



WWF GEF Agency

Environmental and Social Management Framework & Process Framework & Indigenous Peoples Planning Framework (Philippines)

Blue Horizon: Ocean Relief through Seaweed Aquaculture

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LIST OF ACRONYMS

BFAR	Bureau of Fisheries and Aquatic Resources
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Safeguards
ESSF	Environmental and Social Safeguards Framework
FPIC	Free Prior and Informed Consent
GEF	Global Environmental Facility
IPP	IPs Plan
IPPF	IPs Planning Framework
LRP	Livelihood Restoration Plan
PAP	Project Affected People
PF	Process Framework
PMU	Project Management Unit
PSC	Project Steering Committee
SEAFDEC	Southeast Asian Fisheries Development Center
SEP	Stakeholder Engagement Plan
SIPP	Safeguards Integrated Policies and Procedures
WWF	World Wildlife Fund

1. INTRODUCTION

The project 'Blue Horizon: Ocean Relief through Seaweed Aquaculture' will work at the global, regional, and national levels to strengthen and develop seaweed value chains. The project will be implemented in the South China Sea, in the coastal and marine ecosystems of Vietnam and Philippines, where significant potential for the expansion of seaweed aquaculture and seaweed aquaculture value chains exists. Seaweed farming is growing as a lucrative business in coastal provinces – farmed as a foodstuff, used in food processing, as well as cosmetics and medical industries. The livelihoods of the people who live in these coastal areas depend on the quality of water and habitat in these rich marine ecosystems.

Seaweed farming provides livelihood resilience for communities, ecosystem services for biodiversity enhancement and generates revenues for emerging countries in order to alleviate poverty. Seaweed can be integrated into multi trophic systems which can strengthen economic resilience of coastal communities, all while providing benefits that will stabilize and strengthen the health of the surrounding environment.

Seaweeds can be grown with no external inputs, removing eutrophic nutrients from the water and turning them into valuable protein, oils, green chemical feedstock, and a range of industrial products. Producing large volumes of seaweeds for human food, animal feed and additives, pharma & medical, fertilizer and food additives could thus represent a transformational change in the global food security equation.

The Philippines is the third largest producer of seaweed in the world. Four species are farmed but the two major species are *Kappaphycus alvarezii* (trade name "cottonii") and *Eucheuma denticulatum* (trade name "spinosum"), collectively called eucheumatoids and are sources of carrageenan. (The others, in much smaller quantities, are *Caulerpa* and *Gracilaria*). Production is concentrated in four key areas in the country: ARMM (40%), Region IV-B (27%), Region IX (13%) and Region VII (6%). Over 500,000 people earn income from seaweed farming, with an additional 10,000 jobs generated for seaweed processing and related activities. Recognizing opportunities for the seaweed industry, the interest in Filipino seaweed production is accelerating across diverse segments of society.

The Project builds upon and contributes to the momentum of rising interest - globally and in Southeast Asia - in seaweed farming. In recent years scientific efforts have intensified to discover new uses and find ways to increase the value and utility of seaweed. Taking up the results of science and technology, development initiatives have accelerated and spread out to devise programs that convert the intrinsic value of macroalgae into tangible benefits for society. In this context, the project contributes to the broad goal of enhancing the well-being of people based upon the environmental, social, and economic benefits that seaweed generates.

The 'Blue Horizon: Ocean Relief through Seaweed Aquaculture' Project (hereinafter: Seaweed Project) seeks to *create new sustainable seaweed value chains that will deliver ecosystem services and socio-economic benefits*. The ecosystem services include the assimilation of excess nutrients from coastal waters, with associated environmental benefits that include mitigation of ocean eutrophication and acidification as well as improvement of habitat for marine life. Downstream of the farming segment of the chain, additional environmental benefits will be derived from the deployment of biorefinery technology in the production areas and the manufacture of seaweed-based products that are biodegradable, such as bioplastics and those that either do not require much energy to produce or are substitutes of products that do. Social and economic benefits include the diversification of livelihood options, improved household and community revenues and

opportunities for equitable participation of women and men in the improved or new livelihood opportunities along the value chain.

The Seaweed Project was approved by the GEF Council on December 11, 2020. It will be partially financed by the Global Environment Fund (GEF Financing \$6,000,000; Co-financing \$9,525,629), and WWF is the proposed implementing agency. Hence, the WWF's Environmental and Social Safeguards Framework, as detailed in the Safeguards Integrated Policies and Procedures (SIPP) apply to the project, and require the preparation of an Environmental and Social Management Framework (ESMF), Process Framework (PF), and an Indigenous Peoples Planning Framework (IPPF).

The principles and procedures of the ESMF apply only to project activities that are funded through GEF.

In general, the anticipated adverse environmental and social impacts on the population that resides within project affected areas are site-specific, reversible and can be readily mitigated. Thus, the Seaweed Project is classified as a **"Category B" project** under the WWF Environmental and Social Safeguards Categorization.

The institutional arrangement for the project includes WWF as the GEF Agency, the Southeast Asian Fisheries Development Center (SEAFDEC) as the Lead Regional Executing Agency (its Secretariat in Bangkok, Thailand will host the Project Management Unit), the Bureau of Fisheries and Aquatic Resources (BFAR) of the Philippines and Directorate of Fisheries (BFAR) of Viet Nam as the project executing partners in the Philippines and Viet Nam, respectively, and a Project Steering Committee.

1.1. Objective of the ESMF

The preparation of this ESMF was required in accordance with the WWF's ESSF in order to identify and manage the environmental and social risks and impacts of the Seaweed project. The ESMF aims to outline the principles, procedures, and mitigation measures for addressing environmental and social impacts associated with the project in accordance with the laws and regulations of the Philippines and with the ESSF.

Since the precise scope of activities that will be implemented as part of the project will only be determined during the implementation phase, site-specific social and environmental impacts are uncertain at this stage. Thus, the development of site-specific Environmental and Social Management Plans (ESMPs) is currently not feasible, and an ESMF is necessary to set out procedures for addressing potential adverse social and environmental impacts that may occur during project activities. Site-specific ESMPs will be developed pursuant to the guidance provided by this ESMF during project implementation.

The specific objectives of the ESMF include the following:

- Carry out a preliminary identification of the positive and negative social and environmental impacts and risks associated with the implementation of the Project;
- Outline the legal and regulatory framework that is relevant to the Project implementation;
- Specify appropriate roles and responsibilities of actors and parties involved in the ESMF implementation;
- Propose a set of preliminary recommendations and measures to mitigate any negative impacts and enhance positive impacts;

- Develop a screening and assessment methodology for potential activities, that will allow an environmental/social risk classification and the identification of appropriate safeguards instruments;
- Set out procedures to establish mechanisms to monitor the implementation and efficacy of the proposed mitigation measures; and
- Outline requirements related to disclosure, grievance redress, capacity building activities, and budget required for the implementation of the ESMF.

1.2. Objective of the PF

The Project triggers the WWF's Standard on Access Restriction and Resettlement as it may restrict or otherwise affect access to natural resources and the livelihood activities of project affected people (PAP). This Process Framework (PF) describes the process by which affected communities participate in identification, design, implementation and monitoring of relevant project activities and mitigation measures. The purpose of this PF is to ensure participation of Project Affected People (PAP) while recognizing and protecting their rights and interests and ensuring that they do not become worse off as a result of the project. Specifically, the PF will:

- Describe activities that may involve new or more stringent restrictions on use of natural resources in the project area.
- Establish the mechanism through which the local communities can contribute to the project design, implementation and monitoring.
- Identify the potential negative impacts of the restriction on the surrounding communities.
- Specify the criteria for eligibility of economically displaced persons to receive compensation benefits and development assistance (no physical displacement will be allowed under this project).
- Describe the mitigation measures required to assist the economically displaced persons in their efforts to improve their livelihoods, or at least to restore them, in real terms, while maintaining the sustainability of the park or protected area, will be identified;
- Describe the grievance procedure or process for resolving disputes to natural resource use restrictions.
- Describe the participatory monitoring arrangements with neighboring community members.

As the project intends to enhance the livelihoods and resilience of IPs and local communities, the allocation of project benefits among local community members is particularly important. The intent of the framework is to ensure transparency and equity in the planning and implementation of activities by the project. This framework details the principles and processes for assisting communities to identify and manage any potential negative impacts of the project activities. Since the exact social impacts will only be identified during project implementation, the PF will ensure that mitigation of any negative impacts from project investments through a participatory process involving the affected stakeholders and rightsholders. It will also ensure that any desired changes by the communities in the ways in which IPs exercise customary tenure rights in the project sites would not be imposed, but should emerge from a consultative process.

1.3. Objective of the IPPF

The target project areas include indigenous groups. The Cuyunon is the largest ethnic group residing in Green Island (originally from the municipality of Cuyo in Palawan) and those who are also involved in seaweed farming. The Cuyunons are identified as one of the indigenous groups in Palawan. The Zamboanga Peninsula consists of several ethnic and religious groups. These include 5 Muslim tribes that reside in the area: Iyakan, Kalibugan, Tausog, Bangingi and Sama Badjao; 1 Christian group: Subanen; and several ethnic groups—Siaman (Bangingi + Sama Badjao), Kalibugan, and Subanen—that are considered IPs. Another ethnic group that resides in the area is Bisaya—these are long-term residents who are well-integrated into the community.

Based on WWF's Standard on IPs, the people affected by this project would thus be considered Indigenous, ethnic or tribal minorities. An Indigenous People/Ethnic Peoples Planning Framework thus has to be prepared.

The objective of the IPs Planning Framework (IPPF) is to clarify the principles, procedures and organizational arrangements to be applied to IPs for the Seaweed project. This framework will serve as a guideline to the Project Team to (a) Enable them to prepare an IPs Plans (IPPs) for specific activities proposed consistent with WWF's Environment and Social Safeguard Integrated Policies and Procedures, (b) Enable IPs to benefit equally from the project, and (c) Engage affected IPs in a Free Prior and Informed Consent (FPIC) process.

1.4. ESMF/PF Preparation Methodology

The ESMF/PF was prepared based on the following information: desk review of project materials and relevant national legislation and policies, as well as a field visits to project sites in Roxas, Palawan and Zamboanga City in September-December 2021. The field visit in Palawan included meetings and consultations with seaweed farmers, traders, officers of the Northern Palawan Fishers Cooperative (NPFC), and representatives from the provincial, city, and municipal government (full participation list is included in Philippines Stakeholder Engagement Plan (SEP)). The field visit in Zamboanga City included three BFAR Region IX officers, two local government unit officials from the Office of the City Agriculturist, and one farmer, the president of the Aplaya Buenavista Seaweed Farmers Association.

The ESMF/PF/IPPF draws on consultations results, and on the relevant laws and regulations of the Philippines and SIPP. The relevant laws and regulations of the Philippines related to safeguards apply to the project since it is implemented within the jurisdiction of the Philippines. WWF's SIPP apply since the project is managed by WWF, which is an implementing agency of GEF.

In order to avoid duplications and for ease of reference, the ESMF, PF, and IPPF are combined into a single document.

2. PROJECT DESCRIPTION

This chapter outlines the objectives of the Philippines Seaweed project, its components, milestones, and major supported activities.

1.2. Project Objectives and Components

The objective of the project is “to create new sustainable seaweed value chains that will deliver ecosystem services and provide socioeconomic benefits.”

The Project is expected to generate environmental, economic, and social benefits.

Environmental benefits are expected to result from the enhanced ecosystems services provided to the seaweed farms, specifically: mitigation of acidification of the sea, oxygenation of coastal waters, mitigation of eutrophication of marine waters, mitigation of harmful algal blooms and improvement in the conditions for aquatic biodiversity.

Economic benefits are expected to accrue from enhanced and diversified livelihood opportunities, which will improve incomes through the increased production of higher-quality biomass, production and sale of traditional product forms, participation in the production and sale of higher value products, and should it prove feasible, the prospect of additional income from carbon credits. Some higher value products based on seaweed would also impart environmental benefits (e.g., bioplastics).

Social benefits are expected to include improved livelihoods, employment opportunities generated by the production of and trade in traditional and new consumer products, as well as enhanced food security. An expected multiplier effect is also expected due to higher incomes from seaweed enterprises: farmers will be able to use their increased revenues to invest in micro- or other small-scale enterprises (e.g., small convenience stores). A higher and more stable family income will also contribute to an improved access to health care and support to children's education. An intrinsic social benefit is the enhanced self- and collective esteem that results from participation in the development of a progressive, self-reliant community.

The Project's objective will be achieved through the following four inter-connected components:

Component 1: Regional approach and capacity for seaweed value chains in SEAsia. Under this Component, the project will develop plans, tools, and trainings to build a supportive regional enabling environment for seaweed aquaculture. This will include development of a Regional Guide for Seaweed Aquaculture in the Region, to be adopted by the SEAFDEC Governing Council, principles for seaweed aquaculture that are adapted to the region and encompass operational, environmental, and consumer safety (adapted from global guidance from the Safe Seaweed Coalition), and trainings and capacity building to support both the plan and adoption of the standards. Such a regional approach will support the region's capacity to further expand, modernize and establish a strong influence in global seaweed value chains.

Component 2: Enabling Environment for Seaweed Aquaculture in Philippines and Viet Nam. This involves creating an enabling environment for seaweed aquaculture at the national level. A governance framework comprising policy, regulatory and technical guidelines will be developed. The project will support processes to identify suitable areas for seaweed expansion, and to formulate and operationalize management plans specific to such areas, with accompanying plans and coordination mechanisms (national/regional/global) to support this component.

Component 3: Seaweed Value Chains (production + processing). This Component requires working with organized producers (organized into associations or cooperatives) to pilot farms in areas farther than current sites (i.e. off-the-coast or off-shore) that will serve as proof of concept for seaweed production in these environments. It will seek to expand collaboration with the finance sector and private sector.

Component 4: Knowledge Management, M&E, and IW Learn (regional). This involves knowledge sharing and monitoring and evaluation. The activities will be monitored and communicated through multiple channels. In this way the project will utilize and expand on current baseline activities in the seaweed industry in the Philippines and Viet Nam to promote the interests of seaweed farmers and their communities, and grow the global market for seaweed in a sustainable and responsible fashion.

2.2. Project Area Profile

The project will be implemented in two sites in the Philippines and two sites in Viet Nam. Three of the sites are marine waters and the second site, in Viet Nam, comprises land-based coastal ponds that are being converted from shrimp to *Caulerpa lentillifera* culture. The Project sites are marked on the map in Figure 1.



Figure 1. Project Sites: (1) Zamboanga City, Zamboanga Peninsula, Philippines; (2) Green Island, Roxas, Palawan, Philippines; (3) Thuận Nam District, Ninh Thuận province, Vietnam; (4) Ninh Hòa District, Khánh Hoà Province, Vietnam

Seaweed represents the largest aquaculture product of the Philippines by volume. It was 1.47 million MT (wet weight) in 2020. Currently 60,000 hectares of coastal waters are being farmed for seaweed. The potential for expansion is 200,000 ha of farmable area along coastlines and 500,000 ha of farmable area in deeper offshore waters. The value of seaweed products from the Philippines has been estimated at around the USD 200 million. The exports largely comprise raw material, for the manufacture of higher value products, including: Philippine Natural Grade used as a food additive, refined and semi-refined carrageenan and, in some cases, raw dried seaweed. This suggests a large potential for domestic manufacture of the higher value forms.

The industry consists of more than 200,000 farm families, more than 130 nursery operators providing planning materials, 20,000 to 30,000 traders, and a processing sector of 5 multinational-owned and 9 locally owned plants with a total rated capacity of 38,000 MT biomass. The processing plants handle the marketing (mostly exporting) of their products. There are also 10 firms solely engaged in international trading of seaweed products. The value chain is short: seed banks or nurseries (mainly government-operated) provide the propagules; seaweed farmers plant the propagules, and often use young cuttings from the existing crop as planting materials for the next three to four crops; the farmers dry the harvest and sell the dried biomass (RDS or raw dried seaweed) to local buyers who may or may not be agents of a consolidator operating from an urban

center. The consolidator sells the raw materials to processors. Processors in the Philippines produce for export (some for local industries) value-added carrageenan building block products or blended ingredient solutions rather raw, dried seaweed.¹ The major export market is the USA. Others are EU, China, Australia, Russia, Mexico, Argentina, UAE, Chile, Thailand, Malaysia, Indonesia and Vietnam (Note: All the information on Philippine seaweed are from Pedrosa III, Alfredo, 2017).²

The locations of the two project sites are planned in the Zamboanga Peninsula and on Green Island, Roxas, Palawan, as indicated in Table 1 below.

Table 1. Project Sites in the Philippines

	Location	Seaweed Species	Description
1	Zamboanga Peninsula, Philippines <ul style="list-style-type: none"> • Magdaup, Ipil, Zamboanga Sibugay • Buenavista, Zamboanga City 	<i>Kappaphycus</i> spp. <i>Euचेuma denticulatum</i>	Offshore and nearshore Tubular net for consideration
2	Green Island, Roxas, Palawan, Philippines	<i>Kappaphycus</i> spp. <i>Euचेuma denticulatum</i>	Offshore and nearshore Tubular net for consideration

2.3. Demographic and economic information

The agriculture sector is the second largest employer in the Philippines, representing 25% of the total labor force. Fisheries, a subcomponent of agriculture, attracted 3% of the labor force accounting to approximately 1.2 million people. Based on the 2017 data, 32% of the economically active men and 15% of women engage in agriculture-related activities. When the data is further subdivided by type of agriculture activity, the fisheries sector accounted for 4% and 5% of the male and female working population, respectively.

Seaweed farming in the Philippines is predominantly a family-based livelihood activity; both women and men participate in all or selected segments of the production chain. It is considered one of the primary livelihoods in coastal areas. The seaweed value chain is composed of three segments and three key players: the production stage composed mostly of farmers, marketing/trade comprised of different levels of traders/consolidators, and processing/export.

Roxas, Palawan

Palawan is one of the top seaweed producing provinces of the Philippines, contributing 24% of the country's production. Its coastline is 2000 km long. Of its 23 municipalities, 20 are seaweed producers. One of these is Roxas, which has administrative authority over one of the two project sites: Green Island. Seaweed farming was introduced to this island in 1978 by a private company, Marine Colloids. Green Island has a zoning map developed by the Palawan Council for Sustainable Development, which guides marine resources use in the seascape. Areas off Green Island have been mapped and designated for seaweed farms. A fishers cooperative is active in the area. The Northern Palawan Fishers Cooperative has a membership of more than 130, almost all of whom are seaweed

¹ Neish, Iain, SEAPlant.net Monograph no. HB2B 0808 V2

² Pedrosa III, Alfredo. 2017. Current Status of the Phil Seaweed Industry. Regional Scientific Meeting Attaining Sustainable Development Goals: Philippine Fisheries and Other Aquatic Resource 20/20. Davao Citu, Phil. March 13-14, 2017. <https://nast.ph/index.php/downloads/category/108-day-1-march-13-2017?download=346:4-plenary-2-mr-pedrosa-iii>

farmers. The Palawan State University has an ongoing two-year project on seed improvement on Green Island; the University can supply the seed for the project demonstration farm which, in turn, can serve as a trial bed for the seeds in an off-the-coast or offshore environment. Also on Green Island, the municipal government will continue to provide farmers with materials for improving their livelihood outcomes and has acknowledged the importance of improving seaweed farming conditions.

Zamboanga

The Zamboanga Peninsula is the 3rd top seaweed producing region in the country, contributing 13.8% (or 202,606.31 MT) of fresh seaweeds in 2020. Total area planted is 11,728 hectares with an additional 17,120 hectares for expansion. 26,850 seaweed farmers, 126 seaweed farmer associations and cooperatives, 147 traders and 3 seaweed processing plants comprise the key players that make up the seaweed industry in the region.

Zamboanga City with a total coastline length of around 300 kilometers including its island barangays and where deep-sea seaweed farming has started, has been chosen as the model area for the project. With minimal fluctuations in water salinity, temperature and other physical-chemical parameters including less resource-use conflicts, offshore areas in Barangay Buenavista with water depth of more than twenty (20) meters are suitable for commercial seaweed farming.

Zamboanga provides an important baseline for offshore seaweed farming. Currently, 20 units of climate-resilient deep-sea seaweed farms are being piloted in the Zamboanga Peninsula by DA-BFAR Regional Office IX. The seaweed farms are primarily made-up of Polyethylene (PE) ropes with a dimension of 100m x 25m for a total area of 2,500 sq.m. (1/4 hectare).

2.4. IPs and Vulnerable Groups

(a) General IP situation

The existence of IPs in the Philippines has been recognized under changing terms since the Spanish colonial period. In 1974, the term “members of national cultural minorities (NCCs)” was used under a presidential decree which declared ancestral lands occupied by the NCCs as alienable and disposable and provided for the issuance of land occupancy certificates to NCC members. In the 1987 Constitution the term “indigenous cultural communities” was adopted, and in 1997 the term “IPs” was added, so that the official term today is “indigenous cultural communities/IPs” (ICC/IP). This term is used in the IPs Rights Act of 1997 (IPRA) and includes a wide variety of groups that share certain conditions which set them apart from mainstream society in the Philippines—the Christians, lowland and urban population.

The IPRA defines ICCs/IPs as a group of people or homogenous societies identified by self-ascription and ascription by others, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed and utilized such territories, sharing common bonds of language, customs, traditions and other distinctive cultural traits, or who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures, become historically differentiated from the majority of Filipinos.

Approximately ten percent of the population in the Philippines is considered as ICC/IPs. They live in several regions but are particularly concentrated in Mindanao (60%) and in the mountains of

Northern and Central Luzon (30%). There are no accurate census data regarding the number of IPs, but it is estimated to be around 10 million people. The National Commission on IPs officially recognizes the existence of 110 ethno-linguistic groups in the country. In Luzon, most of the IPs are concentrated in the northern mountain ranges of the Cordillera area where one can find the Tinggian, Isneg-Apayao, Kalinga, Bontoc, Sagada, Ifugao, Ibaloy, Kankanaey, Gaddang, and Ilongot; collectively they are called Igorot. Ethnic groups outside the Central Cordillera area are the Agta, Dumagat, Yogad, Ikalahan, Kalanguya and Itawis who inhabit the foothills and narrow valleys of the Sierra Madre mountain ranges. Other indigenous groups in Luzon (found in Zambales, Pampanga, Tarlac, Quezon Province, Pollilo Island and the Bicol Peninsula) are the Pinatubo, Baluga and the Agta (also known as Ayta, Ati and Dumagat). The government subdivides Luzon into three ethnographic regions. Region 1 is comprised of the Cordillera Region, while Region 2 consists of the Caraballo and Cagayan Valley Region. Pinatubo, Sierra Madre and Bicol make up Region 3.

The Central Philippine area consists of islands found between Luzon and Mindanao. Islands known to have IPs groups are Mindoro, Palawan, Panay and Negros. The Western Islands Region and Central Philippine Islands Region (Region 4) are the home of the Mangyan (whose subgroups include the Iraya, Alanga, Tadyawan, Batangan, Hanunoo and Buhid), Tagbanua, Batak, Tau't Bato, Keney, Sulod, Magahat, Ata and Ati.

Despite the strong rights provided by the IPRA and the historic recognition of IPs in the Philippines, conflicts over their identities continue and ancestral domain claims may face conflicting claims on the part of other local communities or private interests such as mining companies and agricultural businesses. IPs are relatively well organized in the Philippines, however, they face similar social and political marginalization as IPs elsewhere in the world. They are among the poorest population groups in the Philippines and are affected by civil conflicts (e.g. in Mindanao) and encroachment of their lands and resource use areas.

(a) IPs in project sites

The IP composition of project sites is as follows.

Palawan. Results of local stakeholder meetings showed that there are two classifications of residents in Green Island, Roxas – local residents (those born and raised in Green Island) and migrants (i.e., residents who came from other provinces or municipalities in Palawan). The Cuyunon is the largest ethnic group residing in Green Island (originally from the municipality of Cuyo in Palawan) and those who are also involved in seaweed farming. The Cuyunons are identified as one of the indigenous groups in Palawan, but unlike the other ethnic groups, they are well-integrated in communities and the whole province (i.e., have adopted the national system of governance). They have also become less and less distinguishable because they have long intermingled with residents from other municipalities in Palawan.

Zamboanga. The Zamboanga Peninsula consists of several ethnic and religious groups. These include 5 Muslim tribes that reside in the area: Iyakan, Kalibugan, Tausog, Bangingi and Sama Badjao; 1 Christian group: Subanen; and several ethnic groups—Siama (Bangingi + Sama Badjao), Kalibugan, and Subanen—that are considered IPs. Another ethnic group that resides in the area is Bisaya—these are long-term residents who are well-integrated into the community. There are no conflicts between tribes and IPs and migrants.

2.5. Gender

There have been notable disparities in the distribution of social and economic benefits in the seaweed industry, with women receiving lesser benefits compared to men. The gender inequities in the seaweed industry were found to be embedded in the existing social and cultural systems and indicates the relative position of the seaweed farmers (especially female seaweed farmers) in the seaweed value chain.

Women and men play different but complementary roles across the seaweed value chain. Their roles are influenced by established norms and values, which consequently determine the power relations in the industry. In the seaweed production chain, the activities can be divided into three types: (1) generally male activities or roles primarily taken by male farmers; (2) generally female activities or roles assumed primarily by female farmers; and (3) roles that can be assumed by either male or female farmers.

Women and men have differential access to and control over resources and these differences signify the nature of power relations between and among the different stakeholder groups. Traditional beliefs and practices constrain women's access to resources (i.e., seaweed farm); hence, farm ownership is usually associated with (or claimed by) male farmers (i.e., husband). Women's roles are usually tied to their housekeeping and childcare roles, and they have fewer options in farm management. For instance, women prefer to assist in pre-planting and post-harvest activities so that they can still perform their household duties while helping with the farm. This is a primary factor for women's preference for foreshore farming (i.e. fixed-off bottom) as it requires shorter travel time to and from their houses.

A separate Gender Action Plan has been prepared for the project.

3. ENVIRONMENT AND SOCIAL POLICY, REGULATIONS AND GUIDELINES

This chapter first outlines the laws and regulations of the Philippines and the WWF's SIPP that are applicable to the project, and then discusses gaps between Philippine laws and regulations and the SIPP. **For the purposes of the Seaweed Project implementation, the principles and procedures of the SIPP shall prevail in all cases of discrepancies.**

3.1 Philippines' Policies, Laws, Regulations Guidelines

In the Philippines, there are national laws, regulations, and policies related to implementation of environmental and social safeguards, as well as those on coastal areas management which are directly related to this Project. The sections below highlight the key laws, policies and regulations. Particular attention has been paid to laws and regulations governing the project's implementation and the access of poor and excluded groups to goods, services, and opportunities provided by the project.

(a) Laws on Environmental Protection and Biodiversity Conservation

The Fisheries Code of 1998 (RA 8550 as amended by RA 10654, an Act to prevent, deter, and eliminate illegal, unreported and unregulated fishing) is the governing law in Philippine fisheries to address the interconnected issues of resource degradation and poverty among fishers. It provides for

the utilization, management, development, conservation and allocation system of fisheries and aquatic resources; establishment of reserves, refuge and sanctuaries; fisheries research and development; and prohibitions and penalties for unauthorized fishing activities. It prescribes restrictions regarding access to fishery and aquatic resources and aims to ensure the rational and sustainable development, management, and conservation of fishery and aquatic resources in Philippine waters including the Exclusive Economic Zone (EEZ) and in the adjacent high seas. It introduces harvest control mechanisms to limit fishing efforts based on the health of fishing grounds. The Department of Agriculture (DA) is tasked to issue licenses and permits for the conduct of fishery activities subject to harvest control rules and reference points as determined by scientific studies or best available evidence. Preference is given to resource users in local communities adjacent or nearest to municipal waters. The DA is mandated to establish a monitoring, control and surveillance system in coordination with the local government units (LGU), Fisheries Aquatic Resources Management Councils (FARMCs), private sector and other agencies concerned to ensure that the fisheries and aquatic resources in Philippine waters are judiciously and wisely utilized and managed on a sustainable basis, and conserved for the benefit and enjoyment exclusively of Filipino citizens. The general provisions of the Fisheries Code on fisherfolk settlement areas, financing facilities, education campaign, infrastructure support, extension services, collection and protection of sensitive information are similarly relevant to the ESMF.

- **Legislation related to Biodiversity Conservation**

RA 9147 - Wildlife Resources Protection and Conservation Act as amended by RA 11038 Provides for the conservation and protection of terrestrial and marine wildlife resources and their habitats. Provides for the designation of critical habitats outside NIPAS areas where threatened species are found.

RA 8550 - The Fisheries Code, Section 10: Prohibits introduction of exotic species of finfish, mollusk, crustaceans, or aquatic plants without sound ecological, biological justification based on scientific studies and subject to bio safety standards.

RA 8550 - Fisheries Code, Section 11: Empowers BFAR to declare closed seasons and apply conservation and rehabilitation measures for rare, threatened, and endangered species; or, if it so determines, ban the fishing and/or taking of rare, threatened and/or endangered species, including their eggs/offspring.

FAO 9147 Series of 2001 - Code of Practice for Aquaculture Promulgates a Code of Practice for Aquaculture, outlining the general principles and guidelines for environmentally-sound design and operation, including measures to minimize impacts on natural habitats.

Protected Areas RA 7586 - National Integrated Protected Area System Act: Provides for the establishment and management of National Integrated Protected Areas System (NIPAS).

RA 7586 - National Integrated Protected Area System Act, Section 12 Provides that, proposals for activities inside protected areas which are outside the scope of the management plan for said protected areas shall be subject to an environmental impact assessment result thereof shall be taken into consideration in the decision-making process and that no such activities shall be allowed without Environmental Compliance Certificate. Project interventions in protected areas are required to secure the Special Use in Protected Area (SAPA) and to pay annual development fee as premium to the protected area for ecosystem services.

Fisheries Resource Management RA 8550 - The Philippine Fisheries Code as amended, Sections 12 and 13. Requires all proponents of activities or projects which will affect the quality of the environment to prepare a detailed Environmental Impact Statement (EIS) prior to undertaking such development activity as part of the planning process in accordance with PD 1586.

RA 7160, Local Government Code Defines municipal waters to include not only streams, lakes, and tidal waters within the municipality, not being the subject of private ownership and not within the national parks and public forest, but also marine waters fifteen (15) kilometres from the coastline.

Places the responsibility of enforcing fishery laws within municipal waters to the concerned Local Government units.

- ***Environmental regulations related to environmental impacts assessment:***

PD 1586 - The Philippine Environmental Impact Statement System (1978): No environmentally critical projects and projects located in environmentally critical areas shall be implemented without Environmental Clearance Certificate.

Proclamation No. 2146 (1981): Defines environmentally critical projects and environmentally critical areas.

DENR DAO 03-2003 Implementing Rules and Regulations for the for PD 1586: Provides for the implementation of the Environmental Impact System. DAO 2003-308 also recognizes in the assessment and review process the relevant environmental standards under the mandate of other laws such as those pertaining to protected areas and ecosystem services, water resources, IPs, resettlement, grievance mechanisms, labor, climate change, socio-cultural heritage, among others.

DENR Memorandum Circular 002 Series of 2007: Officially adopts the Revised Procedural Manual for DAO03-2003. The Procedural Manual provides the detailed procedure and requirements for the Environmental Impact Assessment process.

RA 8550 - Fisheries Code of the Philippines, Section 12: Provides that, proponents of fishery activities or projects that will affect the quality of the environment shall be required to prepare a detailed Environmental Impact Statement as an integral part of the planning process, pursuant to PD 1586.

- ***Legislation on Air Pollution***

RA 8749 - Philippine Clean Air Act of 1999: Provides for clean air quality standards and emission limits.

DAO 2000-81(IRR of RA 8749) Sets the National Ambient Air Quality Standards (NAAQS) and the National Emission Standards for Source Specific Air Pollutants (NESSAP).

- ***Legislation on Water Pollution***

RA 9275 - Philippine Clean Water Act of 2006: Provides for the abatement and control of pollution from land-based sources; and lays down water quality standards and regulations.

DAO 2016-08 (Water Quality Guidelines and General Effluent Standards of 2016): Provides for classification of water bodies and their respective Water Quality Guidelines; Also sets the general effluent standards.

PD 979 - Marine Pollution Decree of 1976: Provides for the control of pollution discharge from ships in marine waters.

FAO 214 Series of 2001: Code of Practice for Aquaculture Promulgates a Code of Practice for Aquaculture, outlining the general principles and guidelines for environmentally-sound design and operation, including measures to minimize water pollution.

- ***Legislation on Solid Waste Management***

RA 9003 - Ecological Solid Waste Management Act: Provides for the segregation, composting, materials recovery and disposal of residual nonbiodegradable wastes in sanitary landfills. Requires local government units to set up material recovery facilities as part of the integrated solid waste management system; Encourages commercial and industrial establishments to develop and adopt innovative processes that shall recycle and re-use materials, conserve raw materials.

- **Legislation on Water Conservation**

PD 1067 - Water Code of the Philippines: Provides for the development, exploitation, and conservation of water resources.

- **Legislation on Energy Conservation**

RA 11285 - Philippine Energy Efficiency and Conservation Act of 2018: Requires manufacturers, importers, and dealers to comply with the Minimum Energy Performance Standards (MEPS) and to display the Energy Label showing the energy requirement and consumption efficiency of products.

(b) Specific Policies related to the Seaweed Industry

The Philippines has several plans that guide the seaweed industry:

BFAR's **Seaweed Roadmap** (2016-2022) has guided seaweed production in the Philippines over the past five years, and is structured around three key components: (1) improved production; (2) organized seaweed farmers; and (3) promotion/commercialization of seaweed products. This roadmap is currently being updated for the period 2022-2027. It provides strategies and interventions which include, among others, the expansion of seaweed farming in traditional areas, introduction of seaweed farming in non-traditional areas, adoption of technologies to increase productivity, improvement of post-harvest technologies, and research and development to address the identified problems in production technology, processing and value adding and marketing.

In addition to national-level plans, BFAR is currently updating the **Philippines National Standards (PNS)** on good aquaculture practices and raw dried seaweed, which are expected to be finalized by early 2022. The Philippine National Standard (PNS) on the Code of Good Aquaculture Practices (GAQP) for Seaweed covers practices that aim to prevent or minimize the risk associated with aquaculture production in any environment. It covers food safety and quality, environmental integrity and socio-economic welfare. The ultimate aim is to gain greater confidence in consumers' expectations that the Philippine Seaweed products are safe, sound and fit for human consumption.

The **PNS for Dried Raw Seaweed adopted in 2012**, aims to provide common understanding on the scope of the standard, quality requirements, classification according to quality, tolerances, contaminants, hygiene, packaging, marking or labeling, sampling, and definition of defectives. It prescribes quality specifications and safety requirements of dried raw seaweed of the class Rhodophyceae (red seaweed) such as but not limited to *Kappaphycus* spp. and *Eucheuma* spp.

(c) Laws on Labor and Working Conditions

The Philippine labor laws are compliant with international standards. The Philippines has ratified a total of 38 ILO Conventions. These include all of eight (8) Fundamental Conventions, which are all in force and incorporated in the country's labor laws, viz.: Forced Labor, Freedom of Association and Protection of the Right to Organize, Right to Organize and Collective Bargaining, Equal Remuneration, Abolition of Forced Labor, Discrimination in Employment and Occupation, Minimum Age, and Worst Forms of Child Labor.

Specific national provisions related to Labor and Working conditions include the following:

PD 442 - Labor Code of the Philippines: Grants the entitlements/rights to: (i) assembly, representation, and collective bargaining; (ii) overtime pay; (iii) vacation and sick leave with pay; (iv) 13th month pay; (v) health insurance; (vi) retirement pay and benefits; (vii) social security, etc.

RA 8550 - Fisheries Code, Section 25: Fishworkers shall be entitled to the privileges accorded to other workers under the Labor Code, Social Security System and other benefits under other laws or social legislation for workers. Fishworkers on board fishing vessels engaged in fishing operations shall be considered as field workers and not subject to normal working hours and overtime.

PD 442 - Labor Code of the Philippines: Makes it unlawful for any employer to discriminate against any woman employee with respect to terms and conditions of employment solely on account of her sex, marital status. Prohibits discrimination of any employee on account of age.

The Magna Carta of Women (Republic Act No. 9710, as amended): Prohibits discrimination against women and expressly imposes liability for damages on the person directly responsible for such discrimination.

The Anti-Age Discrimination in Employment Act (Republic Act No. 10911): Prohibits discrimination on account of age; and imposes penalties for violation.

The Magna Carta for Persons with Disability (Republic Act No. 7277, as amended): Provides that a qualified employee with disability shall be subject to the same terms and conditions of employment as a qualified able-bodied person.

The IPs' Rights Act (Republic Act No. 8371): Prohibits discrimination against indigenous cultural communities with respect to recruitment and conditions of employment on account of their descent.

The Anti-Sexual Harassment Act (Republic Act No. 7877): Prohibits sexual harassment in the workplace.

Protection of Minor and PD 442 - Labor Code of the Philippines: Prohibits employment of children below fifteen (15) years of age, except when he works directly under the sole responsibility of his parents or guardian, and his employment does not interfere with his schooling. Prohibits hiring of minors below 18 years of age in an undertaking which is hazardous or deleterious in nature.

RA 7610 - Special Protection of Children Against Child Abuse, Exploitation and Discrimination Act Provides for protection of minors (persons below 18 years old) against exploitation, trafficking, and other forms of abuse, and in situations of armed conflict; Provides for conditions in the employment of children below 15 years old.

RA 9231 - An Act Providing for the Elimination of the Worst Forms of Child Labor Amends RA 7610 and defines and bans worst forms of child labor.

PD 442 - Labor Code of the Philippines, Book IV, Chapter II - Occupational Health and Safety Empowers the Secretary of the Department of Labor and Employment to set and enforce mandatory occupational health and safety standards.

BWC RA 11058 - An Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations Thereof Provides for the organization, duties, and responsibilities for the enforcement of OSH Standards. Provides for an annual spot audit on compliance with OSH, authorizing the Secretary or his representative to enter workplaces at any time to examine records and investigate facts, conditions or matters necessary to determine compliance. DOLE publishes and maintains a comprehensive OSH Standards.

(d) Land Acquisition

The Philippine Constitution, Article III, Section 9 Provides that private property shall not be taken for public use without just compensation.

RA 10752 - Right of Way Act: Provides for the procedure of acquisition of right-of-way, site, or location of a national government infrastructure project. The government shall proffer as compensation based on the current market value of the land, replacement cost of structures and improvements, and current market value of crops and trees.

RA 8550 - Fisheries Code, Section 45 Public lands such as tidal swamps, mangroves, marshes, foreshore lands and ponds suitable for fishery operations shall not be disposed of or alienated. FLA may be issued for public lands that may be declared available for fishpond development primarily to qualified fisherfolk cooperatives/associations.

Resettlement of the displaced. RA 7279 - Urban Development and Housing Act: Defines "underprivileged and homeless citizens" as referring to individuals or families whose income or combined household income falls within the poverty threshold and who do not own formal housing facilities, including those who live in makeshift dwelling units and do not enjoy security of tenure. The law provides that eviction and demolition in the case of "underprivileged and homeless citizens" is subject to 30 days prior notice; adequate consultations; presence of local government officials; and adequate relocation. Local Government Units, in coordination with the National Housing Authority (NHA), shall provide resettlement sites with basic amenities and access to employment and livelihood, and implement the relocation and resettlement of persons living in danger areas and other public places.

RA 10752 - Right of Way Act: Echoes the RA 7279 provisions for the government through HUDCC and National Housing Authority in coordination with the LGU to develop a resettlement site for informal settlers in anticipation of informal settlers that would be removed from the site of future infrastructure projects. LGU shall provide and administer the relocation sites

Land ownership/tenure laws. PD 1529 - Property Registration Decree: Provides for procedures for registration of properties and annotation of encumbrances thereof.

Commonwealth Act No. 141 - Public Land Act, as amended Provides that lands acquired through Free Patent are subject to ROW with compensation limited to land improvements only RA 6389 - **Comprehensive Agrarian Reform Law (CARL)** Provides that lands acquired under CARL shall be subject to right-of-way reservation. Also provides that agricultural lessees are entitled to disturbance compensation.

Accidental damage to properties and crops (not part of the expropriated land) during construction RA 386 -Civil Code of the Philippines, Book IV, Title XVII, Chapter 2 (Quasi Delict) Provision for liability to pay compensation for accidental damages (e.g., by contractor during construction.)

(e) IPs

The 1987 Constitution of the Republic of the Philippines recognizes the rights of IPs 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. The following basic rights which are relevant to the implementation of the Project are:

- 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 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 IPs to natural resources pertaining to their lands shall be, specially safeguarded. These rights include the right of the IPs 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 IPs and must occur under appropriate procedures established in the law and regulation, including public hearings to give the IPs opportunity for effective representation;

- The right to return when cause for relocation ceases. The rule is that IPs have the right to return to their traditional domains as soon as the ground for relocation ceases to exist. When return is not possible, IPs 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 IPs 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 IPs in fulfilling a number of goals among which are recognition that the lands of the IPs should be protected from activities that are environmentally unsound or what the IPs concerned consider to be socially or culturally inappropriate and the adoption or strengthening of appropriate policies and or legal instruments towards these ends.

The IPs Rights Act (IPRA) of 1997 recognizes and respects 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 IPs (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.

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.

Free and Prior Informed Consent under IPRA. IPRA vests the ICC/IPs collective ownership to their ancestral domain (AD) and requires, among others, that activities, projects, plans and programs shall be subject to FPIC of the ICC/IP owning the AD. IPRA defines FPIC as the consensus of all members of the ICC/IPs to be determined in accordance with their respective customary laws and practices, free from any external manipulation, interference and coercion, and obtained after fully disclosing the intent and scope of an activity, in a language and process understandable to the community. The NCIP has issued Guidelines for the implementation of FPIC process, the latest of which is contained in the NCIP Administrative Order (AO) No. 3 Series of 2012. The Administrative Order categorizes

projects or activities in the Ancestral Domain into: (a) Extractive/Intrusive/Large Scale projects which would require a very elaborate FPIC process; (b) Non-Extractive/Small Scale projects which would require a only a simplified FPIC process; and (3) Projects which do not require FPIC, including activities which are community-solicited or initiated activities, projects undertaken in collaboration with NCIP, which would require only a Validation Process.

Cultural Heritage RA 8371- IPs' Rights Act of 8371 of 1997, Chapter VI Protects the rights of indigenous people to their cultural heritage which includes traditions, religious practices, indigenous knowledge, oral traditions, literature, visual arts, cultural sites and ceremonies.

Grievance Redress RA 8371- IPs' Rights Act of 8371 of 1997 NCIP shall have jurisdiction over all claims and disputes involving rights of ICCs/IPs: Disputes shall be brought to the NCIP only after the parties have exhausted all remedies provided under their customary laws.

(f) Community Engagement

Stakeholder Engagement in the Environmental Impact Assessment (EIA) process is well supported in the EIA Law, particularly in the DAO 2003-30 as well as in the latest revision of the EIA Procedural Manual. The DAO 2003-30 includes social acceptability of projects as one of the criteria for the approval of the project. The Procedural Manual has since ensured public participation in the EIA process, particularly during scoping, during data collection and during public hearing.

For the fishery sector, the Fisheries and Aquatic Resource Management Councils (FARMCs) are organized at various levels down to the barangay levels to institutionalize the participation of the local fisherfolks and other resource users in the community-based planning and implementation of policies and programs for the management, conservation, development and protection of fisheries and aquatic resources of the municipal waters, as defined by the Local Government Code. The FARMCs which were created under EO 240 in 1995 were then tapped as consultative bodies, among other functions being assigned, under the Fishery Code to help formulate and implement coastal resource and fishery management plans.

Specific legislative provisions are as follows:

Executive Order No. 240 (1995): Provides for the creation of Fisheries and Aquatic Resource Management Councils (FARMCs) in Barangays, Cities and Municipalities, their composition, and functions.

RA 8550 - Fisheries Code: Provides that, the formulation of plans and ordinances be undertaken in consultation with appropriate levels of FARMCs (i.e., national FARMC for national level plans, regional FARMC for regional plans, municipal/city FARMC for local plans/ordinances):

2017-15 Guidelines on Public Participation under the PEISS DENR Freedom of Information Mechanism Executive Order No. 2, series of 2016: Aims to promote an open government by increasing the transparency of the executive branch and its agencies. Strengthens the right to information as enshrined by the constitution. FOI allows Filipino citizens to request any information about government transactions and operations (provided that it shall not put into jeopardy privacy and matters of national security).

3.2 WWF Safeguards Standards and Procedures Applicable to the Project

WWF's safeguards standards require that any potentially adverse environmental and social impacts are identified, and avoided or mitigated. Safeguards policies that are relevant to this project are as follows.

(i) Standard on Environment and Social Risk Management

This standard is applicable because the Seaweed Project intends to support activities that result in a variety of environmental and social impacts. The Project is expected to support seaweed production and improve the livelihoods of seaweed farmers, and its environmental and social outcomes are thus expected to be positive. Adverse environmental and social impacts that may occur as a result of project activities are expected to be site-specific, negligible and easily mitigated.

The precise location and impact of specific activities cannot be determined at this stage, and will only be known during project implementation. Thus, an ESMF is prepared to set out guidelines and procedures on how to identify, assess and monitor environmental and social impacts, and how to avoid or mitigate adverse impacts. Site-specific ESMPs will be prepared as required, based on principles and guidelines of the ESMF.

(ii) Standard on Protection of Natural Habitats

WWF's mission is to protect natural habitats, and it does not undertake any projects that would result in conversion or degradation of critical natural habitats, especially those that are legally protected, officially proposed for protection, or identified as having high conservation value.

The seaweed farming area, where project activities will be carried out, provides ecosystem services and livelihood to project affected communities. Seaweed farming is the mainstay of project affected communities, who are directly dependent on it.

Overall, the Seaweed Project activities will produce significant environmental and livelihood-related benefits. Any potential adverse environmental impacts on human populations or environmentally important areas including the local fisheries and aquaculture are expected to be very limited. However, the ESMF is prepared to properly manage the risk of any unforeseen adverse environmental impact on natural habitats, including critical natural habitats, as well as measures to enhance the project's positive environmental outcomes.

(iii) Standard on Involuntary Resettlement

The WWF's Standard seeks to ensure that adverse social or economic impacts on resource-dependent local communities as a result from restrictions on resource access and/or use are avoided or minimized. Resolution of conflicts between environmental objectives and local livelihoods is sought primarily through voluntary agreements, including benefits commensurate with any losses incurred. Involuntary resettlement is avoided or minimized, including through assessment of all viable alternative project designs and, in limited circumstances where this is not possible, displaced persons are assisted in improving or at least restoring their livelihoods and standards of living relative to pre-displacement or pre-project levels (whichever is higher).

The adverse resettlement impacts of the Seaweed project are expected to be minimal. Land acquisition or physical displacement will be avoided. Other forms of economic resettlement (e.g., restrictions of access to natural resources and livelihoods, loss of community property resources, land use conflicts, etc.) will be discouraged under the project. However, if such resettlement impacts

will be unavoidable, mitigation measures will be taken to reduce and mitigate such impacts, in accordance with the guidance provided in the ESMF.

(iv) Standard on IPs

The WWF's standard requires ensuring that indigenous rights are respected, that IPs do not suffer adverse impacts from projects, and that IPs receive culturally appropriate benefits from conservation. The policy mandates that projects respect IPs' rights, including their rights to FPIC processes and to tenure over traditional territories; that culturally appropriate and equitable benefits (including from traditional ecological knowledge) are negotiated and agreed upon with the IPs' communities in question; and that potential adverse impacts are avoided or adequately addressed through a participatory and consultative approach.

The standard is triggered for the Seaweed Project in the Philippines as IPs reside in both project sites.

(v) Standard on Community Health, Safety and Security

This Standard ensures that the health, safety and security of communities are respected and appropriately protected. The Guidance on Labor and Working Conditions requires employers and supervisors to implement all reasonable precautions to protect the health and safety of workers through the introduction of preventive and protective measures. It also requires that the labor rights of project-employed workers are observed, as indicated in Annex 1: Screening Tool. Project activities should also prevent adverse impact involving quality and supply of water to affected communities; safety of project infrastructure, life and properties; protective mechanisms for the use of hazardous materials; disease prevention procedures; and emergency preparedness and response.

(vi) Standard on Pest Management

The project will not allow the procurement or use of formulated products that are in World Health Organization (WHO) Classes IA and IB, or formulations of products in Class II, unless there are restrictions that are likely to deny use or access by lay personnel and others without training or proper equipment. The project will follow the recommendations and minimum standards as described in the United Nations Food and Agriculture Organization (FAO) International Code of Conduct on the Distribution and Use of Pesticides and its associated technical guidelines, and procure only pesticides, along with suitable protective and application equipment, that will permit pest management actions to be carried out with well-defined and minimal risk to health, environment, and livelihoods.

The project will not fund nor include the promotion or usage of pesticides. On the contrary, it will aim to reduce the amount of chemical fertilizers and pesticides used through strengthening of farmer capacity on the proper use of chemicals/non-chemical alternatives for seaweed farming. Thus, this standard is not triggered by the project.

(vii) Standard on Cultural Resources

This Standard requires that Cultural Resources, which include archaeological, paleontological, historical, architectural, and sacred sites (e.g., graveyards, burial sites, sites of unique natural values, etc.) are appropriately preserved and their destruction or damage is appropriately avoided.

Project activities are not expected to negatively impact cultural resources, since Project activities will be implemented in areas that lack such resources (i.e., in coastal areas or inside the sea). However, to avoid any adverse impacts on cultural resources, the project will not finance activities that could significantly damage such resources. The Project Management Unit will also consult with local people and other relevant stakeholders in documenting the presence and significance of cultural resources, assessing the nature and extent of potential impacts on these resources, and designing and implementing mitigation plans.

(viii) Standard on Accountability and Grievance System

Project-affected communities and other interested stakeholders may raise a grievance at any time to the Project Team and WWF. The PMU will be responsible for informing project-affected parties about the Accountability and Grievance Mechanism. Contact information of the PMU and WWF will be made publicly available. Relevant details are also provided in the Grievance Redress section of this ESMF/PF.

The WWF Standard on Accountability and Grievance Mechanism is not intended to replace project- and country-level dispute resolution and redress mechanisms. This mechanism is designed to: address potential breaches of WWF's policies and procedures; be independent, transparent, and effective; be accessible to project-affected people; keep complainants abreast of progress of cases brought forward; and maintain records on all cases and issues brought forward for review.

(ix) Standard on Public Consultation and Disclosure

This standard requires meaningful consultation with relevant stakeholders, occurring as early as possible and throughout the project cycle. It requires the Project Team to provide relevant information in a timely manner and in a form and language that are understandable and accessible to diverse stakeholders. This standard also requires that information concerning environmental and social issues relevant to the project is disclosed for at least 30 days prior to implementation. WWF will disclose safeguards documentation on its Safeguards Resources web page. The final safeguards documents should be published on national websites of the Implementing Agencies and made available locally in specific locations. The project is also required to locally release all final key safeguards documents via hardcopy, translated into the local language and in a culturally appropriate manner, to facilitate awareness by relevant stakeholders that the information is in the public domain for review.

(x) Standard on Stakeholder Engagement

This standard details the necessary requirements for meaningful, effective and informed stakeholder engagement in the design and implementation of projects. The project has prepared a Stakeholder Engagement Plan () that will be implemented during the project.

3.3 Gaps between Philippine laws and policies and the WWF's SIPP

While the Philippine national regulatory systems are largely consistent and are complying with the WWF's SIPP, certain gaps exist between these two systems.

Environmental protection and biodiversity. There are no relevant gaps in the country's laws on biodiversity and management of its biological resources with respect to WWF's Standards. While

there is similarity of the Philippine regulations with the WWF's Standards in terms of assessment of impacts on and conservation of habitats and biodiversity, there are variances in terms of cumulative impact assessment on habitat and biodiversity, implementation of mitigation hierarchy, treatment of alien species, and biodiversity offsets.

Pollution. The pollution control laws in the country are comprehensive and neatly organized into major legislations: the Clean Air Act, the Clean Water Act, and the Solid Waste Act.

Resettlement. Analysis of the national systems indicate that the following gaps exist with respect to involuntary resettlement and access restrictions: (i) criteria for determining eligibility of informal settlers and cut off dates; (ii) adequacy of transition support, alternative income-earning opportunities, and livelihoods restoration, particularly for vulnerable people; (iii) protection for informal economic activities and compensation for loss; and (iv) full replacement cost for economic and physical displacement; and (v) restrictions of access to natural resources in declared critical habitats resulting to economic and sociocultural displacement.

Occupational health and safety. All the key elements of the WWF's Occupational Health and Safety Standards are adequately addressed by the current country legal framework, namely basic worker's rights (e.g., right to assembly, collective bargaining, overtime, minimum wage, insurance, separation benefits, etc.); non-discrimination; child labor; occupational health and safety; and grievance redress mechanism. Still there are differences and inherent challenges in terms of meeting WWF's standards. The Philippine policy framework on labor, however, could be more explicit in terms of measures to prevent harassment apart from sexual and gender-based exploitation in the implementing rules and regulations. The provisions could also be enhanced with regard to monitoring of compliance of contractors (including primary suppliers) with labor welfare and protection; and, applicability of grievance mechanism to contracted employees in the public sector.

Community health and safety. The country has an array of legislations dealing with public health and safety, including structural standards for buildings, fire safety, food safety and safety concerns on the use of pesticides. The country system however could provide explicit guidelines for anticipating and avoiding the transmission of sexually transmitted communicable diseases due to influx of temporary or permanent workers as an enhancement to the implementing rules and regulations.

IPs. The gap between IPRA and the WWF Standards is that under IPRA, all proposed activities within ancestral domains/lands are subject to the FPIC as validated by the NCIP through field-based investigations that involve potentially affected IP/indigenous cultural communities. **Project sites are not located on ancestral domain lands and thus do not require FPIC under Philippine laws.**

However, WWF's Standards do require FPIC for areas outside AD/L should the below triggers be present:

- Project activities may have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation;
- Project activities may cause relocation of IP from land and natural resources subject to traditional ownership or under customary use or occupation; or
- Project activities may have significant impacts on IP's cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected IP's lives.

The WWF's Standards also require the preparation of an IPPF to ensure that the impacts of the project are periodically assessed throughout project implementation, that any adverse impact would be avoided or mitigated so that the affected IPs would benefit in an optimum manner and that their welfare and culture are duly protected/promoted. The IPPF is part of this ESMF in Section 5.4.

Community engagement. Stakeholder consultations are undertaken throughout project development and management stages. A plethora of laws support stakeholder engagement through implementing agencies and local government units. However, resources and capacities are recognized constraints at implementation.

For the purposes of the Seaweed project, the provisions of the WWF's SIPP shall prevail over Philippine legislation in all cases of discrepancy.

4. ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

The objective of the project is “to create new sustainable seaweed value chains that will deliver ecosystem services and provide socioeconomic benefits,” and it is thus expected to result in major positive environmental outcomes. This section outlines potential adverse environmental and social impacts that may result from project activities.

4.1 Adverse Environmental Impacts

Minor and site-specific negative environmental and social impacts may result from activities under **Component 3: Seaweed Value Chains (production + processing + marketing)**. This Component requires working with organized producers (organized into associations or cooperatives) to pilot farms in areas farther than current sites (i.e., off-the-coast or off-shore) that will serve as proof of concept for seaweed production in these environments.

As part of this Component, demonstration farms will be established within national marine spatial plan (MSP) frameworks, and with the specific goal of advancing uniformly accepted risk assessment, rapid alert systems and data collection in order to develop safe modes of production, focusing on food safety, occupational safety and environmental safety and in order to overcome barriers of insufficient information that directly limit off-take agreements amongst global supply chain actors, contribute to the low level of regulations, and represent a barrier for insurability.

In the Philippines, two farms will be established in the following locations:

1. Zamboanga Peninsula, Philippines:
 - a. Magdaup, Ipil, Zamboanga Sibugay
 - b. Buenavista, Zamboanga CityThe farms will grow *Kappaphycus* spp. (off-shore) and *Eucheuma denticulatum* (in circular marine fish cage modified for seaweed culture).
2. Green Island, Roxas, Palawan, Philippines: the farm will grow *Kappaphycus* spp. (off-shore) and *Eucheuma denticulatum* (tubular net for consideration).

In Zamboanga, the Norwegian circular fish cage system will be modified for seaweed cultivation in deeper (10-20m) offshore waters, which can withstand and afford more protection to the plants in the harsher environment.

In Roxas, the deepwater demonstration farm is expected to produce a total of 150,000 kg of RDS based on 3 harvests per year. The traditional technology will be improved and adapted to the deeper

(5-10m) and higher energy culture environment of the selected site. The traditional long line method will still be used but a robust anchoring structure will be built.

This activity will also include the establishment of a **solar dryer and guardhouse**. The solar dryer is a land-based structure for hanging and drying seaweed equipped with protective covering from the rain. The guardhouse is a floating structure set up close to the seaweed farm to be used as a patrol station and as a resting place for farmers.

(a) Component 3: Demonstration Farms

The adverse environmental impacts of activities envisioned as part of the farm's assembly and operationalization (Activity 3.1.1) include the following:

- *Weather risks:* climate change is recognized as the most significant environmental risk for seaweed farming. It may result in adverse weather conditions (e.g., typhoons, monsoons), high waves, and changing sea temperature that may damage the seaweed growth.
- *Entanglement of sea turtles, dugongs, and smaller fish:* The Green Island site is a nesting area of dugongs. And there is the risk of their and the sea turtles' entanglement in the seaweed lines. In Zamboanga, the cage structures do not pose this risk.
- *Damage to the local fauna:* an inappropriate placement of the farms may damage the local fauna, such as coral reefs.
- *Biological risks* such as pests, grazers and predators, endo- and epiphytes, and diseases impact on the growth of the demonstration crops.
- *Chemical risks* such as pollution from agricultural and domestic runoffs, oil spills, unsuitable water parameters in growing area may render the area unsuitable for a seaweed demonstration farm.
- *Pollution:* while seaweed farming in itself does not involve pollution, some of the tying materials are made of plastics, which may let loose and get into the sea.
- *Construction risks:* the construction of the solar dryer and guardhouse may result in a variety of construction-related adverse impacts, which include noise, dust, pollution, waste, etc.

(b) Component 3: Value Chain Initiatives

Minor and site-specific negative environmental and social impacts may also result from activities planned as part of *Output 3.1.2: Implementation of at least 2 seaweed value chain initiatives*. This activity may include some construction works at a fish feed production plant and/or bioplastic refinery (listed as Options 3 & 4 respectively in the Project Document), which may trigger construction-related risks. These include pollution, dust, noise, waste, etc. The operation of the plant or refinery may also result in waste generation, as well as occupational health and safety risks for workers.

A detailed overview of these impacts, potential mitigation measures, and responsible authorities is provided in Table 1 below.

4.2 Environmental Mitigation Measures

Table 3. Anticipated Environmental Impacts and Mitigation Measures

Potential impact	Proposed mitigation measures	Responsible party
Component 3: Establishment and operation of demonstration farms		
<i>Weather risks:</i> adverse weather conditions (e.g., typhoons, monsoons), high waves, and changing sea temperature that may damage the seaweed growth.	<p>The project will use cultivars that are tolerant to temperature fluctuations, especially higher water temperature.</p> <p>Timing of crops will be informed by local knowledge and long-term forecasts to avoid the months when typhoons or monsoons occur.</p> <p>The project will employ a culture system and use structures that provide protection to the crop from strong winds and rough seas.</p> <p>Sites will be located in areas that are reasonably sheltered from strong winds and currents.</p> <p>In Zamboanga, the planned cage design will have a robust mooring system which can withstand stronger waves and currents.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<i>Entanglement of sea turtles and dugongs:</i> the seaweed farming contributes to the improvement of the natural habitat and may attract sea turtles, dugongs and other endangered sea species to the farms' area, who may then be caught in the farmers' nets.	<p>The field personnel will be instructed to regularly inspect the farm and free any dugong or sea turtle found entangled in the ropes.</p> <p>Awareness raising will be carried out among farmers to ensure that they are fully familiar with the relevant legislation and rules that protect marine life. This will include the dissemination of pictures of endangered species, visual materials that provide relevant information regarding the legal status of species, etc.</p> <p>Farms will be selected in locations where sea turtles are less likely to be present.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>

<p><i>Chemical risks</i> such as pollution from agricultural and domestic runoffs, oil spills, unsuitable water parameters in growing area renders the area unsuitable for a seaweed demonstration farm.</p>	<p>The sites selected are in areas that are not exposed to heavy runoffs from land-based activities and with sufficient chemical and dissolved oxygen content.</p> <p>Offshore and deeper waters are generally safe from industrial, agricultural, and domestic discharges, and well oxygenated.</p> <p>Consultations have also confirmed the sites are designated solely for seaweed farming and will be outside the navigation routes for fishing and transport vessels.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<p><i>Pollution:</i> while seaweed farming in itself does not involve pollution, some of the tying materials are made of plastics, which may let loose and get into the sea.</p>	<p>It will be ensured as part of bidding documents that proper materials are used for the ropes and pollution is avoided.</p> <p>Awareness raising will be carried out among farmers regarding the appropriate usage of ropes and how to avoid pollution.</p> <p>In Zamboanga, there will be installed nets to capture fragments of seaweed fronds that break off, which would otherwise be lost during the entire culture period.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<p><i>Biological risks</i> such as pests, grazers and predators, endo- and epiphytes, and diseases impact on the growth of the demonstration crops.</p>	<p>Sites are being selected that pose minimal risks from these factors; deeper offshore waters are generally less prone to epiphyte and endophyte infestation.</p> <p>Disease-resistant planting materials will be sourced and used for the demonstration crop (as mentioned above, providers of these quality materials have been engaged).</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p>

		Safeguards and Gender Specialist for monitoring
<i>Damage to the local fauna:</i> an inappropriate placement of the farms may damage the local fauna, such as coral reefs.	<p>The farms would not be placed on live corals</p> <p>A strict protocol will be developed and used on how farm sites will be selected</p> <p>Farm location will be carefully selected to avoid any damage to the local fauna</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
Construction works of solar dryer and guardhouse (Component 2) and fish feed production plant and/or bioplastic refinery (Component 3)		
<i>Noise disturbance:</i> Possible noise disturbance as a result of outdoor equipment usage and transportation vehicles driving around the construction site	<p><i>Pre-construction:</i> requirements to limit noise pollution should be included in the bidding documents, as a precondition for the contractor's selection</p> <p><i>During construction:</i></p> <ul style="list-style-type: none"> • Noise level control should be performed before the start up of construction activities; • The equipment should be fitted with appropriate noise devices that will reduce sound level; • The construction work should not be permitted during the nights, the operations on site shall be restricted to the hours 7am—7pm; • Vehicles that are excessively noisy shall not be operated until corrective measures have been taken; 	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>

<p>Air quality: dust as a result of construction works and possible emissions from transportation vehicles</p>	<p><i>Pre-construction:</i> requirements to limit emissions should be included in the bidding documents, as a precondition for the contractor’s selection</p> <p><i>During construction:</i></p> <ul style="list-style-type: none"> • Construction site, transportation routes and materials handling sites should be water-sprayed on dry and windy days; • Construction materials should be stored in appropriate and covered places to minimize dust; • Before allowing vehicles on site, fitness and emission test of the vehicle shall be performed; • Vehicle loads likely to emit dust need to be covered; • Workers should wear protective masks if dust appears; • Vehicle speed should be restricted within the construction site; • Regular maintenance of the vehicles and construction machinery should be performed in order to reduce any leakages of motor oils, emissions and dispersion of pollution; • Burning of debris from ground clearance shall be prohibited. 	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<p>Waste: generation of waste as a result of construction activities and during the operation of the plant / biorefinery</p>	<p><i>Pre-construction:</i> requirements for appropriate waste management should be included in the bidding documents, as a precondition for the contractor’s selection</p> <p><i>During construction:</i></p> <ul style="list-style-type: none"> • Identification of the different waste types at the project site (soil, asphalt, food, etc.); • Ensure that camps are located away from existing stream, river, or water sources, and that no discharge from camps is made into nearby water bodies; • Proper containers/waste bins should be provided at the project site; 	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>

	<ul style="list-style-type: none"> • Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited; • Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; • Collection, transportation and final disposal of all waste should be undertaken regularly (weekly) • Possible hazardous waste (motor oils, vehicle fuels, etc.) should be collected separately and authorized collector and transporter should be sub-contracted to transport and finally dispose; • All construction materials should be covered during the transportation to avoid waste dispersion; • The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.); • Burning of construction waste should be prohibited. <p><i>After construction:</i></p> <ul style="list-style-type: none"> • All waste shall be removed from the project site. <p><i>During operation:</i></p> <ul style="list-style-type: none"> • Trash bins should be installed in the facility • No waste should be thrown outside of the facility • Waste should be regularly collected (at least once a week) 	
<p>Water quality: contamination of local water sources may occur due to wastewater and sewage from construction sites</p>	<p><i>Pre-construction:</i> requirements for appropriate measures to prevent water contamination should be included in the bidding documents, as a precondition for the contractor's selection.</p> <p><i>During construction:</i></p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p>

	<ul style="list-style-type: none"> • An environment-friendly toilet (e.g., pit toilet) and washing facilities should be made available, built with locally available materials • Open defecation in the vicinity of project sites should be prohibited • Throwing waste in water sources should be prohibited • Possible hazardous waste (motor oils, vehicle fuels, lubricants) should be collected separately and authorized entity should be transporting and disposing the hazardous waste; <p><i>After construction:</i></p> <ul style="list-style-type: none"> • Pit toilets are dismantled and pits are covered • All waste is removed from the project site 	Safeguards and Gender Specialist for monitoring
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4.3 Adverse Social Impacts

While project activities aim to strengthen the sustainable livelihoods of local communities, it may also result in some adverse social impacts.

(a) Component 2: Site-specific development plans

Minor and site-specific negative social impacts may result from activities under *Component 2: Enabling Environment for Seaweed Aquaculture in PH* include the following.

Specific outputs include:

- Output 2.1.1. National support for marine spatial planning that integrates more sustainable seaweed farming.
- Output 2.1.2. National Seaweed Plan presented for adoption and National Seaweed Industry Roadmap adapted to local levels.

In Roxas, Palawan, Coast4C—a social enterprise to be contracted as a partner of BFAR—will facilitate a participatory marine spatial planning process in close coordination with the community, BFAR, the municipal government (LGU) and other relevant stakeholders. This process will follow an Environmental and Social Management System (ESMS) to ensure that it is fully participatory, follows principles of Free Prior Informed Consent, includes conflict assessment and identifies safeguarding plans. As part of the process there will be an assessment of the social infrastructure particularly at the community level, and actions to strengthen this infrastructure to ensure equitable access, meaningful participation and representation. The outcome will include a marine spatial plan that identifies zones with specific uses attached to them (including proper siting of sustainable seaweed farms and support facilities) that are socially and ecologically sustainable.

As part of this, Coast4C will facilitate a planning process for a site-specific marine spatial plan for Roxas that incorporates regenerative seaweed, and then implement the spatial management plans. The output of the project in the Philippines is the adaptation and translation into local regulations of the provisions of the Seaweed Industry Roadmap. The roadmap presents detailed strategic plans for the Philippine seaweeds industry to guide its progress towards the goal of regaining its position in the international seaweeds industry.

While these activities are planned to be executed in a participatory manner, there might still be a risk that they result in **social tensions** as some community members may greatly benefit from site-specific development maps that would make them eligible to take part in project activities, while others may be left behind. Vulnerable community members may thus be further marginalized.

Further, site-specific development plans may **affect and change the current access and usage rights of natural resources in project sites**. These activities may result for the short-term in land and sea use conflicts among different communities or among members of the same community. Conflicts and tensions may also be triggered due to the criteria for changing the current usage practices and rights. This is particularly worrisome given the existing competition between seaweed farmers and other fishermen and enterprises in project sites. Livelihood restoration measures should be undertaken to mitigate the adverse impacts of access and usage restrictions on project affected people and other relevant stakeholders. These are specified in the Process Framework in section 4.5 below.

(b) Component 3: Cooperatives & Demonstration Farms

Minor and site-specific negative social impacts may result from activities under *Component 3: Seaweed Value Chains (production & processing)*, activity 3.1.1.2 “Establish seaweed farmer Cooperative (incl. private sector) in for Zone D pilot farm” and Activity 3.1.1.5 “Assemble and commence operation.”

- **Selection criteria for participation in cooperatives**

As part of Output 3.1.1., it is planned to “recruit 100 cooperators (seaweed farmers), to operationalize the farm. This group will perform all the tasks from preparing the seedlings, setting them in the culture site, care and maintenance, and harvest and post harvest handling.”

Seaweed farmers who do not participate in the farm operationalization will be able to resume farming in their current locations and any form of economic displacement will be avoided. However, only those who are selected to work on the farm will be able to directly benefit from it, and social conflicts may arise as a result of eligibility and selection criteria. While all farmers on Green Island are eligible to apply, BFAR will propose selection criteria, based on input from seaweed farms and the cooperative. BFAR and the local cooperative will be responsible for selecting the seaweed farmers.

Potential social conflicts may arise from the fact that farmers may be required to pay a membership fee to take part in the cooperative, and vulnerable households may thus be unable to take part in the cooperative. Further, the number of cooperative members is likely to be restricted, thus limiting the number of potential beneficiary households.

- **Power asymmetries**

Project activities may result in power asymmetry in the community by which the members with more power tend to appropriate the major roles in and benefits from the project, while excluding more vulnerable community members.

- **Conflicts with other fishermen and local community**

Seaweed farming is currently in competition with other economic activities in the area (i.e. tourism, aquatic animal culture, fishing, navigation, energy production, etc.), and the planned demonstration farms may be disturbed by these other activities. For instance, local community members and farmers who are not part of the cooperatives may steal the farms’ crop. Competition may arise between seaweed farmers and fishermen who catch shrimps and snails. The passage of fishermen’s boats may also damage the farm and the crop.

- **Exclusion of women**

A serious concern is the potential marginalization of women, at least in the care and harvesting of the crop, because they would have more difficulty in accessing the offshore. While women are engaged in seaweed farming equally as men, they typically work on-shore, enabling them to take care of household chores and children. Deeper seaweed sites (which also pose greater risks) are typically farmed by men, and the off-shore sites would also be mostly accessed by men.

- **Child labor**

It is culturally habitual that children help their parents with farming activities on shore. Children are typically engaged in these activities in their spare time, after they finish school, and they do not come at the expense of their education. However, the risk of child labor that would obstruct education or be overly demanding cannot be fully discarded.

- **Job loss resulting from supply chains changes**

The seaweed supply chain currently includes collectors, who collect fresh seaweed from farmers and transfer it to processing facilities. The function of collectors would become obsolete as a result of project activities, as farmers would be directly connected to processing facilities, thus resulting in job loss for some of the local residents.

- **Cultural challenges**

Project activities will be implemented within a closely tied and homogenous community that has been engaged in seaweed farming for generations, and that relies on traditional farming methods. Culturally inappropriate project delivery may hamper relationships with and social acceptability by the community of the project.

- **Community health and safety, and particularly the COVID-19 pandemic**

Local community members may be exposed to a variety of health risks, including COVID-19 pandemic, as a result of interaction with project workers who would be engaged in the establishment of the demonstration farms, as well as construction works.

- **Occupational health and safety, and particularly the COVID-19 pandemic**

Workers that will be engaged in the establishment and operationalization of the demonstration farms will work off-shore and may be exposed to a variety of occupational hazards, as well as the COVID-19 pandemic. This includes workers who would be engaged in the establishment of the demonstration farms, as well as construction works and the subsequent operation of the plant / biorefinery.

A detailed overview of these impacts, potential mitigation measures, and responsible authorities is provided in Table 2 below.

4.4 Social Mitigation Measures

Table 4. Anticipated Social Impacts and Mitigation Measures

Potential impact	Proposed mitigation measures	Responsible party
<p>1. Changes in the current access and usage rights of natural resources and livelihoods in project sites</p>	<p>The Process Framework (section 4.5) details the mitigation measures</p>	<p>Project Manager for implementation Selected contractors for implementation Safeguards and Gender Specialist for monitoring</p>
<p>2. Social tensions resulting from site-specific development plans: some community members may greatly benefit from site-specific development maps that would make them eligible to take part in project activities, while others may be left behind. Vulnerable community members may thus be further marginalized.</p>	<p>The development of site-specific plans will be carried out in a participatory manner, through community consultations that will be organized by professional facilitators. Special efforts will be undertaken to proactively engaged the most vulnerable community members. Detailed community engagement activities are provided in the Stakeholders Engagement Plan.</p>	<p>Project Manager for implementation Selected contractors for implementation Safeguards and Gender Specialist for monitoring</p>

<p>3. Selection criteria for participation in cooperatives: only cooperative members can directly benefit from project activities. While membership will be open to all community members, the requirement to pay membership fees may exclude vulnerable households and the number of participating households is likely to be limited, restricting the number of beneficiaries.</p>	<p>Cooperative membership and management will be guided by the Philippine Cooperative Code of 2008 (RA9520). Vulnerable community members (female-headed households, disabled persons, widows/widowers, elderly, youth) will be prioritized for cooperative membership.</p> <p>Cooperative members that are unable to pay due to the economic conditions of their households will be supported by the project.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<p>4. Power asymmetries: Project activities may result in power asymmetry in the community by which the members with more power tend to appropriate the major roles in and benefits from the project, while excluding more vulnerable community members.</p>	<p>With organized groups that are managed professionally, the probability of this risk arising would be low. The project will engage and provide opportunities for meaningful participation of all community members.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<p>5. Conflicts with other fishermen and local community: the demonstration farm may be disturbed by other fishermen's boats, and crops may be stolen by local community members.</p>	<p>The Project has consulted with the Local Governments and the local communities, to obtain information and assurance – backed by local regulation -- that the site of the project does not obstruct navigation and does not prevent fishers from accessing fishing grounds.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p>

	<p>Regular patrols by farmers will be carried out to ensure the safety and security of the demonstration farm. Detailed guidelines for patrol operations will have to be developed in collaboration with the farmers and local communities.</p> <p>An area management plan that comprises good management practices and safety standards for the identified seaweed farm site will be developed to avoid negative impacts of the farm operation on the environment and thus to other users of the same marine landscape.</p> <p>Project authorities will closely monitor activities to ensure that causes for conflicts are minimized.</p>	<p>Safeguards and Gender Specialist for monitoring</p>
<p>6. Exclusion of women: project activities may result in the potential marginalization of women, at least in the care and harvesting of the crop, because they would have more difficulty in accessing the offshore, deeper seaweed sites (which also pose greater risks) than they have now to the nearshore, shallow and at most chest deep growing areas.</p>	<p>Measures to support women's engagement are provide in the Gender Action Plan, attached to the Project Document.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
<p>7. Child labor: it is culturally habitual that children help their parents with farming activities on shore.</p>	<p>The project team will carry out awareness raising among local farmers to explain the risks of child labor, and ensure that children are not engaged in any project-related works.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender</p>

		Specialist for monitoring
8. Collectors' job loss as a result of supply chain changes: The function of collectors would become obsolete as a result of project activities, as farmers would be directly connected to processing facilities, thus resulting in job loss for some of the local residents.	The project team will aim to integrate seaweed collectors into project activities and assist them to assume new functions as part of the seaweed supply chain (e.g., as part of the cooperatives, processing facilities, etc.).	Project Manager for implementation Selected contractors for implementation Safeguards and Gender Specialist for monitoring
9. Cultural challenges: Culturally inappropriate project delivery may hamper relationships with and social acceptability by the community of the project.	The project team will work with local community facilitators, opinion leaders and organized farmer and women groups, the project 1) will ensure appropriate community protocols are followed, does not debase local culture and traditions; and (2) be sensitive to local issues that have the potential to turn into problems, and plan and carry out ways to resolve them before they escalate into a social conflict.	Project Manager for implementation Selected contractors for implementation Safeguards and Gender Specialist for monitoring
10. Workers' health and safety as a result of occupational hazards during the establishment of the demonstration farms, as well as construction works and the	Project Managers and the implementing contractors shall provide a safe and healthy work environment, taking into account physical, chemical or biological risks that may be inherent in project activities—especially off-shore. They shall also take steps to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, as far as reasonably practicable, the causes of hazards. In a manner consistent with good international	Project Manager for implementation

<p>subsequent operation of the plant / biorefinery.</p>	<p>industry practice, the implementing contractor shall (i) identify potential hazards to workers, particularly those that may be life-threatening; (ii) provide preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; (iii) train workers as necessary; (iv) document and report occupational accidents, diseases, and incidents; and (v) undertake emergency prevention, preparedness, and response arrangements.</p> <ul style="list-style-type: none"> • Ensure regular health screening for the workers pre and during construction activities • Ensure that no underage workers, or children are engaged • Ensure decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers. • Ensure that workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices • Implement a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns <p>With regards to COVID-19, advisories on precautionary, exigency, and emergency measures by WHO and the government health authority will be heeded and complied with. These will be brought to the attention of all project personnel and anyone doing personal transaction with any project staff for the purpose of having a common understanding and as much as possible mutual agreement of the need for and benefits of compliance.</p>	<p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
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<p>11. Local community's health and safety as a result of occupational hazards during the establishment of the demonstration farms and the construction works at the hatchery facility.</p>	<p>Project and the implementing contractors shall evaluate the risks and impacts to the health and safety of the affected community during the implementation of project activities, and shall establish preventive measures to address them in a manner commensurate with the identified risks and impacts.</p> <p>Project activities shall prevent adverse impact on the quality and supply of water to local communities, ensure the safety of construction infrastructure and equipment, introduce protective mechanisms for the use of hazardous materials; and undertake all necessary emergency preparedness and response measures.</p> <p>Specific measures include the following:</p> <ul style="list-style-type: none"> • Ensure the safety of all project-related equipment, in line with the requirements above; • Minimize the use of hazardous materials, and ensure that community members are not exposed to them. In case that the use of such materials is necessary, provide sufficient notice to local community members and inform them on safety and protection measures; • Avoid dumping any waste or otherwise contaminating community sources of water supply and water quality; • Provide information to local communities on construction activities and plans. <p>With regards to COVID-19, advisories on precautionary, exigency, and emergency measures by WHO and the government health authority will be heeded and complied with. These will be brought to the attention of all project personnel and anyone doing personal transaction with any project staff for the purpose of having a common understanding and as much as possible mutual agreement of the need for and benefits of compliance.</p>	<p>Project Manager for implementation</p> <p>Selected contractors for implementation</p> <p>Safeguards and Gender Specialist for monitoring</p>
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4.5 Process Framework: Livelihood Restoration Measures

The development of site-specific management plans as part of the project may result in restrictions of access to livelihoods and natural resources for local communities. This may include local fishermen who may lose access to fishing areas; local SMEs that are engaged in tourism, aquatic animal culture, fishing, navigation, energy production, or other forms of business; or any other stakeholders whose livelihoods may be affected as a result of project activities.

Any change of land use, sea use or new zonation should be based on free and prior informed consultations of the affected communities and relevant authorities, which should be carried out prior to finalizing any usage changes.

If the planned spatial seaweed zonation negatively impacts sources of economic income or other types of livelihoods of affected communities, full and timely compensation shall be provided to all affected individuals, irrespective of their formal land title. All affected communities and households around the project-supported areas will be provided with opportunities to restore their livelihoods to at least pre-project levels.

Livelihoods-related support during project implementation will be provided to the households (HH) of all communities impacted by project-induced restrictions of access to natural and community resources within the targeted areas. This process will be organized in the following manner:

- *Screening*

The Safeguards and Gender Specialist at BFAR, with technical inputs from the Project Manager, will undertake a screening of all planned activities for likely access restrictions to local communities. This will include both communities that reside in project-affected areas, and individuals that may lack title.

- *Social assessment*

If the screening confirms and identifies HHs affected due to access restriction to natural resources, a social assessment (SA) process based on participatory consultations with affected peoples will be carried out. The SA will generate the necessary baseline information on demographics, social, cultural, and economic characteristics of affected communities, as well as the land and territories that they have traditionally owned or customarily used or occupied, and the natural resources on which they depend. The SA will assess potential impacts and the extent of restriction of access to resources along with suitable mitigation and enhancement measures including options for alternative access to similar resources.

- *Livelihood Restoration Plans*

Based on the findings of the screening and social assessment, if livelihoods will be negatively affected by project activities, an action plan that is known as a Livelihood Restoration Plan (LRP) will be prepared after holding further meaningful consultations with affected peoples and stakeholders which will provide tailored livelihood support and benefit sharing for affected persons, groups and communities.

The LRPs will be site-specific and include the following issues: (1) providing information regarding site-specific impacts; (2) setting out criteria and eligibility for livelihood assistance; (3) outlining the rights of persons who have been either customarily or legally/illegally using sea or land resources for subsistence to be respected; (4) describing and identifying available mitigation measures alternatives, taking into account the provisions of applicable local legislation, and the available measures for mitigation promoted via project activities and considering any additional sound alternatives, if proposed by the affected persons; (5) outlining specific procedures on how compensation can be obtained.

- *Mitigation measures as part of the LRPs*

Participatory and inclusive consultations should be carried out with affected communities, individuals, and stakeholders to agree on the allocation of alternative livelihoods. Eligibility criteria should be established according to guidelines provided in Section 5.6 Community Engagement of the ESMF/PF/IPPF.

Alternative livelihood schemes should be discussed, agreed upon and provided for affected persons/ groups. The livelihood options to be built on and be based upon the traditional skills, knowledge, practices and the culture/world view of the affected peoples/groups and persons.

Affected persons should be provided project-related livelihood support and other opportunities as part of the planned project activities. These may include activities implemented as part of the following outcome:

- Outcome 3.1: Improved technologies and testing for seaweed value chains in PH
- Outcome 3.2: Generating benefits from seaweed aquaculture for target communities

An accessible and efficient grievance redress mechanism should be established and made functional (see Section 5.9 of this ESMF/PF).

Any proposed measures should be closely coordinated with PAPs to ensure that they fully reflect their needs and priorities.

- *Compensation*

In case that compensation is awarded, it shall be calculated based on the replacement value of these livelihoods (economic market value plus any replacement costs) by the Safeguards and Gender Specialist at BFAR. In cases where compensation will consist of the allocation of alternative resources (e.g., alternative fishing areas), measures will include identification of these resources with the active involvement of the affected persons/ communities and assistance to access these resources. Detailed procedures on how compensation should be calculated and awarded should be provided in each site-specific LRP based on local conditions.

5. IMPLEMENTATION ARRANGEMENTS

5.1. Procedures for the Identification and Management of Environmental and Social Impacts

The following activities will not be financed by the Seaweed project:

1. Activities that involve procurement or use of any pesticides categorized IA, IB, or II by the World Health Organization;
2. Activities that require private land acquisition;
3. Activities that require physical displacement of persons from their homes or legal businesses, irrespective of ownership;
4. Activities that involve felling of trees in core zones and in critical watershed areas;
5. Activities that involve quarrying and mining;

In advance of the initiation of any project activity, the Safeguards and Gender Specialist at BFAR should fill in detailed information regarding the nature of the activity and its specific location in the *Safeguards Eligibility and Impacts Screening* form (Annex 1). Part 1 of this form comprises of basic information regarding the activity; Part 2 contains basic “pre-screening” questions. If the response to any of the questions in these two parts is “Yes”, the activity will be deemed ineligible for funding under the Project. The executing partners will thus be required to change the nature

or location of the proposed activity so that it complies with all safeguards requirements and all responses at the *Safeguards Eligibility and Impacts Screening* form are negative.

If the activity is deemed eligible according to Part 2, an environmental and social screening procedure will be carried out in accordance with Part 3 of *Safeguard Eligibility and Impacts Screening* format, which is based on the WWF's SIPP and applicable Philippine laws and regulations. The executing partners shall respond to the specific questions in Part 3 of the form, provide general conclusions regarding the main environmental and social impacts of each proposed activity, outline the required permits or clearances, and specify whether any additional assessments or safeguard documents (e.g., ESMP) should be prepared.

Issues that are considered as part of this environmental and social screening include the following:

- a. Need for government-land acquisition;
- b. Environmental impacts (e.g., dust, noise, smoke, ground vibration, pollution, flooding, etc.) and loss or damage to natural habitat;
- c. Social impacts: identification of vulnerable groups, impacts on community resources, impacts on livelihoods and socio-economic opportunities, restrictions of access to natural resources, land usage conflicts, etc.; and
- d. Health and safety issues (both for workers and for local communities).

The screening of each activity should be undertaken by the Safeguards and Gender Specialist at BFAR. If the screening process indicates that additional assessments or safeguards documents shall be prepared, these should be carried out by the executing partners prior to the start of activities.

If the screening reveals adverse environmental or social impacts that may arise from the planned activity, an ESMP should be prepared. The ESMP should be prepared by the Safeguards and Gender Specialist at BFAR, in collaboration with the Project Managers.

5.2. Guidelines for ESMP Development

In case that the Environmental and Social screening process identifies any adverse environmental or social impacts as a result of specific project activities, the Safeguards and Gender Specialist in collaboration with the Project Managers should develop a site- and activity-specific ESMP. The ESMP should be prepared before the initiation of the project activity and closely follow the guidance provided in this ESMF.

The ESMP should describe adverse environmental and social impacts that are expected to occur as a result of the specific project activity, outline concrete measures that should be undertaken to avoid or mitigate these impacts, and specify the implementation arrangements for administering these measures (including institutional structures, roles, communication, consultations, and reporting procedures).

The structure of the ESMP should be as follows:

- (i) **A concise introduction:** explaining the context and objectives of the ESMP, the connection of the proposed activity to the project, and the findings of the screening process.
- (ii) **Project description:** Objective and description of activities, nature and scope of the project (location with map, construction and/or operation processes, equipment to be used, site facilities and workers and their camps; bill of quantities if civil works are involved, activity schedule).

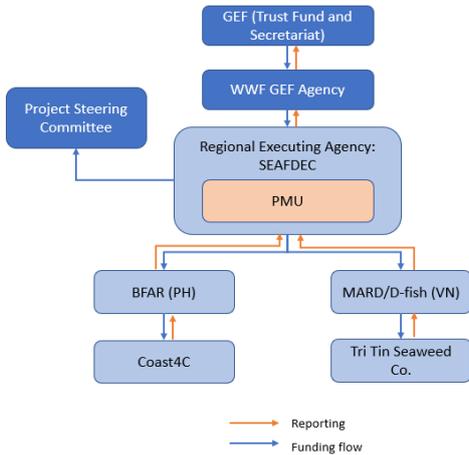
- (iii) **Baseline environmental and social data:** Key environmental information or measurements such as topography, land use and water uses, soil types, and water quality/pollution; and data on socioeconomic conditions of the local population. Photos showing the existing conditions of the project sites should also be included.
- (iv) **Expected impacts and mitigation measures:** Description of specific environmental and social impacts of the activity and corresponding mitigation measures.
- (v) **ESMP implementation arrangements:** Responsibilities for design, bidding and contracts where relevant, monitoring, reporting, recording and auditing.
- (vi) **Capacity Need and Budget:** Capacity needed for the implementation of the ESMP and cost estimates for implementation of the ESMP.
- (vii) **Consultation and Disclosure Mechanisms:** Timeline and format of disclosure.
- (viii) **Monitoring:** Environmental and social compliance monitoring with responsibilities.
- (ix) **Grievance Mechanism:** Provide information about the grievance mechanism, how PAPs can access it, and the grievance redress process.
- (x) **A site-specific community and stakeholder engagement plan:** In order to ensure that local communities and other relevant stakeholders are fully involved in the implementation of the ESMP, a stakeholder engagement plan should be included in the ESMP. Specific guidelines on community engagement are provided in Section 5.8 below.

5.3. Stakeholders' Role & Responsibilities in the ESMF Implementation

(a) General

The institutional arrangement (Figure 3) for project implementation includes WWF as the GEF Agency, the Southeast Asian Fisheries Development Center (SEAFDEC) as the Lead Regional Executing Agency (its Secretariat in Bangkok, Thailand will host the Project Management Unit), the Bureau of Fisheries and Aquatic Resources (BFAR) of the Philippines and Directorate of Fisheries (D-FISH) of Viet Nam as the project executing partners in the Philippines and Viet Nam, respectively, and a Project Steering Committee.

Figure 3. Project Institutional Arrangement



Blue lines depict the flow of funding, orange lines the reporting flow

Regional executing agency: SEAFDEC is the **Lead Executing Agency** for the project, which will be responsible for overseeing the implementation of project activities, including disbursing and administering funds to BFAR and BFAR. As part of its responsibilities, SEAFDEC will host a Project Management Unit (PMU) at headquarters (Bangkok, Thailand). The PMU will be responsible for the day-to-day management of the project, including project administration (including issuing sub-grants), project management, and monitoring and reporting. The PMU will be comprised of a Project Manager, a Finance and Administrative Officer, and a Technical Specialist. Specialist support services will be provided by an M&E Specialist and Communications Specialist, who are to be engaged with short-term contracts.

National executing agency: The national partner responsible for project implementation in the Philippines is BFAR, which is responsible for national-level project management and delivery of Component 2 and 3 (with contributions to Component 4). It will report to SEAFDEC and the PMU.

BFAR will recruit the following positions to the N-PMU: The N-PMU officers to be recruited are the Project Manager (PM), Project Development Officer (PDO), Safeguard and Gender Specialist (SGS), Administrative and Finance Officer (AFO), and Project Assistant (PA). They will report to the project coordinator (sitting in BFAR and covered through co-financing). To support implementation of the farms, the project will recruit (in Roxas) a Project Supervisor, Farm in Charge, and farm workers to undertake monitoring. In Zamboanga, a project coordinator and personnel will support oversight of the seaweed farm, and are covered through co-financing.

The BFAR N-PMU will subgrant to Coast4C for activities under Component 2 and Component 3.

Project Steering Committee (PSC): A Project Steering Committee (PSC) will be formed to serve as the oversight, advisory, and support body for the project. The PSC will consist of a representative from the Ministry of Agriculture and Rural Development (VN), Ministry of Natural Resources and Environment (VN), Department of Agriculture (PH), Department of Natural Resources and Environment (PH), Seaweed Industry Association of the Philippines, and SEAFDEC. A representative from WWF-PH and WWF-VN and a member of the WWF GEF Agency

team will hold an “observer status” in the Project Steering Committee. The PSC is responsible for approving annual work plans and budgets and reviewing and approving any changes to the project strategy alongside WWF GEF Agency. The PSC will be invited to a (virtual) annual reflection workshop (see M&E section) to discuss the theory of change and project progress.

WWF GEF Agency: WWF-US, through its WWF GEF Agency will: (i) provide consistent and regular project oversight to ensure the achievement of project objectives; (ii) liaise between the project and the GEF Secretariat; (iii) report on project progress to GEF Secretariat (annual Project Implementation Report); (iv) ensure that both GEF and WWF policy requirements and standards are applied and met (i.e. reporting obligations, technical, fiduciary, M&E); (v) approve annual workplan and budget; (vi) approve budget revisions, certify fund availability and transfer funds; (vii) organize the terminal evaluation and review project audits; (viii) certify project operational and financial completion, and (ix) provide no-objection to key terms of reference for project management unit.

(c) Safeguards Implementation

Specific arrangements and responsibilities related to the implementation of environmental and social safeguards requirements, as stated in this ESMF/PF/IPPF are as follows:

Lead executing agency (SEAFDEC):

- Overall responsibility for ensuring environmental safeguards are implemented.

Project Steering Committee:

- Overall oversight and monitoring of compliance with safeguards commitments.
- Support and specific recommendations on specific safeguard issues if needed.

WWF GEF Agency:

- Overall oversight and monitoring of compliance with safeguards commitments.
- Support and specific recommendations on specific safeguard issues if needed.

BFAR PMU:

- Ensuring that bidding documents and contracts include any relevant particular clauses or conditions relevant to environmental and social safeguards as set out in this ESMF. It is particularly important to include in bidding documents requirements related to occupational health and safety.
- Implementing and supervising ESMF and other safeguard plans;
- Provision of safeguard reports to the Lead Executing Agency;
- Reporting on safeguards implementation and compliance to the PSC and WWF GEF Agency.
- Overall responsibility for the operation of the grievance redress mechanism for activities in the Philippines.

Safeguards and Gender Specialist at the BFAR PMU:

- Overall responsibility for compliance with ESMF, PF, and IPPF Safeguards and other annexed documents of this report;
- Screening all project activities to identify social and environmental impacts;

- Reviewing annual work plans and budgets and analyze planned community/individual sub-projects and their environment/social impacts, in order to identify safeguards risks and initiate screenings of activities;
- Contributing to the preparation of site-specific ESMPs as needed;
- Ensuring the inclusion of safeguards requirements in all project bidding documents and contracts;
- Monitoring contractors' compliance with safeguards requirements;
- Conducting consultation meetings with local stakeholders as required, informing them, updating them on the latest project development activities;
- Carrying out regular site inspections;
- Reporting on safeguards implementation and compliance to the PMU Project Manager and to SEAFDEC;
- Disclosing of safeguards documents;
- Ensuring that consultations with local communities are carried out in an inclusive and participatory manner, and are well documented;
- Monitoring the state of safeguards implementation, and ensure that sub-projects are implemented in accordance to best practices and guidelines set out in the ESMF;
- Identifying and liaising with all the stakeholders involved in environment and social related issues in the Project;
- Operate the project's Grievance Redress Mechanism (GRM), including compiling and reporting on project-related grievances, monitoring grievance resolution, and closing the feedback loop with the complainant.
- Carrying out field visits as necessary to monitor the implementation of project activities and their compliance with safeguard requirements;
- Providing capacity support to the PMU and other project-related stakeholders on environmental and social issues;
- Providing execution assistance and advise the Project Director as necessary on safeguards related issues including adaptive management.
- Reporting on overall safeguards performance to the Project Steering Committee, WWF GEF Agency and other stakeholders as necessary.

5.4. Indigenous People Planning Framework (IPPF)

(a) IP Population of Project Sites

Palawan. Results of local stakeholder meetings showed that there are two classifications of residents in Green Island, Roxas – local residents (those born and raised in Green Island) and migrants (i.e., residents who came from other provinces or municipalities in Palawan). The Cuyunon is the largest ethnic group residing in Green Island (originally from the municipality of Cuyo in Palawan) and those who are also involved in seaweed farming. The Cuyunons are identified as one of the indigenous groups in Palawan, but unlike the other ethnic groups, they are well-integrated in communities and the whole province (i.e., have adopted the national system of governance). They have also become less and less distinguishable because they have long intermingled with residents from other municipalities in Palawan.

Zamboanga. The Zamboanga Peninsula consists of several ethnic and religious groups. These include 5 Muslim tribes that reside in the area: Iyakan, Kalibugan, Tausog, Bangingi and Sama Badjao; 1 Christian group: Subanen; and several ethnic groups—Siana (Bangingi + Sama Badjao), Kalibugan, and Subanen—that are considered IPs. Another ethnic group that resides in the area is Bisaya—these are long-term residents who are well-integrated into the community. There are no conflicts between tribes and IPs and migrants.

(b) Project Impacts on IP Groups

The presence of IPs in the project sites requires a social assessment to generate the necessary baseline information on demographics, social, cultural, and political characteristics of affected IP communities as well as the land and territories that they have traditionally owned or customarily used or occupied, and the natural resources on which they depend. A social assessment process was carried out as part of the preparation of safeguard documentation, drawing on desk review and field visits and consultations.

As IP groups constitute the main population group in the project area, they will both take advantage of the project's positive effects and its potentially adverse impacts. Based on stakeholder consultations, no group among the IP population seems to be disadvantaged vis-à-vis other IP groups.

The introduction of value-adding technologies, along with strengthening the seaweed value chains activities supported by the project, will have positive long-term impacts on the livelihoods of local IP communities and sustainable management of natural resources. In fact, IP communities will be able to take advantage of all project activities and opportunities.

There are expected to be no distinct adverse impacts as a result of project activities on one IP group or the other. The potential negative impacts and associated mitigation measures that are listed in Section 4 may thus apply to all IP groups in either Palawan or Zamboanga.

(c) Mitigation Planning

The following steps should be followed to screen and assess the project's potential social and environmental risks including project restriction of access to resources & livelihood, and to prepare the required management plans for avoiding, and where avoidance is not possible, reducing, mitigating and managing potential adverse impacts. The screening, social assessment, planning and implementation of the management plans (IPPs and LRPs) and their monitoring and evaluation will be the responsibilities of PMU using project budget allocated for project activities.

The mitigation planning steps are as follows:

1. Identification of the project site and of specific activities under component 2 (BFAR)
2. Screening of the activity using the Screening Tool (attached in Annex 1) and questions in Box 1 below (Safeguards and Gender Specialist).
3. Outcomes of the screening exercise would be:
 1. Scenario 1: If screening indicates Project restriction of access to resources and sources of livelihood and other impacts on IPs/marginalized groups and also confirms FPIC requirement (using the Box 1 template), conduct social assessment of the activity.
 2. Scenario 2: If Screening conforms no impacts on IPs, prepare an action plan to continue consultations with IPs and consider their feedback while designing and implementing the activities.
4. If FPIC required => Initiate process of preparation of IPP for the activity impacting IPs and determine how to achieve FPIC (See Box 2 for steps and process);

If FPIC is NOT required => Initiate process to determine if preparation of IPP is needed for the activity impacting IPs

If IPs' livelihoods are affected, initiate process for designing LRP (See Section 4.5) to restore livelihood and ensure access to common resources where access to common resources and sources of livelihood of local communities are restricted by execution of the specific activity.

5. Implement IPP; FPIC agreed action plan/IPP and LRPs.

(d) Steps for Formulating an IPP

WWF's Standard on Indigenous People requires that, regardless of whether Project affected IPs are affected adversely or positively, an IPP needs to be prepared with care and with the participation of affected communities.

The requirements include screening to confirm and identify affected IP groups in the project areas, social analysis to improve the understanding of the local context and affected communities; a process of free, prior, and informed consent with the affected IPs' communities in order to fully identify their views and to obtain their broad community support to the project; and development of project-specific measures to avoid adverse impacts and enhance culturally appropriate benefits.

Minimum requirements for projects working in areas with IPs are:

- Identification of IP groups through screening;
- Assessment of project impacts;
- Consultations with affected IP communities following FPIC principles and obtain their broad community support;
- Development of sites specific IPs plan (IPP) to avoid adverse impacts and provide culturally appropriate benefits; and
- In activities with no impacts, the requirements could be limited to consultations during implementation to keep local communities informed about project activities and documentation of all consultations held.

(e) Social Assessments

WWF's Standard on Indigenous People requires screening for IPs to assess risks and opportunities and to improve the understanding of the local context and affected communities.

As mentioned in Section 4, the following activities may result in adverse impacts on local communities, which primarily consist of IPs:

- Output 2.1.1. National support for marine spatial planning that integrates more sustainable seaweed farming.
- Output 2.1.2. National Seaweed Plan presented for adoption and National Seaweed Industry Roadmap adapted to local levels.

These activities may require site-specific IPs Plans (IPPs) to ensure equitable project benefits sharing with indigenous communities present at the project sites. For this purpose, screening and

a social assessment (SA) will be conducted in consultation with the IP communities to identify project-affected IPs, potential impacts, and severity of impact among the different IP groups affected by each activity and ensure that the proposed mitigation are appropriate.

The social assessment should gather the following information about IP individuals affected for each project activity: overview of the indigenous communities affected by the project, project activities as they relate to the local communities, how project implementation will address the particular circumstances of IPs, and how they will participate and be consulted during implementation.

(f) Development of IP Plans

Based on the results of the social assessments, an IP Plan shall be developed for each project site.

The contents of the IPP will depend on the specific project activities identified and the impacts these activities may have on IPs in the project area. As a minimum, the IPP should include the following information:

- ✓ Description of the IPs affected by the proposed activity;
- ✓ Summary of the proposed activity;
- ✓ Detailed description of IPs' participation and consultation process during implementation;
- ✓ Description of how the project will ensure culturally appropriate benefits and avoid or mitigate adverse impacts;
- ✓ Budget;
- ✓ Mechanism for complaints and conflict resolution; and
- ✓ Monitoring and evaluation system that includes monitoring of particular issues and measures concerning indigenous communities.

For project activities that may result in changes in IPs' access to livelihoods , the provisions of the Process Framework (Section 4.5) should be followed.

(g) Free, Prior and Informed Consent Framework

Free, Prior and Informed Consent (FPIC) is an approach for ensuring that the rights of IPs are guaranteed in any decision that may negatively affect their lands, territories or livelihoods. It ensures that they have the right to give or withhold their consent to these activities without fear of reprisal or coercion, in a timeframe suited to their own culture, and with the resources to make informed decisions.

FPIC is composed of four separate components:

- Free—Without coercion, intimidation, manipulation, threat or bribery.
- Prior—indicates that consent has been sought sufficiently in advance, before any project activities have been authorized or commenced, and that the time requirements of the indigenous community's consultation/consensus processes have been respected.
- Informed—Information is provided in a language and form that are easily understood by the community, covering the nature, scope, purpose, duration and locality of the project or activity as well as information about areas that will be affected; economic, social, cultural and environmental impacts, all involved actors, and the procedures that the project or activity may entail.
- Consent—The right of IPs to give or withhold their consent to any decision that will impact their lands, territories, resources, and livelihoods.

The processes of consultation and obtaining FPIC will be applied to all the aspects of the project (financed under WWF) that may negatively affect the rights of the IPs and ethnic minorities. FPIC will be required on any matters that may negatively affect the rights and interests, water areas, lands, resources, territories (whether titled or untitled to the people in question) and traditional livelihoods of the IPs concerned.

Thus, FPIC is integral to the execution of the proposed project, as the project areas includes diverse indigenous communities. WWF recognizes the strong cultural and spiritual ties many IP groups have to their lands and territories and committed to strengthen these ties in all WWF/GEF funded projects. FPIC gives IPs the freedom to determine their own development path promoting conservation sustainably. The following checklist (Box 1) may assist in helping to determine whether some Project activities may require an FPIC process

Box 1. Checklist for appraising whether an activity may require an FPIC Process

6. Will the activity involve the relocation/resettlement/removal of an indigenous population from their lands or water areas?
7. Will the activity involve the taking, confiscation, removal or damage of cultural, intellectual, religious and/or spiritual property from IPs?
8. Will the activity adopt or implement any legislative or administrative measures that will affect the rights, lands, territories and/or resources of IPs (e.g. in connection with the development, utilization or exploitation of mineral, water or other resources; land reform; legal reforms that may discriminate de jure or de facto against IPs, etc.)?
9. Will the activity involve natural resource extraction such as logging or mining or agricultural development on the lands/territories of IPs?
10. Will the activity involve any decisions that will affect the status of IPs' rights to their lands/territories/water resources, resources or livelihoods?
11. Will the activity involve the accessing of traditional knowledge, innovations and practices of indigenous and local communities?
12. Will the activity affect IPs' political, legal, economic, social, or cultural institutions and/or practices?
13. Will the activity involve making commercial use of natural and/or cultural resources on lands subject to traditional ownership and/or under customary use by IPs?
14. Will the activity involve decisions regarding benefit-sharing arrangements, when benefits are derived from the lands/territories/resources of IPs (e.g. natural resource management or extractive industries)?
15. Will the activity have an impact on the continuance of the relationship of the IPs with their land or their culture?
16. Will the interventions/activities restrict on access to NTFPs, timber, lands, etc. and other sources of livelihoods and community resources?

If the answer is 'Yes' to any of these questions in Box 1, it is likely that FPIC will be required of the potentially affected indigenous peoples for the specific activity that may result in the impacts identified in the questions. When an FPIC process is required, a stakeholder consultation process will need to be initiated to define and agree on an FPIC process. The IPs who may be affected by the Project will have a central role in defining the FPIC process. The consultation process should be launched as early as possible to ensure full, effective and meaningful participation of IPs.

All consultations with IPs should be carried out in good faith with the objective of achieving agreement or consent. Consultation and consent is about IPs' right to meaningfully and effectively participate in decision-making on matters that may affect them. Consultations and information disclosure are integral parts of FPIC process and any development support planning for IPs to ensure that the priorities, preferences, and needs of the indigenous groups are taken into

consideration adequately. With that objective in view, a strategy for consultation with IPs has been proposed so that all consultations are conducted in a manner to ensure full and effective participation. The approach of full and effective participation is primarily based upon transparent, good faith interactions, so that everyone in the community is empowered to join fully in the decision-making process. It includes providing information in a language and manner the community understands and, in a timeframe, compatible with the community's cultural norms.

The affected IPs will be actively engaged in all stages of the project cycle, including project preparation, and feedback of consultations with the IPs will be reflected in the project design, followed by disclosure. Their participation in project preparation and planning has informed project design and will continue to actively participate in the project execution. Once the IPP or LRP is prepared, it will be translated into local languages (if possible) and made available to them before implementation.

BFAR shall ensure adequate flow of funds for consultation and facilitation of planned activities within the IPP. Project brochures and pamphlet with infographic containing basic information such as sub-project location, impact estimates, and mitigation measures proposed, and implementation schedule will be prepared, translated into a language understandable to the IPs, and distributed among them.

A range of consultative methods will be adopted to carry out consultation including, but not limited to: focus group discussions (FGDs), public meetings, community discussions, and in-depth and key informant interviews; in addition to the censuses and socioeconomic surveys.

The key stakeholders to be consulted during screening, impact assessment; design and implementation of IPP, LRP and Process Framework (PF) include:

- All affected persons belonging to IPs/marginalized groups;
- Department of Environment and Natural Resources (DENR), Foreign-Assisted and Special Projects Service (FASPS), Department of Agriculture, Bureau of Fisheries and Aquatic Resources (BFAR), Bureau of Agriculture and Fisheries Standards, National Fisheries Research and Development Institute (NFRDI), Department of Trade and Industry;
- Provincial and municipal government representatives; City Environment and Natural Resources Office; Provincial Environment and Natural Resources Office; Palawan Council for Sustainable Development;
- The Northern Palawan Fishermen Cooperative, the Barangay Fisheries and Aquatic Resources Management Council;
- The private sector: Brabender GMBH & Co. KG; Coast4C; Shemberg; MCPI Corporation; and
- Academia representatives.

The project will ensure adequate representation of each group of stakeholders mentioned above while conducting consultations using various tools and approaches.

The views of IP communities are to be considered during execution of project activities, while respecting their current practices, beliefs and cultural preferences. The outcome of the consultations will be documented into the periodical reports and included in project's trimester progress reports. BFAR's Project Manager with support of the Safeguards and Gender Specialist will also ensure that affected persons are consulted and informed about the outcome of the decision-making process and will confirm how their views were incorporated.

Procedures to obtain FPIC

Project interventions and activities adversely affecting the IPs, therefore, need to follow a process of free, prior, and informed consent, with the affected IPs in order to fully identify their views and

to obtain their broad community support to the project; and development of project-specific measures to avoid adverse impacts and enhance culturally appropriate benefits.

Community involvement is a critical component of FPIC, as FPIC is a collective process, rather than an individual decision. In practice, FPIC is implemented through a participatory process involving all affected groups that is carried out prior to the finalization or implementation of any project activities, decisions or development plans. FPIC is established through good faith negotiation between the project and affected IPs. A facilitator should support this process, a person who will be available throughout the Project, who speaks the necessary languages and is aware of the project context.

Box 2 below outlines some generic steps to be followed for FPIC with the affected IPs in order to obtain their broad community support.

Box 2. Steps for Obtaining FPIC from Project Affected IPs

1. Identify communities, sub-groups within communities, and other stakeholders with potential interests/rights (both customary and legal) on the land or other natural resources that are proposed to be developed, managed, appropriated, utilized, or impacted by the proposed project activity.
2. Identify any rights (customary and legal) or claims of these communities to land or resources (e.g., water rights, water access points, or rights to hunt or extract forest products) that overlap or are adjacent to the site(s) or area(s) of the proposed project activity;
3. Identify whether the proposed project activity may diminish the rights, claims, or interests identified in Step 2 above and also identify natural resources that may be impacted by this project and the legal and customary laws that govern these resources;
4. Provide the details of proposed project activities to be implemented along with their likely impacts on IPs either positively or negatively, as well as the corresponding proposed mitigation measures in a language or means of communication understandable by the affected IPs;
5. All project information provided to IPs should be in a form appropriate to local needs. Local languages should usually be used and efforts should be made to include all community members, including women and members of different generations and social groups (e.g. clans and socioeconomic background);
6. Selection of facilitator, who will be available throughout the Project, who speaks the necessary languages and is aware of the project context, and is culturally and gender-sensitive. The facilitator should be trustworthy to affected IPs. It will also be helpful to involve any actors which are likely to be involved in implementing the FPIC process, such as local or national authorities
7. If the IP communities are organized in community associations or umbrella organizations, these should usually be consulted.
8. Provide sufficient time for IPs' decision-making processes (it means allocate sufficient time for internal decision-making processes to reach conclusions that are considered legitimate by the majority of the concerned participants)
9. Support a process to create a mutually respected decision-making structure in cases where two or more communities claim rights over a project site.
10. If FPIC is not familiar to the community, engage in a dialogue to identify existing decision-making structures that support the principles underlying FPIC.
11. Identify the community-selected representative(s) or "focal people" for decision making purpose-- identification of the decisionmakers and parties to the negotiation.
12. Agree on the decisionmakers or signatory parties and/or customary binding practice that will be used to conclude the agreement, introducing the chosen representatives, their

role in the community, how they were chosen, their responsibility and role as representatives;

13. Reach consent, document IPs' needs that are to be included into the project, and agree on a feedback and a project grievance redress mechanism. Agreements reached must be mutual and recognized by all parties, taking into consideration customary modes of decision-making and consensus-seeking. These may include votes, a show of hands, the signing of a document witnessed by a third party, performing a ritual ceremony that makes the agreement binding, and so forth;
14. When seeking "broad community consent/support" for the project, it should be ensured that all relevant social groups of the community have been adequately consulted. When this is the case and the "broad" majority is overall positive about the project, it would be appropriate to conclude that broad community support/consent has been achieved. Consensus building approaches are often the norm, but "broad community consent/support" does not mean that everyone has to agree to a given project;
15. When the community agrees on the project, document the agreement process and outcomes including benefits, compensation, or mitigation to the community, commensurate with the loss of use of land or resources in forms and languages accessible and made publicly available to all members of the community, providing for stakeholder review and authentication;
16. The agreements or special design features providing the basis for broad community support should be described in the IPs Plan; any disagreements should also be documented; and
17. Agree on jointly defined modes of monitoring and verifying agreements as well as their related procedures: how these tasks will be carried out during project implementation, and the commission of independent periodic reviews (if considered) at intervals satisfactory to all interest groups.

(h) Disclosure

The final IPPF and PF and any site specific IPPs and LRPs will be disclosed on the website of the executing agency and the website of WWF and made available to affected IPs; information dissemination and consultation will continue throughout project execution. Summaries of IPPs and mitigation measures proposed in IPPs will be translated into Tagalog and paper copies will be made available to the affected persons in the office of relevant local authorities.

(i) Institutional and monitoring arrangements

The Safeguards and Gender Specialist will be responsible for the development and implementation of the IPPF and any IPP, with support from BFAR's Project Manager on logistical matters (e.g., conducting field visits, reaching out to IP communities, convening meetings, etc.).

The Safeguards and Gender Specialist will periodically report on the implementation of the IPPF/IPP to BFAR's Project Manager, SEAFDEC, PSC, and WWF US. Monitoring and reporting will be undertaken together with reporting on the other ESMF commitments (as indicated in Section 5.5).

5.5. Monitoring

The compliance of Project activities with the ESMF will be thoroughly monitored by various entities at different stages of preparation and implementation.

- **Monitoring at the project level**

The overall responsibility for implementing the ESMF and for monitoring compliance with the Project's environmental safeguard activities lies with the BFAR PMU. The Safeguards and Gender Specialist at BFAR shall oversee the implementation of all field activities and ensure their compliance with the ESMF. The Safeguards and Gender Specialist shall also monitor the project's grievance redress mechanism (GRM) and assess its effectiveness (i.e., to what extent grievances are resolved in an expeditious and satisfactory manner).

The Safeguards and Gender Specialist will also be responsible for reporting on overall safeguards compliance to the Project Manager at BFAR, the Project Manager at SEAFDEC, the Project Steering Committee, and WWF GEF Agency.

- **Monitoring at the field activity level**

The Safeguards and Gender Specialist at BFAR shall closely monitor all field activities, and ensure that they fully comply with the ESMF and with the terms and conditions included in the environment clearances issued by the Philippine national authorities. The Safeguards and Gender Specialist is also fully responsible for the compliance of all external contractors and service providers employed as part of the project with the safeguards requirements outlined in the ESMF and ESMP (as applicable). The Safeguards and Gender Specialist at BFAR will provide the Project Manager at SEAFDEC with monthly monitoring reports. **Disbursement of project funds will be contingent upon their full compliance with the safeguards requirements.**

- **Monitoring at the agency level**

WWF as the project's implementing agency and SEAFDEC as the executing agency are responsible to oversee compliance with the ESMF.

In order to facilitate compliance monitoring, BFAR will include information on the status of ESMF implementation in the six-monthly Project Progress Reports (PPRs) and the annual Project Implementation Review (PIR) reports.

5.5. Community Engagement

Community consultation has been an integral part of these assessments as well as the proposed project design and will be carried out as a continuous process through the project cycle.

(a) Community engagement during Project Preparation

The project design process involved in-depth engagement with key stakeholders in the project. Full details regarding workshops, stakeholder meetings, field-level consultations (including meetings with a range of local stakeholders, community groups, site visits, field inspections, and focus group discussions), presentations and interactions are provided in the Project's Stakeholder Engagement Plan (SEP).

The close engagement of stakeholders in the project preparation process as presented in the SEP ensured a high level of ownership across the various project partners and beneficiaries, and

therefore an important basis for the multi-sectoral and multi-stakeholder approach foreseen for the project.

(b) Community engagement during ESMF/PF Preparation

The ESMF/PF was prepared based on the following information: desk review of project materials and relevant national legislation and policies, as well as a field visits to project sites in Roxas, Palawan and Zamboanga City in September-December 2021. The field visit in Palawan included meetings and consultations with seaweed farmers, traders, officers of the Northern Palawan Fishers Cooperative (NPFC), and representatives from the provincial, city, and municipal government (full participation list is included in Philippines Stakeholder Engagement Plan (SEP)). The field visit in Zamboanga City included three BFAR Region IX officers, two local government unit officials from the Office of the City Agriculturist, and one farmer, the president of the Aplaya Buenavista Seaweed Farmers Association.

The objectives of consultations were mainly to:

- Inform affected communities about project objectives and activities;
- Discuss and assess possible adverse impacts and collect their views to avoid or mitigate them;
- Discuss and assess potential project benefits and how these can be enhanced; and
- Develop a strategy for PAP's participation during project design and implementation and to ascertain communities' broad support for the project.

Local communities and stakeholders were informed in advance about the consultation meeting, venue and the agendas through local authorities. All consultations meetings were accessible to all stakeholders and were in an informal setting. All stakeholders were encouraged to speak up and provide feedback about the proposed project activities. The consultation meeting started with the consent of the participants present. At the beginning of each meeting, overall objectives and expectations from the meeting were shared and participants introduced themselves. After the introduction session, brief information about the key objectives, scope of the project, its benefit and possible impacts was shared with the participants. Consultations were mainly focused on identifying likely adverse impacts of the project and options to avoid or mitigate them and to assess potential project benefits and how these can be enhanced in favor of local communities. All participants, both male and female, were encouraged express their views, concerns and suggestions regarding the proposed project. All the concerns, comments and feedback provided by the participants of each consultation meetings have been noted and reflected in this document as far as practicable.

Overall, project affected communities were highly supportive of the planned project activities, and expressed willingness to take part in these activities as part of the planned demonstration farms and value chain initiatives and in any other ways envisioned by the project. No concerns were expressed.

(c) Community engagement during project implementation

The communities residing in and around the project area are the ultimate recipient of project impacts and benefits, and therefore a key stakeholder. Therefore, the interventions need community support or participation in order to succeed. Thus, a participatory process and community consultations approach engaging government authorities, right holders and stakeholders at different levels will provide substantial information on the patterns of resource use of local affected communities/groups and persons, which will provide accurate information

about which groups/individuals need to be targeted and will therefore be affected most by restrictions on resources.

The project design process involved a process of clarifying and confirming the various roles and responsibilities of these stakeholders, the details of which are presented in the SEP (Annex *** in the Project Document). The SEP provides detailed guidelines on the engagement of various stakeholders, and also outlines a range of specific stakeholder organizations and actors that should be engaged. These include government agencies, local government authorities, private sector partners and business organizations, civil society organizations, and development partners (see Annex I of the SEP).

Three SEPs were prepared for this project—one for Vietnam, one for the Philippines, and another one for SEAFDEC. The primary responsibility for the implementation of the regional SEP will be with the SEAFDEC PMU, under the supervision of the PSC. BFAR will be responsible for the implementation of the national SEP, and will report to SEAFDEC. The primary responsibility for the implementation of the SEP will be with the SEAFDEC PMU, under the supervision of the PSC. Other project partners will be involved in various aspects of its implementation. Component 4 of the project will furthermore include participation in the IW:LEARN community, which will facilitate the creation and dissemination of information, lessons learnt and other materials.

The purpose of this section is to provide more detailed guidelines on the **engagement of project-affected individuals** in project activities, and in particular ensuring that livelihood restoration activities are properly executed.

The key institutional mechanisms for stakeholder engagement during project implementation are:

1. The Project Steering Committee
2. SEAFDEC as the Lead Executing Agency
3. BFAR as the national executing agency in Philippines, and D-fish as the national executing agency in Vietnam.

Under the coordination of the Safeguards and Gender Specialist at BFAR, specific arrangements related to the engagement of community members in project activities implementation and monitoring include the following.

- When should local communities be engaged?

Project affected people should be engaged **in advance of the implementation of each activity that may affect their interests, entitlements, and livelihoods**. Such activities should be identified by the Safeguards and Gender Specialist by going through the environmental and social safeguards screening process. If the screening reveals any adverse environmental or social impacts that may result from a planned activity, a community consultation should be organized in advance of the implementation of this activity, in order to mitigate its adverse impacts. Activities that result in restriction or loss of livelihood should trigger the development of site-specific livelihood restoration plans (as indicated in section 4.5 above). This will primarily include the site-specific development plans that will change the access and usage rights of sea and land resources by various individuals in project sites.

- Who should be engaged? Criteria for Eligibility of Project Affected Persons & Livelihood Restoration

Community members that should be engaged in consultations are those persons who, as a direct consequence of an activity would, without their informed consent or power of choice, either: (a)

lose their assets or access to assets or access to community and natural resources, or (b) lose a source of income or means of livelihood, whether or not they physically relocate to another place.

For activities that may result in restrictions or loss of access to livelihood resources, a participatory process will be followed to identify people, groups, or households, who should participate in the livelihood restoration process. All of the proposed livelihood restoration activities, interventions and initiatives within the LRP will be developed in consultation with the affected people. Implementation of each of these will also be carried out with full transparency and disclosure. Further details on the development of LRPs are provided in section 4.5 of this ESMF/PF.

Vulnerable groups

Vulnerable and marginalized groups should be actively engaged in project-related consultations and in the development of LRPs, since their role in forest and habitat management, livelihood interventions, project supported incentive and benefit sharing make them vital to the process. Vulnerable groups primarily include: women (especially widows and female-headed households), youth, disabled individuals, elderly (especially single-headed households).

- How should communities be engaged?

For the community engagement process to be as inclusive as possible, it is important to use as many avenues as possible to inform all stakeholders through advertisements, national radio and television etc. Special measures should be undertaken to ensure the inclusive engagement of all community members, and in particular vulnerable groups:

- *Easy notification:* communities will be notified and engaged through a variety of communication channels, in light of the quality of phone networks, weather and road accessibility to ensure adequate outreach to all groups (including people with disability and who cannot read).

Communication channels will include publication of information on planned meetings on local notice boards, notification of meetings through phone, letters, public address using speakers and microphones, and dispatch of leaflets/letters using motorcycles. Background information for meetings will be provided in advance to provincial and commune/ward level authorities.

To proactively reach out to specific target groups in the community (e.g., women, youth, elderly, etc.), the project will identify and engage local opinion leaders in those groups, and solicit their help to spread the message to other members.

- *Convenient location and timing:* Local community leaders should help in deciding where to place other information so that target groups will be likely to encounter it. They should also advise on the most suitable timing to convene consultation meetings to ensure that as many community members as possible may attend. This may require enhanced awareness to the availability of both women to attend (and set aside household chores), availability of fishermen who work off-shore, etc. The project will ensure that there is enough time, flexibility (e.g. due to disability, some may come from far) to ensure there is participation of all intended members of communities. This will avoid the risks of women and other relevant groups being excluded to take part due to being excluded from public gatherings due to their disability, gender orientation, economic activity, religion or ethnicity.
- *Simple communication:* Communication should be simplified and adapted to ensure that it fits the local context and helps build confidence (especially in the context of engaging women and nomadic groups). In all meetings, Filipino will be used.

- *Appropriate engagement format:* A combination of methods will be used when consulting and engaging local communities to enhance inclusiveness and active participation of all community groups. This will primarily include open community meetings, one-on-one conversations, focus group discussions using various criteria depending on situation (per economic activity, age group, gender, nomadic groups, etc.); and key informants discussions with emphasis on specific topics.
- *Local facilitation:* It is expected that BFAR will convene most of the meetings, and the discussions should be led by community members and officials from the provincial and commune/ward level government. These meetings should be held in collaboration with local community-based organizations, private sector representatives, and community members. The collaboration is important to lend credibility to the intervention as it may be identified as a community effort rather than an imposition by the government or any particular organization.
- *Documentation:* A register will be kept, updated regularly and feedback systems developed to ensure that women and other relevant groups (minorities, elderly, young other marginalized groups) are fully included in consultations, benefit from the project and informed on the progress on the project.

Closing the feedback loop

Once the community engagement process has started, it has to be maintained. Stakeholders in the community must be kept informed, and support has to be provided when needed, conflicts have to be resolved, methods have to be devised to keep the process reasonably efficient, goals and deadlines have to be set. It is expected that this logical proceeding of activities and the consultation and involvement of local communities in the project, will minimize any potential conflicts and grievances.

The Safeguards and Gender Specialist will ensure that affected persons are informed about the outcome of the decision-making process and will confirm how their views were incorporated into the design of project activities. Specific procedures on how compensation for access restrictions can be obtained should be provided in LRPs.

5.6. Communications and Disclosure

All affected communities and relevant stakeholders shall be informed about the ESMF requirements and commitments. The executive summary of the ESMF will be translated into Filipino and made available along with the ESMF and SEP on the websites of SEAFDEC and BFAR, as well as the websites of the WWF GEF Agency. Hard copies of the ESMF will be placed in appropriate public locations and at SEAFDEC and BFAR. Project Managers and the Safeguards and Gender Specialist at BFAR will be responsible to raise community awareness regarding the requirements of the ESMF, and will also ensure that all external contractors and service providers are fully familiar and comply with the ESMF and other safeguards documents.

During the implementation of the project, activity-specific ESMPs shall be prepared in consultation with affected communities and disclosed to all stakeholders prior to project concept finalization. All draft ESMPs shall be reviewed and approved by BFAR and SEAFDEC in consultation with the PSC and WWF GEF Agency in advance of their public disclosure. The BFAR PMU must also disclose to all affected parties any action plans prepared during project implementation, including gender mainstreaming.

Disclosure should be carried out in a manner that is meaningful and understandable to the affected people. For this purpose, the executive summary of ESMPs or the terms and conditions in environment clearances should be disclosed on SEAFDEC, BFAR and WWF websites.

The disclosure requirements are summarized in Table 4 below.

Table 4: Disclosure framework for ESMF related documents

Documents to be disclosed	Frequency	Where
Environment and Social Management Framework	Once in the entire project cycle. Must remain on the website and other public locations throughout the project period.	On the website of SEAFDEC and WWF. Copies should be available at BFAR, and in local municipal offices in project areas
Environmental and Social Management Plan/s	Once in the entire project cycle for every activity that requires ESMP. Must remain on the website and other disclosure locations throughout the project period.	On the website of SEAFDEC and WWF. Copies should be available at BFAR, and in local municipal offices in project areas
Safeguards Monthly Progress Report	Monthly	Copies should be available at BFAR, and in local municipal offices in project areas
Minutes of Formal Public Consultation Meetings	Within two weeks of meeting	On the website of SEAFDEC and WWF. Copies should be available at BFAR and in local municipal offices in project areas
Grievance redress process	Quarterly, throughout the project cycle	On the website of BFAR. Copies should be available at the BFAR Office and SEAFDEC office

5.7. Capacity Building and technical assistance

Capacity building activities will be provided as needed by WWF US to SEAFDEC and BFAR to acknowledge the latter with ESMF/PF/IPPF implementation requirements and good practices. These will focus in particular on issues related to the preparation of LRPs and IPPs, organization of consultations, operationalization of the GRM, and monitoring of ESMF implementation. The budget for capacity building shall be included in Component 4.

5.8. Grievance Mechanisms

The project will have a direct and tangible effect on local communities and individuals residing within or in the vicinity of project sites. There is thus a need for an efficient and effective Grievance Redress Mechanism (GRM) that collects and responds to stakeholders' inquiries, suggestions, concerns, and complaints. The GRM shall constitute an integral part of the project and assist BFAR in identifying and addressing the needs of local communities. The GRM should be constituted as a permanent and accessible institutional arrangement for addressing any grievances arising from the implementation of project activities.

It is in the interest of the project to ensure that all grievances or conflicts that are related to project activities are appropriately resolved at the lowest appropriate level, without escalation to higher authorities or the initiation of court procedures. Project affected communities will therefore be

encouraged to approach the project's GRM if they feel it is the appropriate level to safely address their grievance.

The GRM will operate based on the following principles:

1. **Fairness:** Grievances are assessed impartially, and handled transparently.
2. **Objectiveness and independence:** The GRM operates independently of all interested parties in order to guarantee fair, objective, and impartial treatment to each case.
3. **Simplicity and accessibility:** Procedures to file grievances and seek action are simple enough that project beneficiaries can easily understand them and in a language that is accessible to everyone within a given community, especially those who are most vulnerable.
4. **Responsiveness and efficiency:** The GRM is designed to be responsive to the needs of all complainants. Accordingly, officials handling grievances must be trained to take effective action upon, and respond quickly to, grievances and suggestions.
5. **Speed and proportionality:** All grievances, simple or complex, are addressed and resolved as quickly as possible. The action taken on the grievance or suggestion is swift, decisive, and constructive.
6. **Participation and inclusiveness:** A wide range of affected people—communities and vulnerable groups—are encouraged to bring grievances and comments to the attention of the project implementers. Special attention is given to ensure that poor people and marginalized groups, including those with special needs, are able to access the GRM.
7. **Accountability and closing the feedback loop:** All grievances are recorded and monitored, and no grievance remains unresolved. Complainants are always notified and get explanations regarding the results of their complaint. An appeal option shall always be available.

Complaints may include, but not be limited to, the following issues:

- (i) Allegations of fraud, malpractices or corruption by staff or other stakeholders as part of any project or activity financed or implemented by the project;
- (ii) Environmental and/or social damages/harms caused by projects financed or implemented (including those in progress) by the project;
- (iii) Complaints and grievances by permanent or temporary workers engaged in project activities.

Complaints could relate to pollution prevention and resource efficiency; negative impacts on public health, environment or culture; destruction of natural habitats; disproportionate impact on marginalized and vulnerable groups; discrimination or harassment; violation of applicable laws and regulations; destruction of physical and cultural heritage; or any other issues which adversely impact communities or individuals in project areas. The grievance redress mechanism will be implemented in a culturally sensitive manner and facilitate access to vulnerable populations.

The GRM will be administered by the BFAR Grievance Committee and reported to the SEAFDEC PMU. The Committee will comprise the following individuals, as stipulated in the BFAR Grievance Machinery: (1) Chief, Human Resource Management Section will serve as the Chairperson of the Grievance Committee; (2) Chief of the Legal Division will serve as the Vice-Chairman; (3) division chiefs; and (4) BFAR.

The Safeguards and Gender Specialist at BFAR will closely collaborate with the Grievance Committee to ensure that all inquiries related to the project are duly registered and addressed. The GRM will operate according to the following guidelines.

- (1) **Submitting complaints:** Project affected people, workers, or interested stakeholders can submit grievances, complaints, questions, or suggestions to the BFAR Grievance

Commented [DE1]: Who is the fourth member of the Grievance Committee? Jennifer did not capture this, perhaps the team in PH can provide correct information.

Committee through a variety of communication channels, including hotline (8888), phone, regular mail, email, text messaging/SMS, or in-person, by visiting the BFAR offices. It should be possible to submit complaints to both WWF and BFAR in order to ensure that project affected people have sufficient opportunities to lodge their complaints to impartial and neutral authorities of their choice.

(2) Processing complaints: All grievances submitted to the BFAR Grievance Committee shall be registered and considered. A tracking registration number should be provided to all complainants. To facilitate investigation, complaints will be categorized into four types: (a) comments, suggestions, or queries; (b) complaints relating to nonperformance of project obligations and safeguards-related complaints; (c) complaints referring to violations of law and/or corruption while implementing project activities; (d) complaints against authorities, officials or community members involved in project management; and (e) any complaints/issues not falling in the above categories.

(3) Acknowledging the receipt of complaints: Once a grievance is submitted, the BFAR Grievance Committee shall acknowledge its receipt, brief the complainant on the grievance resolution process, provide the contact details of the person in charge of handling the grievance, and provide a registration number that would enable the complainant to track the status of the complaint.

(4) Investigating complaints:

- a. For complaints submitted to BFAR, the Grievance Committee will assign the complaint for the investigation of relevant authorities, while notifying the project's Safeguards and Gender Specialist.

A written response to all grievances shall be provided to the complainant within 15 working days. Grievances that cannot be resolved by grievance receiving authorities/office at their level should be referred to a higher level for verification and further investigation.

(5) Appeal: In the event that the parties are unsatisfied with the response provided by the GRM, the following appeal process is suggested: Appeals on complaints that were first lodged to the BFAR Grievance Committee can be submitted to the Civil Service Commission Regional Office. In both cases, appeals should be submitted within 15 days from the date of the original decision. In the event that the parties are unsatisfied with the appeal decision, the parties can submit their grievances to the Court of Law for further adjudication.

(6) Monitoring and evaluation: the Safeguards and Gender Specialist at BFAR shall submit a report with full information on the grievances submitted to BFAR to the Project Manager at SEAFDEC. The report shall contain a description of the grievances and their investigation status. Summarized GRM reports shall constitute part of the regular project progress reporting, and shall be submitted by SEAFDEC to the PSC and WWF GEF Agency.

Information about channels available for grievance redress shall be widely communicated in all project affected communities and to all relevant stakeholders. The contact details (name, phone number, mail and email address, etc.) of BFAR and WWF GRMs shall be disseminated as part of all public hearings and consultations, in the local media, in all public areas in affected communities, and on large billboards in the vicinity of project activity sites.

The GRM seeks complement, rather than substitute, the judicial system and other dispute resolution mechanisms. All complainants may therefore file their grievance in local courts or approach mediators or arbitrators, in accordance with the legislation of the Philippines. In addition to the project-specific GRM, a complainant can submit a grievance to the WWF GEF Agency. A grievance can also be filed with the Project Complaints Officer (PCO), a WWF staff

member fully independent from the Project Team, who is responsible for the WWF Accountability and Grievance Mechanism and who can be reached at:

Email: SafeguardsComplaint@wwfus.org

Mailing address:

Project Complaints Officer
Safeguards Complaints,
World Wildlife Fund
1250 24th Street NW
Washington, DC 20037

Stakeholders may also submit a complaint online through an independent third-party platform at <https://report.whistleb.com/en/wwf>.

5.9. Budget

The EMSF implementation costs, including all costs related to compensation to project affected people, will be fully covered from the project budget. It will be the responsibility of the Safeguards and Gender Specialist at BFAR to ensure that sufficient budget is available for all activity-specific mitigation measures that may be required in compliance with the EMSF.

A full time Safeguards and Gender Specialist will be employed by BFAR and 100% of their time will be dedicated to ensuring the ESMF implementation. A permanent M&E Officer will be employed by SEAFDEC and will monitor the ESMF implementation.

Budget for capacity building on ESMF/PF/IPPF implementation, travel costs and workshops and meetings for safeguards monitoring (including travel, workshops and meetings) will be included in the overall monitoring and evaluation budget under Component 4 of the project.

Annex 1. Safeguard Eligibility and Impacts Screening

This screening tool needs to be filled out for each activity or category of activities included in the annual work plan and budget. In addition, the screening tool needs to be completed whenever management measures or management plans are developed and/or when project intervention areas are determined.

The tool will be filled out by Safeguards and Gender Specialist at BFAR and reviewed by the Project Manager at SEAFDEC. The decision on whether a Site-Specific Environmental and Social Management Plan (ESMP) or Livelihood Restoration Plan (LRP) are required shall be made by the Safeguards and Gender Specialist in consultation with the WWF GEF Agency Safeguards Specialists and SEAFDEC, based on the information provided in this screening form, as well as interviews with the BFAR PMU staff, local communities, and any other relevant stakeholders.

Part 1: Basic Information

1	Activity Name	
	Description of Activity ("sub-activities")	
2	Type of Activity:	New activity <input type="checkbox"/> Continuation of activity <input type="checkbox"/>
3	Activity location:	
4	Total size of site area	
5	Activity implementation dates	
6	Total cost	

(Move to Part 2 after filling in all information in the table above)

Part 2: Eligibility Screening

No.	Screening Questions: <i>Would the project activity</i>	Yes	No	Comments/ Explanation
1	Lead to land management practices that cause degradation (biological or physical) of the soil and water?			
2	Negatively affect areas of critical natural habitats or breeding ground of known rare/endangered species?			
3	Significantly increase GHG emissions?			

No.	Screening Questions: <i>Would the project activity</i>	Yes	No	Comments/ Explanation
4	Use genetically modified organisms or modern biotechnologies or their products?			
5	Introduce crops and varieties that previously did not grow in the implementation areas?			
6	Result in the loss of biodiversity, alteration of the functioning of ecosystems, and introduction of new invasive alien species?			
7	Procure or supply pesticides or result in an increase in the use of pesticides?			
8	Lead to physical displacement and voluntary or involuntary relocation of people, including non-titled and migrant people?			
9	Contribute to exacerbating any inequality or gender gap that may exist?			
10	Involve child labour?			
11	Adversely affect IPs' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (physical and non-physical or intangible) inside and/or outside the project area?			
12	Negatively impact areas with cultural, historical or transcendent values for individuals and communities?			
Please provide any further information that can be relevant:				

If all answers are “No”, project activity is eligible and move to Part 3

If at least one question answered as “yes”, the project activity is ineligible and the proponent can reselect the site of project activity and do screening again.

Part 3: Impacts screening

Answer the questions below and follow the guidance to provide basic information regarding the suggested activity and describe its potential impacts.

No.	Would the project activity:	Yes/No	Provide explanation and supporting documents if needed
<i>Environmental Impacts</i>			
1	Result in permanent or temporary change in land use, land cover or topography.		
2	Involve clearance of existing land vegetation		
3	Result in environmental pollution		

4	Disturb in any way the local aquaculture and biodiversity (e.g., coral reefs)		
5	Disturb the local fauna or endangered species (e.g., turtles)		
6	Result in significant use of water, such as for construction		
7	Produce dust during construction and operation		
8	Generate significant ambient noise		
9	Increase the sediment load in the local water bodies		
10	Change on-site or downstream water flows		
11	Negatively affect water dynamics or the hydrological cycle in ways other than direct changes of water flows (e.g. water filtration and aquifer recharge, sedimentation)		
12	Result in negative impacts to any endemic, rare or threatened species; species that have been identified as significant through global, regional, national, or local laws		
13	Potentially increase the vulnerability of local communities to climate variability and changes (e.g., through risks and events such as landslides, erosion, flooding or droughts)		
Socio-Economic Impacts			
14	Negatively impact existing tenure rights (formal and informal) of individuals, communities or others to land, fishery and forest resources		
15	Restrict access to natural resources (e.g., watersheds or rivers, grazing areas, forestry, non-timber forest products) or restrict the way natural resources are used, in ways that will impact livelihoods		
16	Restrict access to sacred sites of local communities (including ethnic minorities) and/or places relevant for women's or men's religious or cultural practices		
17	Undermine the customary rights of local communities to participate in consultations in a free, prior, and informed manner to address interventions directly affecting their lands, territories or resources		
Indigenous and Vulnerable Groups			
18	Negatively affect vulnerable groups (such as ethnic minorities, poorer households, migrants, and assistant herders) in terms of impact on their economic or social life conditions or contribute to their discrimination or marginalization		
19	Negatively affect the livelihoods and/or customs and/or traditional practices of indigenous groups		

20	Stir or exacerbate conflicts among communities, groups, within families or individuals? Also considering dynamics of recent or expected migration including displaced people		
Occupational and Community Health and Safety			
21	Involve any risks related to the usage of construction materials, working high above the ground or in canals where slopes are unstable		
22	Expose local community to risks related to construction works or use of machinery (e.g., loading and unloading of construction materials, excavated areas, fuel storage and usage, electrical use, machinery operations)		
23	Expose the local community or project workers to health risks, including COVID-19		
24	Generate conflicts or pressure on local resources between temporary workers and local communities		

List of documents to be attached with Screening form:

1	Layout plan of the activity and photos
2	Summary of the activity proposal
3	No objection certificate from various departments and others relevant stakeholders

Screening Tool Completed by:

Signed:

Name: _____

Title: _____

Date: _____

Screening Conclusions [TO BE COMPLETED BY Safeguards Specialist]

- i. Main environmental issues are:

ii. Permits/ clearance needed are:.

iii. Main social issues are:

iv. Further assessment/ investigation needed and next step.

a. Need for any special study:.....

b. Preparation of ESMP (main issue to be addressed by the ESMP):.....

c. Preparation of LRP (main issue to be addressed by the LRP):.....

d. Any other requirements/ need/ issue etc:

Screening Tool Reviewed by:

Signed:

Name: _____

Title: _____

Date: _____

Exclusion list

The following practices and activities will not be supported by the project:

1. Land or water management practices that cause degradation (biological or physical) of the soil and water.
2. Activities that negatively affect areas of critical natural habitats or breeding ground of known rare/ endangered species.
3. Actions that represent significant increase in GHG emissions.
4. Use of genetically modified organisms, or the supply or use of modern biotechnologies or their products in crops.
5. Introduction of crops and varieties that previously did not grow in the implementation areas, including seed import/transfer.
6. Actions resulting in loss of biodiversity, alteration of the functioning of ecosystems, and introduction of new invasive alien species.
7. Procurement of pesticides or activities that result in an increase in the use of pesticides.
8. Activities that would lead to physical displacement and voluntary or involuntary relocation.
9. Activities that do not consider gender aspects or contribute to exacerbating any inequality or gender gap that may exist.
10. Child Labour.
11. Activities that would adversely affect IPs' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (physical and non-physical or intangible) inside and/or outside the project area.
12. Activities that would negatively impact areas with cultural, historical or transcendent values for individuals and communities.