

## WWF Environmental and Social Safeguards Categorization Memorandum

<b>Project Title: Blue Horizon: Ocean Relief through Seaweed Aquaculture</b>	<b>Date: 02/25/2022</b>
<p><b>Project Location and salient physical characteristics relevant to the safeguard analysis:</b></p> <p><b><u>Philippines</u></b></p> <p><b>Roxas, Palawan:</b> Palawan is one of the top seaweed producing provinces of the Philippines, contributing 24% of the county’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 farmers.</p> <p><b>Zamboanga:</b> 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 physico-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.</p> <p>The IP composition of project sites is as follows.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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—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. There are no conflicts between tribes and IPs and migrants.</li> </ul> <p><b><u>Viet Nam</u></b></p> <p>The overall population of the Khanh Hoa province is 1,240,400, and the population of the Ninh Thuan province is 591,000. Overall, the ratio of men and women is 50:50 of the total population, while there is a larger percentage of men who participate in the workforce. This may be explained by the fact that women are more likely to remain at home or hold temporary jobs. The average educational attainment of women is 4 years (primary school), while the average educational attainment of men is 7.5 years. Women face difficulties in accessing education due to household chores and the geographic distance of secondary schools from their community. The primary economic sectors in the Khanh Hoa province are industry and services, while the agriculture/forestry/fisheries sector is only responsible for 11% of the provincial GDP.</p>	<p><b>Project Categorization (A,B,C, Special Consideration):</b></p> <p style="text-align: center;"><b>B</b></p>

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In the Ninh Thuan province, the agriculture-forestry - fisheries sector accounted for around 31% of the total province GDP. There are no medium to large-scale commercial activities in project areas.

**Ninh Thuan province:** The project proposes to pilot the growth of *Kappaphycus* along the coastal areas occupied by the Phuoc Dinh community, Thuan Nam district, Ninh Thuan province. Seaweed farming has attracted and created jobs for 4,000 households, taking advantage of the water surface area in the lagoons, coastal areas. *Kappaphycus* is primarily cultivated by individual farmers, who employ the traditional method of rope-tie on the line. The produce is then sold to collectors, pre-processing facilities or/and processing companies. The collectors classify and sell the fresh *Kappaphycus* to pre-processing facilities or/and processing companies. Processing companies are mostly SME, which apply traditional processing methods for the local market, such as *Kappaphycus* jams and dried jellies. Only a few processing companies employ more than 100 employees. There is no clear distinction between collectors and pre-processors, as most of the fresh *Kappaphycus* is classified and dried. Some pre-processors export directly the white dried *Kappaphycus*.

**Khanh Hoa Province:** The project proposes to pilot the growth of *Caulerpaceae* in the Ning Hai ward, Ninh Hoa town, Khanh Hoa province. Nowadays around 58 households cultivate the seaweed on an area of 30 ha., average 5,000 m<sup>2</sup> /household. Most farms shifted to sea-grapes seaweed farming from shrimp ponds, seasnail ponds or salt ponds. Production ranges from 10 to 20 ton/ha/year of fresh produce. Sea grape weeds are primarily cultured by individual farmers. After the harvest, farmers sell the seaweed to collectors, processing facilities and companies. The collectors typically sell the fresh produce to processing facilities or directly to domestic retailers. Processing facilities and companies are mostly family-owned SMEs that employ up to 60 employees. There are around 20 companies of this type in the province. There is typically no clear distinction between collectors and processing companies. Since the processing process is relatively simple, some of the collectors sell the classified fresh sea grapes directly to the domestic market.

### Project Description:

The project objective “to create new sustainable seaweed value chains that will deliver ecosystem services and provide socioeconomic benefits” will be achieved through four components:

**Component 1: Regional capacity building for seaweed aquaculture.** 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, a set of regional principles of responsible and safe seaweed aquaculture as basis for the development of standards of 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 application of the principles in development of the safety standards, update or development of codes of practices, and update or development of best management practices. 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.** Component 2 involves creating an enabling environment for seaweed aquaculture at the national level – in the Philippines and Viet Nam. A governance framework comprising policy, regulatory and technical guidelines for seaweed aquaculture will be developed. The project will support processes to identify suitable areas for seaweed expansion (such as in deeper off-the coast and offshore areas), and to formulate and operationalize management plans specific to such areas, with accompanying plans and coordination mechanisms (provincial/national/regional/global) to support this component.

**Component 3: Seaweed Value Chains (production + processing + market access).** This Component requires working with 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. Demonstration farms will be established within national marine spatial plan (MSP) frameworks, and with the goal of advancing uniformly accepted risk assessment, rapid alert

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systems and data collection in order to develop safe modes of production, focusing on food safety, occupational safety and environmental safety. This is expected to overcome barriers of insufficient information that directly limit off-take agreements among global supply chain actors, contribute to the low level of regulations, and represent a barrier for insurability. The project will also support seaweed value chain initiatives to address barriers to production and processing. This includes establishing processing solutions closer to the farming sites that add value to the raw seaweed. Markets will be developed or accessed for these products. The outcome is an increase in the livelihood benefits for coastal seaweed farmers. This is expected to encourage additional investments in seaweed aquaculture that then expands the farming areas and compounds the environmental benefits. Biorefinery solutions will be introduced to further add to the economic and environmental values generated by seaweed farming. The project will explore collaboration with the private and financial sectors to support and scale up the results above (offshore seaweed farming, biorefinery solutions, value adding technology, etc).

**Component 4: Knowledge Management, M&E, and IW Learn** (regional). Under Component 4, the project will support knowledge sharing and monitoring and evaluation. Project activities will be monitored and communicated through multiple channels, including through IW:LEARN. 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.

**In addition to the safeguards standards triggered below, the following three safeguards standards apply to all WWF projects:**

- **Environmental and Social Risk Management**
- **Stakeholder Engagement**
- **Grievance Mechanisms**

Safeguard Standards Triggered	Yes	No
Natural Habitats	X	
Pest Management		X
Indigenous Peoples	X	
Restriction of Access and Resettlement	X	
Cultural Resources		X
Community Health, Safety and Safety	X	

**Summary of Key Safeguard Issues:**

The proposed project has been screened according to the Standard on Environmental and Social Risk Management and has been categorized as a Category "B" project, given that it is essentially a conservation initiative expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts are site specific and can be mitigated. Since the exact location and/or nature of potential investments have not yet been determined, an Environmental and Social Management Framework (including a Process Framework) will be prepared to conform to WWF's Environment and Social Safeguards Framework.

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**Standard on Natural Habitat:** Overall, activities of the project will produce significant environmental benefits and any potential adverse environmental impacts are expected to be very limited. While there shall be no conversion or degradation of natural habitats, several potential adverse impacts have been identified including marine mammal entanglement, damage to local fauna, and potential plastics pollution. Therefore, this standard has been triggered. Detailed mitigation measures for these risks will be outlined in the ESMF.

**Standard on Restriction of Access and Resettlement:** There will be no land acquisition or involuntary resettlement of individuals and/or families under the project. While the proposed project will not cause displacement of people from their homes, this standard is triggered because the project will create site-specific development plans for seaweed farming, which may affect and change the current access and usage rights of natural resources in project sites. Such 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, particularly 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. A Process Framework (PF) will be prepared as part of the ESMF.

**Standard on Indigenous People:** There have been no indigenous people identified in the project sites in Viet Nam. Indigenous People have been identified in the project sites in the Philippines. 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. In Zamboanga, there are 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. There are no conflicts between tribes and IPs and migrants. An Indigenous Peoples Planning Framework (IPPF) will be prepared as part of the ESMF.

**Standard on Pest Management:** The activities do not trigger the Standard on Pest Management.

**Standard on Cultural Resources:** This standard is not triggered as the project is highly unlikely to have an impact on cultural resources.

**Standard on Community Health, Safety and Security:** This standard is triggered as there are potential negative impacts as local community members may be exposed to a variety of health risks, including COVID-19 pandemic, as a result of interaction with project staff who would be engaged in different project activities (including the establishment of the demonstration farms, as well as construction works at the hatchery facility). Additionally, local community members may be exposed to accidents and injuries as a result of occupational hazards during the establishment of the demonstration farms and the construction works at the hatchery facility. Preventative measures to address these risks will be included in the ESMF.

### **Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:**

The project expects to achieve improved conservation and sustainable use of natural resources as its long-term impact of project interventions, which will be both environmentally and socially positive.

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<p><b>Required actions:</b> (type of ESIA, ESMP, IPP, IPMP, RAP, consultations, disclosure)</p> <p>An Environmental and Social Management Framework (ESMF), including a Process Framework and an Indigenous Peoples Planning Framework</p> <p>A Stakeholder Engagement Plan (SEP)</p>	<p>DocuSigned by: <i>Erika Drazen</i> 47E02B025BCC424... 2/28/2022</p> <hr/> <p>Erika Drazen Safeguards Coordinator</p> <p>DocuSigned by: <i>Brent Nordstrom</i> DD6030B6C7E2446... 2/28/2022</p> <hr/> <p>Brent Nordstrom Safeguards Compliance Officer</p>
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