value	<table><tr><th>Site</th><th>Y1</th><th>Y2</th><th>Y3</th><th>Y4</th><th>Y5</th><th>Y6</th></tr><tr><td><u>North Maluku</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><u>North Sulawesi</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>Target value: 415,000 ha (recently created MPAs) by year 6</p>							Site	Y1	Y2	Y3	Y4	Y5	Y6	<u>North Maluku</u>							<u>North Sulawesi</u>						
Site	Y1	Y2	Y3	Y4	Y5	Y6																						
<u>North Maluku</u>																												
<u>North Sulawesi</u>																												
Data Collection	Survey and/or FGD, project activity record																											
Frequency	Quarterly, Semi-annually, and Annually																											

Responsible	North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku, Cross-cutting Program Manager, MPA National Coordinator
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity I.6	Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of existing MPAs in North Maluku (WCS, Pemda North Maluku, including DKP and Bappeda)																										
Indicator I.6	# existing MPAs in North Maluku																										
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams																										
Target	<table border="1"> <thead> <tr> <th>Site</th><th>Y1</th><th>Y2</th><th>Y3</th><th>Y4</th><th>Y5</th><th>Y6</th></tr> </thead> <tbody> <tr> <td><u>North Maluku</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td><u>North Sulawesi</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>						Site	Y1	Y2	Y3	Y4	Y5	Y6	<u>North Maluku</u>							<u>North Sulawesi</u>						
Site	Y1	Y2	Y3	Y4	Y5	Y6																					
<u>North Maluku</u>																											
<u>North Sulawesi</u>																											
Data Collection	Survey and/or FGD, project activity record																										
Frequency																											
Responsible	North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku, Cross-cutting Program Manager, MPA National Coordinator																										
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers																										

Activity I.7	Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Maluku including DKP)																										
Indicator I.7	# livelihood development strategies																										
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams																										
Target	<table border="1"> <thead> <tr> <th>Site</th><th>Y1</th><th>Y2</th><th>Y3</th><th>Y4</th><th>Y5</th><th>Y6</th></tr> </thead> <tbody> <tr> <td><u>North Maluku</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td><u>North Sulawesi</u></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>						Site	Y1	Y2	Y3	Y4	Y5	Y6	<u>North Maluku</u>							<u>North Sulawesi</u>						
Site	Y1	Y2	Y3	Y4	Y5	Y6																					
<u>North Maluku</u>																											
<u>North Sulawesi</u>																											

Data Collection	Survey and/or FGD, project activity record
Frequency	
Responsible	North Maluku and North Sulawesi Program Manager, Deputy Program Manager of North Maluku, Cross-cutting Program Manager, MPA National Coordinator, Livelihood Specialist
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity I.8	Ensure that management of selected coastal MPAs is supported by sustainable financing mechanisms and agreements (WCS, CFA, Pemda North Maluku, including DKP)
Indicator I.8	<i># agreements with local government on sustainable financing mechanisms</i>
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams
Target	Not provided on the log frame – pending 17 July meeting with site program teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Semi-annually, Annually
Responsible	North Maluku and North Sulawesi Program Manager, Cross-cutting Program Manager, MPA National Coordinator
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Output II: : Improved management of selected MPAs in the Indonesian province of North Sulawesi	
Working Package C	Improve existing MPA networks in North Sulawesi province
Indicator I.IIa	<i># of ha of North Sulawesi MPAs brought under effective participatory management (Key Conservation Landscape/KLCs and MPAs)</i>
Baseline	Baseline value: 0
Target	Target value: >238,000 ha by Year 1

Indicator I.II.b	<i># of integrated ecosystem watershed management programs piloted</i>
Baseline	Baseline value: 0
Target	Target value: 1 by year 6
Data Collection	Survey and/or FGD, project activity record
Frequency	Annually
Responsible	North Maluku and North Sulawesi Program Manager, Cross-cutting Program Manager, MPA National Coordinator
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers
Milestone Output II	<p>Milestones under output II:</p> <p>Milestone 4 (M.II.1): By year 3, draft harvest control rules have been created for 3 North Sulawesi MPAs and incorporated in fisheries action plans and/or management plans</p> <p><i>Milestone 5 (M.II.2): By Year 5, a pilot model for integrated terrestrial and marine management planning is in place in northern Sulawesi Key Conservation Landscape (KLC)</i></p>

Activity II.1	Support MPA management and stakeholder participation [in MPAs supported under BMU]
Indicator Act II.1	<i># of ha of MPAs in North Sulawesi supported under BMU</i>
Baseline	Baseline value: 0
Target	Target value: >238,000 ha by Year 1
Data Collection	Survey and/or FGD, project activity record, Semi-annual report, Annual Report
Frequency	Annually
Responsible	North Maluku and North Sulawesi Program Manager, MPA Coordinator for North Sulawesi, Cross-cutting Program Manager, MPA National Coordinator
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity II.2	Support MPA management through the creation of fisheries harvest control rules within appropriate MPA zones
Indicator Act II.2	<i># of MPA management having fisheries harvest control rules within appropriate MPA zones</i>
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams
Target	Not provided on the log frame – pending 17 July meeting with site program teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Annually
Responsible	North Maluku and North Sulawesi Program Manager, Fisheries Coordinator for North Sulawesi, Cross-cutting Program Manager, Fisheries National Coordinator
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity II.3	Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies (WCS, Pemda North Sulawesi, including Bappeda, DKP, BKSDA)
Indicator Act II.3	<i># livelihood development strategies</i>
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams
Target	Not provided on the log frame – pending 17 July meeting with site program teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Annually
Responsible	North Maluku and North Sulawesi Program Manager, MPA Coordinator for North Sulawesi, Cross-cutting Program Manager, MPA National Coordinator, Livelihood Specialist
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity II.4	Collaborate with government agencies, local communities and other relevant stakeholders to pilot an integrated management ('Ridge to Reef') approach in the northern Sulawesi KLC#3 (WCS, Pemda, including Bappeda, DKP, BKSDA)
Indicator Act II.4	<i># of integrated ecosystem watershed management programs piloted</i>
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams
Target	Not provided on the log frame – pending 17 July meeting with site program teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Annually
Responsible	Terrestrial Program Manager for North Sulawesi, Infrastructure Program Manager, Cross-cutting Program Manager, North Maluku and North Sulawesi Program Manager
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Activity II.5	Scope options for a new Marine Protected Area adjacent to the northern Sulawesi KLC#3 Ridge to Reef site
Indicator Act II.5	<i>Process of establishment for a new MPA in the northern Sulawesi KLC#3 Ridge to Reef site</i>
Baseline	Not provided on the log frame – pending 17 July meeting with site program teams
Target	Not provided on the log frame – pending 17 July meeting with site program teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Annually
Responsible	Terrestrial Program Manager for North Sulawesi, Infrastructure Program Manager, Cross-cutting Program Manager, North Maluku and North Sulawesi Program Manager, MPA Coordinators
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Output III: Improved management of selected coastal fisheries and MPAs in the Philippines

Indicator I.IIIa	# of hectares of protected areas brought under effective participatory management																				
Baseline	To be established in Year 1																				
Target	<table><tr><td>Site</td><td>Y1</td><td>Y2</td><td>Y3</td><td>Y4</td><td>Y5</td><td>Y6</td></tr><tr><td>The Philippines</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							Site	Y1	Y2	Y3	Y4	Y5	Y6	The Philippines						
	Site	Y1	Y2	Y3	Y4	Y5	Y6														
	The Philippines																				
To be established in Year 1																					
Data Collection	Survey and/or FGD, project activity record																				
Frequency	Annually																				
Responsible	WCS Regional Office																				
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers																				
Indicator I.1b	# of fishers directly benefiting from improved management of their fisheries																				
Baseline	To be established in Year 1																				
Target	<table><tr><td>Site</td><td>Y1</td><td>Y2</td><td>Y3</td><td>Y4</td><td>Y5</td><td>Y6</td></tr><tr><td>The Philippines</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							Site	Y1	Y2	Y3	Y4	Y5	Y6	The Philippines						
	Site	Y1	Y2	Y3	Y4	Y5	Y6														
	The Philippines																				
To be established in Year 1																					
Data Collection	Survey and/or FGD, project activity record																				
Frequency	Quarterly/Annually																				
Responsible	WCS Regional Office																				
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers																				

Milestone Output III	Milestones under output III: <i>Milestone 6 (M.III.1): By Year 1, initial assessments completed and priority sites identified</i> <i>Milestone 7 (M.III.2): By Year 3, fisheries and MPA management agencies are being supported to improve management plans and systems</i>
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Working Package D	Scoping of Philippines MPA and coastal fisheries
Activity III.1	Conduct an initial assessment of potential project site/s
Indicator III.1	
Baseline	Not provided on the log frame – need discuss with teams
Target	
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Working Package E	Improve management of selected Philippines MPAs and MPA networks
Activity III.2	Collaborate with government agencies, local communities and other relevant stakeholders to improve the protection and management of selected MPAs in the Philippines
Indicator III.2	
Baseline	Not provided on the log frame – need discuss with teams
Target	
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly, Semi-annually, Annually
Responsible	WCS Regional Office

Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers
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Activity III.3	Ensure that communities within or adjacent to existing MPAs are supported by livelihood development strategies
Indicator III.3	<i># of community living on MPAs area supported by livelihood development strategies</i>
Baseline value	Baseline value: # livelihood strategy development activity
Target value	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record, Quarterly report, Annual Report
Frequency	Quarterly, Semi-annually, Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Working Package F	Establish new fisheries management systems in selected Philippines coastal fisheries
Activity III.4	Collaborate on the introduction of participatory fisheries management and sustainable fisheries practices and livelihoods in selected coastal fisheries
Indicator III.4	
Baseline	Not provided on the log frame – need discuss with teams
Target	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office

Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers
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Activity III.5	Assist relevant authorities in reducing illegal fishing and trafficking of ETP species at selected project sites
Indicator III.5	
Baseline	Not provided on the log frame – need discuss with teams
Target	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record
Frequency	
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Output IV: Enhanced capacity for marine ecosystem management throughout the Coral Triangle Initiative	
Indicator IV.1	# of national/regional legislations strengthened or developed within CTI-CFF
Baseline	To be established in Year 1
Target	To be established in Year 1 in consultation with CTI-CFF
Data Collection	
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Milestone Output IV	Milestones under output IV: <p>Milestone 8 (M.IV.1): By Year 2, Sulu-Sulawesi marine ecoregion IUU assessment results are available to available to communities and agencies</p> <p><i>Milestone 9 (M.IV.2): By year 4, a new financial mechanism or agreement has been structured at regional level</i></p>
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Working Package G	Build regional capacity for climate-smart fisheries management
Activity IV.1	Support CTI-CFF with improved evidence to enable better decision-making in data-poor situations in support of climate resilience, and food and job security (WCS, CTI-CFF)
Indicator IV.1a	
Baseline	Not provided on the log frame – need discuss with teams
Target	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Working Package H	Build regional capacity for combating IUU and marine wildlife trade
Activity IV.2	Assess the status of illegal fisheries and wildlife trade chains that co-exist in the Coral Triangle (WCS, CTI-CFF)
Indicator IV.2	
Baseline	Not provided on the log frame – need discuss with teams
Target	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Working Package I	Support sustainable financing in the Coral Triangle
Activity IV.3	<i>Support CTI-CFF to build capacity for regional sustainable finance planning and implementation (WCS, CFA, CTI-CFF)</i>
Indicator IV.3	
Baseline	Not provided on the log frame – need discuss with teams
Target	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers
Activity IV.4	<i>Develop and implement financing agreements across the Coral Triangle marine ecosystems and MPAs (WCS, CFA, CTI-CFF)</i>

Indicator IV.4	
Baseline	
Target	
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Working Package J	Support development of integrated ecosystem management approach ('Ridge to Reef') in Coral Triangle
Activity IV.5	<i>Engage with CTI-CFF on integrated ecosystem approach (WCS, CTI-CFF)</i>
Indicator IV.5	
Baseline	Not provided on the log frame – need discuss with teams
Target	Not provided on the log frame – need discuss with teams
Data Collection	Survey and/or FGD, project activity record
Frequency	Quarterly/Annually
Responsible	WCS Regional Office
Quality Control	Monitoring and Evaluation Specialist (and M&E Officer) will ensure the quality data with responsible person in each site province with approval from Program Managers

Annex 16. Summary of Input from ESMF Consultation

Public Consultation Notes – North Sulawesi – 29 September 2020

Name and Organization	Notes
Lily Djenaan, Swara Parangpuan Sulut (NGO)	<ul style="list-style-type: none"> • In conducting social and economic surveys, women are also seen as one of the vulnerable groups. • The involvement of women in every activity, including alternative livelihood activities, where women's roles are very important in managing marine products on land. • The role of women is very important in the Project and it is necessary to include gender analysis instruments in conducting program impact research which is often left by the team since the planning, implementation and monitoring and evaluation stages.
Erlando Tumangken, Manengkel Solidaritas	<ul style="list-style-type: none"> • The local community has been involved since the beginning of the design of the conservation area to obtain information from the community in managing their economy in the conservation area. • In the initial socio-economic survey, local communities who live in the intervention village area as the survey targets. • Local communities are also involved in conducting compliance monitoring of marine conservation areas to maintain the sustainability of marine resources.
Reinhart Garang, Bolaang Mongondow Selatan (South Bolaang Mongondow)	<ul style="list-style-type: none"> • Bolaang Mongondow Selatan has underwater potential and potential for the marine tourism sector and its sustainability needs to be protected. • Suggestions for the establishment of MPAs have been made in the area and will be followed up.
Mario, DPD HPI Sulawesi Utara	<ul style="list-style-type: none"> • The role of tour guides in ecotourism programs is very important which can bring in more potential tourists so that training on tourism is needed.
Viando Manarisip, Manengkel Solidaritas	<ul style="list-style-type: none"> • The role of Pokmaswas is very important in protecting marine conservation areas. Pokmaswas conducts compliance monitoring in 0 -12 miles of sea area. • Pokmaswas members are local fishermen who live in coastal areas to protect marine conservation areas from DF actors. • Based on our experience related to economic aspects in the context of improving the economy of local communities, the Home Industry Group or similar industry needs to get support and facilitation from the Government Service related to alternative businesses that will be developed, such as Disperindag, Dinas Koprasi & UKM, DKP, Dinas Pertanian, Agricultural and Livestock Office, etc.

Name and Organization	Notes
	<ul style="list-style-type: none"> • Efforts or strategies are needed to build a business partnership pattern for community groups in order to gain access to capital and markets as well as price stability as an alternative for businesses to be developed and run. • Regarding complaint handling, it is necessary to have a complaint program or application that is easily accessed and used by the community in submitting complaints or reports at the site level and the program can be accessed online or offline.
Danny, Bappeda Sulut	<ul style="list-style-type: none"> • Need to disseminate and brief the people who are in the Project about the importance of this Project and their role to support the existing program. • Training is needed so that the community has skills that enable them to play an active role in protecting their environment. • There needs a plan and schedule for these programs and it is better if there is a target time to achieve them. • This program needs to be synchronized with planning from the central, provincial and district governments. There is also a need for a clear division of roles for each stakeholder. • The role of this program can indirectly reduce disaster risk, because good watershed management will have an impact on minimizing the impact of disasters, especially if the community also plays an active role. Likewise in coastal programs, protection of coral and mangroves will reduce abrasion and can reduce the destructive power of water during a tsunami.
Erlando Tumangken, Manengkel Solidaritas	<ul style="list-style-type: none"> • The involvement of local NGOs is very important as partners in implementing projects to collaborate and learn together. • The role of local NGOs to be able to continue programs that can benefit the community. • The project being implemented is expected to be sustainable, so proper planning is needed in making an exit strategy.
KMPL Arecaceae Bolaang Mongondow Selatan (South Bolaang Mongondow)	<ul style="list-style-type: none"> • Changes in the perception and mindset of the community with an environmental perspective can be done by providing an approach and involvement of the community in protecting marine conservation areas. • Involving the role of partners to change people's perceptions and mindsets.
Mercy Rampengan, UNSRAT	<ul style="list-style-type: none"> • The value of the sustainability of natural resources can be linked to disaster risk reduction efforts so that the direction of Government Regulation No. 64 of 2010 concerning disaster mitigation in coastal areas and small islands that can be integrated in this program. This is clearly related to the sustainability of local people's livelihoods.

Name and Organization	Notes
	<ul style="list-style-type: none"> • Since this program is related to disaster risk reduction in accordance with the previous response, suggestions should also be included in the planning document so that there is a plus from the current field reality in Bolsel which has just experienced a series of disasters.
Gustaf, UNSRAT	<ul style="list-style-type: none"> • This program is rarely carried out by many community-based organizations. Because even though the program seems beautiful and successful, the potential for failure can threaten such as conflicts of interest, jealousy, policy changes from local governments (usually due to succession or even “other” problems), what determines is the “Model approach” is usually the key to the success of any organization, which is sometimes not mentioned in the method. Unfortunately, this approach model is rarely exposed in detail so it is difficult to be duplicated elsewhere. So maybe we should share some tips about "practical methods" that are often not covered in reports.
Herman Koessoy, DPUPR Sulawesi Utara	<ul style="list-style-type: none"> • WCS is expected to be able to assist the Government of Bolaang Mongondow Selatan Regency, North Sulawesi to prepare a Marine Spatial Plan for Bolaang Mongondow Selatan Regency, considering that if the Omnibus Law of the Work Creation Bill is passed in 2020, it is the obligation of the North Sulawesi Provincial Government to integrate the RZWP3K of North Sulawesi Province, Sea spatial space to the Regional Regulation RTRW of North Sulawesi Province. • WCS is expected to be able to assist the Government of Bolaang Mongondow Selatan Regency, North Sulawesi in preparing the Revised Regional Regulation for the RTRW South Bolaang Mongondow Regency, especially the allotted cultivation spaces bordering the Bogani Nani Wartabone Nature Reserve Forest Area, in the southern part which is directly utilized by the community in 3 Bolaang Mongondow Selatan District as an agricultural and plantation area. • Can WCS propose to the Indonesian Ministry of Environment and Forestry to request 1,000 hectares in the forest area at the border of the Bogani Nani Wartabone Nature Reserve with APL to be used as land use space for conservation and tourism interests for the people of Bolaang Selatan Regency, North Sulawesi.
DKPD Provinsi Sulawesi Utara	<ul style="list-style-type: none"> • WCS has taken into account the inclusiveness of women's issues in every activity by directly inviting women to participate. WCS is also open for collaboration with Swara Parangpuan. WCS will consider a gender analysis study in the implementation of the ESMF analysis. • The purpose of WCS inviting HPI to this discussion is one of the efforts to involve tour guides (HPI) as partners whose role is very important for community capacity building in the tourism sector.

Name and Organization	Notes
	<ul style="list-style-type: none"> WCS is still planning and conducting studies to examine potential impacts, particularly the interrelated impacts from upland to lower upland areas. But WCS does not have a specific target to reduce the impact of natural disasters. WCS will focus on risk assessment as well as in building infrastructure. Pokmaswas are often the first to know about destructive fishing, however facilities for pokmaswas activities are still very limited. Therefore, it should be combined with fishermen activities that already have special insurance for fishermen.

Public Consultation Notes – North Maluku – 28 September 2020

Name and Organization	Notes
Surahman Hadar, Komite Nasional Pemuda Indonesia (KNPI)/ Himpunan Nelayan Seluruh Indonesia (HNSI) / Indonesian Youth National Committee (KNPI) / Indonesian Fishermen Association (HNSI)	<ul style="list-style-type: none"> The existence of a Regional Regulation regarding the Zoning Plan for Coastal Areas and Small Islands (RZWP3K) which has implications for environmental management where the Regional Regulation has been disseminated in districts or cities in North Maluku without prioritizing KLHS (Strategic Environmental Assessment) which should be parallel to the preparation RZWP3K. Adjustments need to be made because KLHS requires a process and also public consultation is required where the fisheries and environmental agencies are also involved, including representatives from the KNPI. The provisions in the KLHS will be made not in conflict with the RZWP3K provisions.
Abbas Hurasan, Seksi Konservasi Wilayah (SKW) 1 / Regional Conservation Section 1	<ul style="list-style-type: none"> Five marine conservation areas in North Maluku province and one of them is Widi Island which has 99 islands. The determination of Widi waters is in the process of being converted into a conservation area and for the land area will be managed by another party. It is hoped that the management of this conservation area will be supported by the local community.
Lutfi Musa, Marekofo village	<ul style="list-style-type: none"> In the village area of Marekofo there is still a group of Kalase fishermen, a traditional fishing method but not environmentally friendly. As a resident of Marekofo village, he hopes that this method of fishing with Kalase can be replaced with fishing gear that is environmentally friendly and does not Damage the ecosystem of coral reefs, fisheries and others ecosystem in the sea. In the context of local wisdom, in practice it does not always have a positive impact, but the role of WCS and DKP teams in mentoring the Kalase group to

	<p>create specific strategies to replace bad habits by providing counseling and explanation of the importance of marine ecosystems.</p> <ul style="list-style-type: none"> • Facilitating the termination of the use of Kalase fishing by obtaining the consent of the village community to be able to agree to the termination without coercion by reminding each other and creating awareness from the community.
Supriyadi Sawai, Aliansi Masyarakat Adat Nusantara (AMAN) / the Indigenous Peoples' Alliance of the Archipelago Maluku Utara	<ul style="list-style-type: none"> • Prevention of disposal of waste from mining companies to the sea so as not to threaten the extinction of marine biodiversity. • Mitigate properly so that there is no serious impact on the marine ecosystem.
Samsul Talib, Dowora sub-district, Tidore Timur	<ul style="list-style-type: none"> • Development of other villages besides the intervention villages that have been selected in other areas to be facilitated by WCS. • The intervention village that has been selected is expected to provide good experiences for other villages so that other villages can learn.
Ramjan, Juanga village head	<ul style="list-style-type: none"> • The activity of taking white sand on Morotai Island as a mixture of building materials that can cause abrasion which can reduce tourism potential. • Providing alternative livelihood program by using the village's potential such as fish resources, tourism potential, and other potentials.
Fauzi, Pokmaswas Tafamutu village	<ul style="list-style-type: none"> • The use of fishing rods with compressors is prohibited because the mode used is to use anesthesia for the fish and it could endanger the health of humans who consume them. • The arrows are legal but by anesthetizing the forbidden fish. In addition, compressor fishing gear can endanger the health of fishermen who use it.
Isba Sehe, Pokmaswas Talimau village	<ul style="list-style-type: none"> • In conducting monitoring for protection of conservation areas, Pokmaswas need equipment. • The role of Pokmaswas is very important to protect conservation areas from environmental damage. • WCS facilitates Pokamaswas group discussions. Pokmaswas can use environmentally-friendly tools in carrying out their duties.
Savaronov, DKP North Halmahera	<ul style="list-style-type: none"> • The disposal of waste by the company will affect the destruction of the marine ecosystem so that research is needed and accompanied by regulations from the government. • Companies can mitigate the negative impacts of dumping waste into the sea by seeing and hearing the aspirations of the community. • The function of public consultations to hear opinions from people who care about the environment and the welfare of society is very important to protect the rights of vulnerable people.

Lists of Participants:**Participants from North Sulawesi:**

1. Pemerintah Daerah Kabupaten Bolaang Mongondow Selatan
2. Bappeda Provinsi Sulawesi Utara
3. Bapelitbangda Kabupaten Bolaang Mongondow Selatan
4. BKSDA Provinsi Sulawesi utara
5. Bolaang Mongondow Selatan Diving Club
6. DKPD Provinsi Sulawesi Utara
7. Dinasbuda Kabupaten Bolaang Mongondow Selatan
8. Diperindag Kabupaten Bolaang Mongondow Selatan
9. DPUPRD Provinsi Sulawesi Utara
10. DLH Kabupaten Bolaang Mongondow Selatan
11. HPI Sulawesi Utara
12. Manengkel Solidaritas
13. Politeknik Negeri Manado
14. POSSI Bolaang Mongondow Selatan
15. Swara Parangpuan Sulawesi Utara
16. Universitas Negeri Manado
17. Universitas Sam Ratulangi
18. Pemerintah Kecamatan Pinolosian Tengah
19. Pemerintah Desa Intervensi

Participants from North Maluku:

1. Kepala Dinas Kelautan dan Perikanan Provinsi Maluku Utara
2. Kepala Balai Konservasi Sumberdaya Alam Provinsi Maluku
3. Kepala Balai Konservasi Sumberdaya Alam Seksi Wilayah 1 Ternate
4. Kepala Bidang PRL dan PSDKP DKP Provinsi Maluku Utara
5. Kepala Bidang Perikanan Tangkap DKP Provinsi Maluku Utara
6. Kepala Bidang Pemasaran dan Penguatan Daya Saing DKP Provinsi Maluku Utara
7. Kepala Bidang Budidaya Ikan DKP Provinsi Maluku Utara

8. Kepala UPTD Kawasan Konservasi DKP Provinsi Maluku Utara
9. Kepala UPTD Pelabuhan Perikanan Ternate DKP Provinsi Maluku Utara
10. Kepala UPTD Pelabuhan Perikanan Tidore DKP Provinsi Maluku Utara
11. Kepala UPTD Pelabuhan Perikanan Halsei, Sula dan Taliabu DKP Provinsi Maluku Utara
12. Kepala UPTD Pelabuhan Perikanan Morotai DKP Provinsi Maluku Utara
13. Kepala Badan Perencanaan Pembangunan Daerah Provinsi Maluku Utara
14. Kepala Dinas Lingkungan Hidup Provinsi Maluku Utara
15. Kepala Dinas Pemberdayaan Perempuan dan Perlindungan Anak Provinsi Maluku Utara
16. Kepala Dinas Pariwisata Provinsi Maluku Utara
17. Kepala Badan Pemberdayaan Masyarakat Desa Provinsi Maluku Utara
18. Kepala Badan Penanggulangan Bencana Daerah Provinsi Maluku Utara
19. Ketua Satker PSDKP Stasiun Ternate.
20. Kepala Pelabuhan Perikanan Nusantara Bastiong Ternate
21. Kepala Biro SDA, Setda Provinsi Maluku Utara
22. Kepala Biro Hukum, Setda Provinsi Maluku Utara
23. Kepala Dinas Kelautan dan Perikanan Kota Ternate
24. Kepala Dinas Kelautan dan Perikanan Kota Tidore
25. Kepala Dinas Kelautan dan Perikanan Kabupaten Halmahera Selatan
26. Kepala Bappeda Kabupaten Halmahera Selatan
27. Kepala Dinas Kelautan dan Perikanan Kabupaten Halmahera Utara
28. Kepala Bappeda Kabupaten Halmahera Utara
29. Kepala Dinas Kelautan dan Perikanan Kabupaten Morotai
30. Kepala Bappeda Kabupaten Morotai
31. Dekan Fakultas Perikanan dan Kelautan Universitas Khairun Ternate
32. Ketua Program Studi Perikanan Universitas Muhammadiyah Ternate
33. Dekan Fakultas Perikanan dan Kelautan Universitas Pasifik Morotai
34. Dekan Fakultas Perikanan Politeknik Halmahera Bacan
35. Ketua Program Studi Perikanan Universitas Padamara Tobelo
36. Dekan Fakultas Perikanan Universitas Nuku Tidore
37. Kepala Desa Tagalaya Kab. Halmahera Utara

38. Kepala Desa Tulonuo Kab. Halmahera Utara
39. Kepala Desa Juanga, Kab. Morotai
40. Kepala Desa Kolorai Kab. Morotai
41. Kepala Desa Wayabula Kab. Morotai
42. Kepala Desa Posi Posi Rao Kab. Morotai
43. Kepala Desa Sebelai, Makian Kab. Halmahera Selatan
44. Kepala Desa Talimau Kab. Halmahera Selatan
45. Kepala Desa Bajo Kab. Halmahera Selatan
46. Kepala Desa Laluin Kab. Halmahera Selatan
47. Kepala Desa Tafamutu Kota Ternate
48. Kepala Desa Dowora Kota Tidore Kepulauan
49. Kepala Desa Maregam Kota Tidore Kepulauan
50. Kepala Desa Marekofo Kota Tidore Kepulauan
51. Kelompok Perempuan, Desa Juanga Kabupaten Morotai
52. Kelompok Sadar Wisata, Desa Juanga Kabupaten Morotai
53. Kelompok Sadar Wisata, Desa Kolorai Kabupaten Morotai
54. Ketua Koperasi, Desa Pandanga Kabupaten Morotai
55. Kelompok Masyarakat Pengawas, Desa Tafamufu Kota Ternate
56. Kelompok Masyarakat Pengawas, Desa Maregam Kota Tidore kepulauan
57. Kelompok masyarakat pengawas, Desa Marekofo Kota Tidore kepulauan
58. AMAN Maluku Utara
59. Lembaga Mitra Lingkungan Maluku Utara
60. Yayasan Semank Maluku Utara
61. PT Morotai Marine Culture

Annex 17. Monitoring and Evaluation Criteria and Indicators for MPA Grading (Full dashboard of social-ecological system indicators for small-scale coastal fisheries)

Construct	Indicator
S5. Market incentives	Market access
	Market engagement (ice, middlemen)
ECO1. Climate patterns	Climate exposure to coral bleaching
ECO2. Pollution patterns	Land-based pressures
Resource System	
RS5. Productivity of system	Hard coral cover
	Coral genera richness
	Structural complexity
	Reef fish biomass
	Reef fish species richness
Resource Units	
RU5. Size	Fishable biomass
	Density of target invertebrates
Actors	
A1. Number of actors	Community population
A2. Socioeconomic attributes of actors	Place of origin
	Residential period
	Age
	Formal education
	Clan or ethnicity
	Religion
	Marital Status
	Household status
	Gender
	Household size

Construct	Indicator
	Wealth (assets)
	Community infrastructure
A5. Leadership	Trust in leadership
A6. Norms / Social capital	Participation in community organizations
	Community trust
A7. Knowledge of social-ecological system	Knowledge of human agency
	Change in resource abundance
	Resource decline response
A8. Importance of resource	Fisheries dependence
	Occupational multiplicity
	Fish consumption
	Catch use (eat)
	Catch use (sell)
	Catch use (give away)
	Fisheries occupational attachment
	Place attachment
	Traditional marine practices
A9. Technology used	Primary fishing gear
	Fishing gear diversity
Governance System	
GS3. Network structure	Number of partners
	Partner activities
	Number of partner levels
	Partner contact frequency
	Partner benefits
	Partner costs
GS5. Operational rules	Knowledge of rules

Construct	Indicator
	Rule origin
	Rule description
	History of rules
	Clearly defined management boundaries
GS6. Collective-choice rules	Participation in decision-making
	Political efficacy
	Fairness of decision-making
	Support for management
	Government support for prosecution
	Government support for rule changing
	Rights to participate
	Clearly defined membership
	Accountability
GS8. Monitoring and sanctions	Conflict resolution success
	Conflict resolution process
	Compliance monitoring
	Sanctions
	Graduated sanctions
	Monitoring frequency
	Congruence of rules
Interactions	
I1. Harvesting	Total catch
	Value of catch
	Catch per unit effort (CPUE)
	Level of poaching
I4. Conflict	Perceived conflict
	Conflict actors

Construct	Indicator
	Conflict issue
	Conflict intensity
Outcomes	
O1. Social performance	Management effect on community
	Management effect on individual
	Fairness of management impacts
	Management effect on fish abundance
	Management effect on fishing effort
	Management effect on catch reliability
	Change in subjective wellbeing
	Management effect on traditional marine practices