

Annex 5 Environmental and Social Management and Monitoring Plan

Risk management arrangements

The management arrangements are based on **the** management structure of the Project which aims to provide assigned responsibilities for **relevant** actors. The main arrangements are below:

- **During project** execution, UN-Habitat and EEs will be responsible for the implementation of the environmental and social risk measures through their contractors. Therefore, under the **PMU**, there is a staff who supervises the implementation of the environmental and social risk measures and **reports** to the PMU and **UN-Habitat**.

- The UN-Habitat and **EES**, in collaboration with their technical counterparts, will have overall responsibilities for implementing the environmental and social measures requirements and compliance with the **national regulations** and **standards**, and AF principles as well.

- The site supervision and monitoring of the ESMP implementation will be carried out by EEs, local focal points, who will also be supported by technical contractors.

- In addition, the contractor shall employ an ESM staff responsible for **the** implementation of social/environmental requirements. This person will maintain regular contact with **EES** and **the** local focal point. The contractors **are responsible for ensuring** that the proposed mitigation measures are properly implemented during the construction phase.

- UN-Habitat and EEs will make sure that all project staff and **counterparts** who are **involved** in project implementation receive both initial and ongoing environmental and social safeguard awareness and training sufficient to ensure they are familiar with their environmental and social safeguard responsibilities under the ESMP.

- Direct management responsibility of the ESMP will be under the Project Manager. The Project Manager will have oversight/final compliance responsibility. Any changes or additional activities required during project implementation that fall within allowable limits set by the Adaptation Fund will need to be approved by the project team leader and presented to the Project Steering Committee, depending on the scale of the activity. This plan, **along with** any changes in the risk landscape, will also be presented to the PSC.

- Management and implementation of the investments: All project activities have been screened against the AF 15 environmental and social risks areas during the project preparation phase. Outcomes will be presented to all stakeholders during project inception to confirm the management and monitoring arrangements and to agree on the detailed steps required to develop management plans for each activity, including detailed studies and risk mitigation measures to comply with national technical standards in line with Part II, Section E.

General environmental and social risk management reduction measures

In addition to the risk management measures identified above, the following elements will be put in place to ensure compliance with the Environmental and Social Plan:

(i) All **Memorandum** of Understanding (MoUs) and Agreements of Cooperation with the Executing Entities will include detailed reference to this ESMP and in particular the 15 ESP Principles.

(ii) The **Terms** of Reference (ToR) of Committees and Working Groups, project personnel and focal points will include detailed reference to this ESMP and in particular the 15 ESP Principles.

(iii) All key Executing Entity Partners will receive training/capacity development to understand the 15 Principles, the ESMP and in particular their responsibilities. This will include members of the Project Steering Committee, Project Management Unit, local focal **points**, the Working Groups and the Communities.

(iv) A Monitoring and Evaluation Framework, including monitoring of risks and mitigation measures, will be developed by the PMU and presented for approval to the Project Steering Committee and UN-Habitat Team Leader (HQ: Monitoring and Evaluation).

(v) The UN-Habitat Human **Rights Officers** and PAG will check project compliance with the AF ESP and the Environmental and Social Safeguard System of UN-Habitat during the project (besides the project manager).

4. Grievance Mechanism

i) The grievance mechanism will apply to all the project's target areas and will be open to beneficiaries and non-beneficiaries alike. It will allow them **an** accessible, transparent, fair and effective means to communicate with the project management (UN-Habitat and Project Steering Committee) if there are any concerns regarding the project design and implementation. All employees, executing entities and **contractors**, and people in the target areas will be made aware of the grievance mechanism to lodge any complaint, criticism, concern or query regarding the project's **implementation**.

ii) The mechanism considers the particular needs of different groups in the target communities. It combines anonymous mailboxes at community level, a trained local facilitator in each community who can listen to grievances while assuring anonymity and a telephone number that enables people to call anonymously. These options allow people to make their grievance in whichever language they choose, offer options for illiterate people or people with low levels of literacy, and recognize that internet penetration is still low in the target area.

iii) Project staff will also be trained to recognize grievances from community members and how to deal with grievance reports. The local facilitators in each community will also be trained to recognize dissatisfaction and on how to report grievances. In addition, monitoring activities will also provide an opportunity for beneficiary communities to voice their opinions as they wish.

iv) All grievances will be anonymised and presented to the Project Steering Committee.

v) The address and email address of the Adaptation Fund will be made public (i.e. project website, Facebook and mailbox) for anyone to raise concerns regarding the project:

Adaptation Fund Board secretariat

Mail stop: MSN P-4-400

1818 H Street NW

Washington, DC

20433 USA

Tel: 001-202-478-7347

Screening and examination process (see the example for screening and examination in Annex 5)

ESS consultants and an ESS consultation work reviewer have conducted screening, examination and review between March and December 2019 **as part of the feasibility studies**. The designed **activities**, especially infrastructure investments, were assessed to identify the potential **risks** and **impacts**. After identification, mitigation measures were set up, and risky **parts** for social and environmental impacts were analysed, and then the revision of activities was conducted. Based on

those measures, monitoring plans were arranged, and probability of **risks** was determined. With mitigation measures, monitoring plans, and probability of **risks**, mitigation action plans were developed below.



The ESMP was subsequently updated in **2025** to reflect the changes in the local context and results framework, based on the assessment results of the new feasibility study, environmental and social risks examination.

AF Environmental and social principles	Environmental and social impacts and risks	Monitoring / Probability of Risks	Specific environmental and social impacts and risks	Mitigation Action Plans
<i>Compliance with the Law</i>	<ul style="list-style-type: none"> - Possible conflict over land ownership (Act. 3.1.1 & Act. 3.1.2); - Failure to comply with laws relating to procurement procedure (Act.3.2.1) (1- Technology transfer to local people who are not legally allowed to operate the business models; 2- Only a private company or cooperative can manage the operation of the business models) 	<p>PM and focal points will check the status of land use and have consultation with local communities</p> <p>Monitoring indicators:</p> <ul style="list-style-type: none"> • # of meetings with relevant local stakeholders to select sites. • # of organized trainings for technology transfers • # of established business models <p>Probability of risk: Low</p>	<ul style="list-style-type: none"> - Construction works of coastal erosion and installation of water treatment systems may be on private land or public land which requires specific construction and land-use permits. - The communities might not be allowed to manage or operate the business model of the water supply systems. 	<ul style="list-style-type: none"> - Only install infrastructure on public land with engagement with Department of Agriculture and Environment for land use and Department of Construction for approval - Consult the legal procedures to establish a community-owned business model and provide capacity building to establish a legally recognized community business model.

<p><i>Access and Equity</i></p>	<ul style="list-style-type: none"> - Potential social inequality in terms of access to infrastructure, or that preferential access is given to certain groups (Activity 3.1.1) - Potential insecurity of schoolchildren (Activity 3.1.1) 	<p>Consultations have and will continue to capture all issues and needs of “marginalized and vulnerable groups” and particular impacts on- and needs of marginalized and vulnerable groups will be assessed throughout the project.</p> <p>Monitoring indicators:</p> <ul style="list-style-type: none"> • # of beneficiaries (especially poor/marginalized) • Community management regulations developed • # of safety codes implemented • Volume of hard interventions achieved <p>Probability of risk: Medium</p>	<ul style="list-style-type: none"> - There is possible dispute with existing drinking water suppliers in the area when treatment system installed since the price is 70% of the market price. So, there is a risk that the project’s objective to provide fresh water for drinking the price will increase after the project finished and the marginalized and poor may not be able to access that water source. - There is a potential risk of conflict when it comes to water shortage for a long period. In all community’s households lacking access to clean water is more than 20-45% but the project water systems can only provide clean water for limited number of people. - Since the water treatment systems are located in schools or kindergartens there is possible risk related to the safety of schoolchildren if people come to collect the water (e.g., by motorbike) 	<ul style="list-style-type: none"> - New sustainable operation model to make sure the price stable for the poor and marginalized over time - Pro-poor tariffs will be applied, and the price will be determined by Working Group. - Community management with rules ensuring that equal access is guaranteed. - Make sure the effective operation of water treatment system for the locals with capacity building and develop the mechanism to provide the service to remote areas. - The water systems would be installed in easily accessible areas (e.g. near school gates or security booths) without requiring entry to the school premises. - Business as usual’ mechanism will be applied and minimize the impact on economic activities from the construction of coastal protection system such as provide daily labour of construction and using alternative way to reach the construction/livelihood areas.
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<p><i>Marginalized and Vulnerable Groups</i></p>	<p>- There would be small number of vulnerable groups to access to livelihood resources (Activity 3.1.1 and 3.1.2)</p>	<p>Consultations have and will continue to capture all issues and needs of “marginalized and vulnerable groups” and particular impacts on- and needs of marginalized and vulnerable groups will be assessed throughout the project.</p> <p>Monitoring indicators:</p> <ul style="list-style-type: none"> • Community-based documents and plans for the engagement of marginalized groups. <p>Probability of risk: Medium</p>	<p>- Marginalized and vulnerable group could have lack of information about the system and pro-poor tariffs.</p> <p>- Marginalized group can be denied access to the infrastructure.</p> <p>- Construction work to upgrade coastal dykes may be given to strong and skilled workers; women and unskilled workers may not be able. to participate in the construction work.</p> <p>- Temporary restrictions during construction could briefly affect vulnerable households relying on coastal agriculture or fishing.</p>	<p>- Community co-management with guidelines ensuring that equal access and information is guaranteed and community-based engagement will be applied to encourage the participation from marginalized and vulnerable group.</p> <p>- Make sure that the information about the infrastructures will be announced to marginalized groups.</p> <p>- At least one facility will be installed in the underserved and ethnic minorities communities</p> <p>- Ensure construction schedules minimize disruption to daily livelihoods and establish alternative access routes.</p>
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<p><i>Human Rights</i></p>	<ul style="list-style-type: none"> - Human rights breaches can arise from denying access to water and other basic services. - Construction works to upgrade to T-groynes may be given to strong and skilled workers; women and unskilled workers may not be able to participate in the construction work. 	<p>The project will monitor and ensure that international and national human rights laws will be complied with.</p> <p>Monitoring indicators:</p> <ul style="list-style-type: none"> • Human rights clauses acknowledged and attached to all formal agreements/contracts. <p>Probability of risk: Low</p>	<ul style="list-style-type: none"> - Inequitable employment opportunities during the construction phase if hiring practices favour specific groups. 	<ul style="list-style-type: none"> - Apply UN-Habitat's project management cycle and human rights policies., human rights and climate change. - The Human Rights Officer of UN-Habitat will monitor and ensure that the project is implemented to respect and adhere to the requirements of all relevant conventions on human rights.
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<p><i>Gender Equity and Women's Empowerment</i></p>	<ul style="list-style-type: none"> - Women could be denied access to infrastructure, or excluded from making critical decisions (Activity. 3.1.1 and 3.1.2) - Prolonged droughts in rural areas place the primary water-collection burden on women and children, increasing their workload and exacerbating time constraints. 	<p>The project will actively pursue of Gender Equity and Women's Empowerment participation in project activities and stakeholder consultation, e.g. through quota systems and /or organization of separate working groups during the implementation of Components.</p> <p>Monitoring indicators:</p> <ul style="list-style-type: none"> • # of women employed by the businesses • # of women who lead/manage businesses • # verified 40% female access <p>Probability of risk: Medium</p>	<ul style="list-style-type: none"> - Women might have limited influence in management structures, keeping water access points technically or logistically inaccessible to them. - Construction works to upgrade coastal dykes may be given to strong and skilled workers, women and unskilled workers may not be able to participate in the construction work. - Women and children are in charge of collecting water in prolonged drought seasons in rural areas which put an extra burden on their shoulders. 	<ul style="list-style-type: none"> - Integrate gender issues into all project interventions, with a specific focus on capacity building at all levels as well as activities on the ground. During the project's implementation, the Gender Officer and the project manager of UN-Habitat will monitor to ensure that gender equality integration follows the technical requirements and guidelines. - Involving women and the Local Women's Union throughout the process and especially during the implementation, and after the end of the project - The activities under Component 3 will create employment, enabling some marginalised and vulnerable groups, including unemployed youth and women, to access employment.
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<p><i>Core Labor Rights</i></p>	<p>- Labour rights may not be respected when contracting communities (Activity 3.1.2)</p>	<p>The project will monitor international and national labour laws for any work that may be carried out in relation to the project. Monitoring indicators: <ul style="list-style-type: none"> • Labor rights clauses integrated into all contracts • Introduced safety principles at all built facilities Probability of risk: Low</p>	<p>Although minimal, workers might be exposed to heavy loads, wet/slippery conditions, concrete dust, and marine hazards without proper PPE or training.</p>	<p>- All community contracts must be scrutinized to ensure they comply with both Vietnamese law and international standards. - The relevant national labour laws guided by the ILO labour standards will be followed throughout project implementation. - The safety manual and instructions will be provided prior to any work.</p>
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<p><i>Indigenous Peoples</i></p>	<p>- The certain minority group can be denied access to infrastructure and excluded from the process of decision-making (Activity 3.1.1)</p>	<p>Consultations have and will continue to capture all issues and needs of all communities and particular impacts on and needs of indigenous people and other communities will be monitored throughout the project. Monitoring indicators:</p> <ul style="list-style-type: none"> • # of minority people engaged in supervising works and management. • Participation rates in community plans <p>Probability of risk: Low</p>	<p>In both Tra Vinh and Bac Lieu, a major percentage is Kinh people, followed by the Khmer and Chinese ethnic (e.g., in Tra Vinh, over 29% of the population is ethnic Khmer, 5-6% is ethnic Chinese and a small Cham population). There is a possible risk that minority groups may not receive equitable benefits or face language/cultural barriers in accessing the new water treatment systems.</p>	<p>- Community's management plans must ensure equal access for vulnerable and poor minority groups. - Involving the minorities in the operation processes and management boards of hard infrastructure constructed by projects or infrastructure existing in the region. - At least one facility will be installed in the ethnic minority's communities.</p>
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<p><i>Involuntary Resettlement</i></p>	<p>- Though the project utilizes public land, interventions like coastal erosion protection could inadvertently overlap with informal land use (Activity 3.1.2)</p>	<p>No activity will be implemented where there is the possibility, however small, of forced eviction. AoCs and contracts will include standard clauses stating that target communities will not be ‘involuntarily resettled’, also after the project. Monitoring indicators: • Verification that 100% of public areas used for construction have no informal settlers requiring displacement</p> <p>Probability of risk: Low</p>	<p>The project itself does not require any involuntary resettlement. While the physical relocation is very unlikely to occur, and the land acquisition from private ownership is not required (as 100% of the sites are in public land), however cases of economic dislocation may occur on the current livelihood and economic activities on the project site locations subject to the land clearing and installation / construction / mangrove planting.</p>	<ul style="list-style-type: none"> • Strictly prohibit activities where there is any possibility of forced eviction. • Ensure all contracts include standard clauses stating that target communities will not be involuntarily resettled.
<p><i>Protection of Natural Habitats</i></p>	<p>- The project aims to protect the current state of coastal areas and natural habitat.</p>	<p>N/A</p> <p>Probability of risk: Low</p>	<p>- N/A</p>	<ul style="list-style-type: none"> - The planted/ restored mangrove will establish new habitats for local species. - The T-groynes once established, will slow down water velocities, encourage gradual sediment accumulation, supporting the long-term growth of surrounding vegetation and micro-habitats.

<p><i>Conservation of Biological Diversity</i></p>	<p>- While damage to biological diversity is unlikely, there is a possibility that construction work undertaken, or reforestation measures may adversely impact on local biodiversity (Activity 3.1.2)</p>	<p>Relevant policies and guidelines to be explained and understood by project personnel prior to implementation and monitored by implementing partners. Monitoring indicators:</p> <ul style="list-style-type: none"> • Area of green coastal erosion stabilization designed and planted. • Mangrove plantation/maintenance guideline adopted <p>Probability of risk: Low</p>	<p>- Mangrove reforestation is a good measure not only conserving the biodiversity loss due to aquaculture activities but also protecting community from soil erosion. However, there is a potential risk that the newly planted mangroves will have poor survival rates if inappropriate species are selected or if local hydrodynamic conditions are altered by hard structures.</p>	<p>- Community consultation and involvement in identifying the plantation areas and originated mangrove species. - Community co-management mechanism is in place to ensure the survival of newly planted. - The T-groynes once established, will slow down water velocities, encourage gradual sediment accumulation, supporting the growth of surrounding vegetation and micro-habitats.</p>
<p><i>Climate Change</i></p>	<p>- This project is inherently an adaptation project and as such no maladaptation is foreseen. The project will not provide or install infrastructure or appliances that result in increased emissions.</p>	<p>N/A</p> <p>Probability of risk: Low</p>	<p>N/A</p>	<p>- Solar power will be used as part of the electric source to operate the water purification system which reduces cost and emission.</p>

<p><i>Pollution Prevention and Resource Efficiency</i></p>	<p>- Construction of infrastructure generates wastes (Activity 3.1.1 and 3.1.2)</p>	<p>PM and focal points will set up the manual for pollution and have consultation with stakeholders for capturing the relevant issues throughout the project. Monitoring indicators:</p> <ul style="list-style-type: none"> • Developed/approved plans for waste management • Community supervision logs of facility operation regarding waste. <p>Probability of risk: Medium</p>	<p>- There are potential non-biodegradable materials used for the green coastal erosion rehabilitation and control system can be leached into the surrounding environment which might affect the local habitats.</p>	<p>- Locally sourced, natural, untreated, and renewable materials, whenever possible, should be used to install T-groynes and the gabions. - Protocols on maintenance and replacement will be established so degraded materials and treatment chemicals are retrieved and stored securely before transfer to compliant disposal facilities.</p>
<p><i>Public Health</i></p>	<p>- No public health issues are foreseen, and improving public health is a secondary impact area of this project.</p>	<p>N/A Probability of risk: Low</p>	<p>The technology for water treatment system in this project is membrane processes which is used for removal of bacteria, microorganisms, particulates, and natural organic material, and inorganic contaminants from water. There is a low risk in terms of human health effects due to contamination. However, the test for the effectiveness of RO in removing organic and non-organic materials have been done in other places. N/A</p>	<p>- To mitigate the possible risk even though it is minimal, the test of effectiveness of water treatment system should be conducted at the project sites to show the evidence to local authorities who are in charge of local public health.</p>

<p><i>Physical and Cultural Heritage</i></p>	<p>- Minor disturbance during construction at the pagoda (Activity 3.1.1)</p>	<p>Joint inspections with temple and community representatives, documentation, and a grievance mechanism, ensuring full cultural safeguarding throughout construction. Monitoring indicators:</p> <ul style="list-style-type: none"> • Technical design approvals <p>Probability of risk: Low</p>	<p>Minor disturbance during construction (noise, vibration, dust); potential visual intrusion of kiosks/tanks.</p>	<p>- Install the water treatment system in a designated area that does not interfere with religious activities or cultural structures. - Heritage-sensitive siting and design, with construction impacts minimized through standard controls. - Ensure that community access to the pagoda for worship and cultural activities remains uninterrupted during and after installation.</p>
<p><i>Lands and Soil Conservation</i></p>	<p>- There is a potential risk of localized erosion, salinization or downdrift land loss due to changes in the currents and flows from the coastal protection measures (Activity 3.1.2)</p>	<p>Consultations have and will continue to capture all issues, and this will be monitored throughout the project. Monitoring indicators:</p> <ul style="list-style-type: none"> • Total area of planted mangroves • Total length of built coastal interventions <p>Probability of risk: Low</p>	<p>Changes in coastal dynamics after installation could lead to unintended erosion or sedimentation on adjacent stretches of coastline.</p>	<p>- Soil conservation will be enhanced through afforestation components as protective measures for land erosion control. - Careful calculation and anticipated impacts of coastal protection measures to find best place to introduce the intervention. - Monitoring erosion rate of the protected area and the surrounding locations.</p>