

Annex [6]. Social and Environmental Screening Report

Project Information

Project Information	
1. Project Title	Coastal Resilience to Climate Change in Cuba through Ecosystem Based Adaptation – “MI COSTA”.
2. Project Number	Project ID: 95204 Output ID: 99212
3. Location (Global/Region/Country)	Republic of Cuba

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the human-rights based approach

The project mainstreams a human rights based approach by designing the intervention around the communities in Cuba most vulnerable to climate. By pegging the project design to the national strategy for Climate Change Adaptation (Tarea Vida) with a focus on the elements of the plan, which prioritizes the health, safety, security, and livelihoods of Cuba’s most vulnerable coastal populations, the project strives to fulfill the economic and social rights of beneficiaries. An integral part of the Ecosystem-Based Adaptation approach is enhancing resilience from the bottom-up, including the resources (water, land, shelter) on which people depend, as well as creating a participatory approach to climate change resilience rooted in community-based adaptation. The project design and implementation depends on close collaboration with Cuba’s vulnerable coastal communities to foster adaptation and resilience through local capacity building and enhancing knowledge on climate change and ecosystems, ensuring the procedural rights of a human-rights based approach. Furthermore, the community-driven adaptation will prioritize the needs of the most vulnerable within those communities, including female-headed households, the elderly, the disabled and children. The use of participatory methods ensures that interventions are aligned with community priorities and promote equitable engagement opportunities and benefit sharing, especially among those most vulnerable to climate change (Activity 2.1.). At the institutional level, integrating EBA into existing

coastal protection plans, adaptation management projects, and Capacity Building Centers will also encourage the prioritization of vulnerable populations in public policies and action at the local to national levels (Activities 2.1, 2.2 and 2.3). Taken together, these activities will also foster the generation of additional socio-economic co-benefits, such as improved food and livelihood security, enhanced fresh water access and sanitation, as well as cultural co-benefits, such as improved recreational spaces.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

The project is aligned with the high level of gender equality in participation and benefits that is characteristic of the Cuban national socio-political context, while accounting for gendered differences in adaptation and resilience that have been identified through the gender assessment, to further enhance Cuba's gender equality goals. A Gender Assessment and Action Plan (GAAP) has been prepared, including gender-specific consultations, which helped to identify ways to make participatory interventions, such as capacity building, sensitive to the needs to women, girls, men and boys. Strategies to ensure that women will benefit from coastal ecosystem rehabilitation and community capacity building by addressing the gender-specific barriers to participation and benefit-access, as well as women's unique vulnerabilities to climate change, and constraints in accessing trainings and community planning activities will be implemented. Fostering gender equitable knowledge of climate change risks and ecosystem services (Activities 2.1 and 2.2) will encourage the empowerment of women by promoting their livelihood agency, their engagement in ecosystem management, and their capacity to adapt to/cope with climate change.

Briefly describe in the space below how the Project mainstreams environmental sustainability

Using an ecosystem-based approach, this adaptation project mainstreams environmental sustainability through the integrated management, conservation and restoration of ecosystem services in a manner that is coherent with the ecosystem's inherent connectivity and complexity. Drawing on EBA to inform the rehabilitation, maintenance and monitoring of Cuba's coastal "green infrastructure" (mangroves, swamp grasslands, coastal forests, coral reefs, etc.), the design and implementation of project activities will explicitly work with, rather than against, natural ecosystem functions, structure and cross-scale dynamics for coastal management, thereby avoiding the (unintentional) feedbacks that frequently emerge from interventions that narrowly prioritize a single ecosystem service, often at the expense of others. In doing so, this project will enhance the resilience of Cuba's complex coastal ecosystems and reduce vulnerability of coastal communities to climate change impacts (saline intrusion, flooding, etc.) by addressing mangrove health, coastal erosion, salinization of fresh water aquifers and coastal soil. Moreover, the project will generate significant multiple environmental co-benefits such as increased terrestrial and aquatic biodiversity, habitat restoration, and carbon sequestration, in some of the Caribbean's most critical habitats. By rehabilitating coastal ecosystems, habitats essential for the breeding of variety of fish, turtles, crabs, and birds, many of which are threatened, will also be protected. To further bolster the sustainability of activities and outcomes, the project engages with actors across multiple sectors as well as local communities to build ecosystem stewardship and strengthen local ecosystem management capacities. The project will also reinforce existing regulatory measures for the protection of

the environment, including monitoring of mangroves and coral reefs, as well as better waste management in coastal areas (through co-finance).

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks?	QUESTION 3: What is the level of significance of the potential social and environmental risks?			QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
Risk 1: Rehabilitation of ecosystems may introduce non-native organisms/invasive species	P: 2 I: 3	Moderate	The project will rely on a combination of natural regeneration and artificial regeneration (planting) to achieve the recovery of structure, function and EBA services. Rehabilitation of mangroves and swamp wetlands and forests will involve enrichment planting, and reintroducing species to rehabilitate coastal protection ecosystem services. Invasive species	Natural regeneration will be the preferred option wherever possible. When enrichment planting and vegetation restoration is carried, only native species that are adapted to the hydrological and soil conditions of these ecosystems will be used. Species will also be selected in accordance with their ability to successfully thrive in degraded conditions (with the exception of invasive species), resist projected climate extremes, and restore needed ecosystem services. This could include, pioneering species, flood resistant species, or species with deep root networks to restore soils. The project activities also include evaluating survival rates and growth of ecosystem rehabilitation through a




			<p>(either planted or already existent in the ecosystem) may proliferate and colonize areas more quickly than native species, especially during the initial stages of rehabilitation activities or in frequently disturbed areas.</p>	<p>comprehensive monitoring program. This will be complemented by management plans to monitor and control invasive species, such as <i>Casuarina equisetifolia</i>, <i>Dichrostachys cinerea</i> and <i>Leucaena leucocephala</i>. The selected control mechanisms (primarily manual) will be designed to mitigate adverse effects on the ecosystem or human health. Pesticide use will be prohibited, in other to protect sensitive environments and human settlements from any possible exposure. For manual or mechanical control, measures will be taken to avoid damage to sites that are critical for the thriving of native biodiversity (e.g., breeding sites, nesting sites, etc.).</p>
<p>Risk 2: Project activities, including restoring hydrological flows to mangroves and coastal wetlands may cause adverse impacts to habitats (including critical habitats and/or environmentally sensitive areas).</p>	<p>P: 3 I: 3</p>	<p>Moderate</p>	<p>Sedimentation movement and water contamination during rehabilitation activities (associated with nurseries, replanting, natural regeneration management activities, and the clearing and creation of existing and new drainage canals) may affect sensitive environments including threatened species and their natural habitats</p> <p>The rehabilitation of mangroves and wetlands will require the clearing of existing canals, as well as</p>	<p>Protocols and management measures will be put in place to ensure that all activities mitigate any possible harm to ecosystems (and sensitive receptors). This will include guidelines for the use of machines to transport materials and remove any grey infrastructure as per the Environmental and Social Assessment Report (ESAR). Emergency procedures for dealing with possible spills or accidents that could impact soils, waters, and native species will be included.</p> <p>Additionally, management plans for all revegetation activities will be developed, (included limited use of fertilizers, and a prohibition on the use of pesticides) as will procedures for managing the impact of replanting activities on natural habitats.</p> <p>The methodologies and measures will be tailored to each ecosystem component and for each of the three</p>

			<p>removal of some existing hard infrastructure to restore hydrology (i.e. fresh water flows to these areas). This may generate waste and lead to local erosion. Removal of exiting concrete structures (low cement walls that were built in the past and are crumbling/eroded), may lead to localized erosion, disruption to sensitive environments.</p>	<p>intervention sites. Consideration will be given to the topographic, hydrogeological, and climate conditions for each site, as well as existing infrastructure (state of degradation, types of materials), so as to avoid contamination and disturbance of the ecosystem (e.g., leaching of metals in salt water conditions) that could harm sensitive aquatic biota).</p> <p>This will be carried out with the participation of relevant state actors (e.g., Forestry Agency) and/or with projects and organizations already working with these issues (e.g., The Sabana Camagüey Project).</p> <p>Finally any construction and clearing activities will avoid environmentally sensitive areas (breeding grounds) and will proceed as per the ESAR, to manage impacts on flora and fauna.</p>
<p>Risk 3: Risk that climate change will impact rehabilitation interventions and environmental monitoring systems.</p>	<p>P: 3 I: 3</p>	<p>Moderate</p>	<p>Particularly in the early stages of rehabilitation, the mangroves, swamp wetlands and forests, and coral reefs will be vulnerable to extreme events and sea temperature variations.</p> <p>Monitoring equipment may be susceptible to extreme weather events and there may be a risk of damage,</p>	<p>Measures will be taken to use climate resilient species for rehabilitation whenever possible. Protective measures and on-going monitoring will occur to mitigate hydraulic pressures (i.e., waves, rapid flooding) on swampland, forest, and mangrove areas that will be susceptible to climate events, especially in the early stages of rehabilitation.</p> <p>Monitoring equipment will be selected and calibrated to account for the full range of possible hydro-climatic events, taking into consideration extreme scenarios.</p>

			malfunction or faulty measurements.	A budget has also been provided to account for statistical failure rates of the green infrastructure rehabilitation protocols, as well as to equipment replace lost or damaged in extreme weather
Risk 4: Risk that project activities, including mangrove and wetland rehabilitation, infrastructure removal activities, as well as monitoring of coral reefs may have an adverse effect on community or workers health and safety.	P: 2 I: 3	Moderate	Activities involving the removal and transportation of materials may generate noise, dust, and other disturbances that impact the health and well-being of local communities or workers. Similarly, chemicals used in nurseries or planting (fertilizers,) could impact community health. Finally, working in mangroves and swamps implies increased exposure to vector borne diseases such as dengue fever, prevalent in Cuba. Finally, monitoring of coral reefs involves diving, which is an inherently risky activity.	Protocols and management measures will be put in place mitigate damages and disruptions due to noise, vibration and air quality impacts associated with removal. This will include guidelines for the use of machines and transportation that ensure worker and community safety. Emergency procedures for dealing with possible spills or accidents will be put in place. In instances where fertilizers are used, the methodologies will include proper management and limited application. Health and safety training will be given to all employees of the project (including subcontractors) and will include avoidance measures for vector borne disease exposure, as well as dive safety training as required.
	QUESTION 4: What is the overall Project risk categorization?			
	Select one (see <u>SESP</u> for guidance)		Comments	
	Low Risk		<input type="checkbox"/>	
	Moderate Risk		<input checked="" type="checkbox"/>	This project has been deemed of moderate risks because project activities are take place in

			environmentally sensitive areas of high biodiversity value, and in/ and near protected areas
	High Risk	<input type="checkbox"/>	
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?		
	Check all that apply	Comments	
	Principle 1: Human Rights	<input type="checkbox"/>	
	Principle 2: Gender Equality and Women's Empowerment	<input type="checkbox"/>	
	1. Biodiversity Conservation and Natural Resource Management	X	Project activities occur in sensitive terrestrial and marine environments
	2. Climate Change Mitigation and Adaptation	X	Project interventions may be sensitive to climate change and/or extreme weather
	3. Community Health, Safety and Working Conditions	X	Implementation of project activities involve exposure of workers to vector-borne disease (dengue) and diving risk (coral reef monitoring)
	4. Cultural Heritage	<input type="checkbox"/>	
	5. Displacement and Resettlement	<input type="checkbox"/>	
	6. Indigenous Peoples	<input type="checkbox"/>	
	7. Pollution Prevention and Resource Efficiency	X	Project activities may lead to temporary, localized release of suspended sediment

Final Sign Off

Signature	Date	Description
QA Assessor Grisel Acosta Programme Officer Environment and Energy 	Friday, 14 th , June 2019	UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
QA Approver Soledad Bauza Deputy Country Director 	Thursday, 18 th , June 2019	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC.
PAC Chair Edith Felipe Programme Coordinator 	Wednesday, 19 th , June 2019	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental <u>Risks</u>	
Principles 1: Human Rights	Answer (Yes/ No)
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	N
2. Is there likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ¹	N
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	N
4. Is there likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	N
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	N
6. Is there a risk that rights-holders do not have the capacity to claim their rights?	N
7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	N
8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	N
Principle 2: Gender Equality and Women's Empowerment	
1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	N
2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	N

¹ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	N
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	N
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	Y
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Y
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	N
1.4	Would Project activities pose risks to endangered species?	N
1.5	Would the Project pose a risk of introducing invasive alien species?	Y
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	Y
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	N
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water?	N

	<i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	N
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	N
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	N
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant ² greenhouse gas emissions or may exacerbate climate change?	N
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	Y
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	N
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	N
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	N
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	N
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	N
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	Y

² In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	N
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	Y
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	N
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	N
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	N
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	N
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	N
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	N
5.3	Is there a risk that the Project would lead to forced evictions? ³	N
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	N
Standard 6: Indigenous Peoples		

³ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	N
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	N
6.3	<p>Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?</p> <p><i>If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.</i></p>	N
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	N
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	N
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	N
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	N
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	N
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	N
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Y
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	N

7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	N
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	N
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	N