



## ADAPTATION FUND

AFB/PPRC.30/9  
03 October 2022

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Adaptation Fund Board  
Project and Programme Review Committee  
Thirtieth Meeting  
Bonn, Germany, 11-12 October 2022

Agenda Item 4 d)

### **PROPOSAL FOR SRI LANKA**

## Background

1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e., those that request funding exceeding US\$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fully-developed project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.

2. The Templates approved by the Board (Annex 5 of the OPG, as amended in March 2016) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

*For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.*

3. The first four criteria mentioned above are:

- (i) Country Eligibility,
- (ii) Project Eligibility,
- (iii) Resource Availability, and
- (iv) Eligibility of NIE/MIE.

4. The fifth criterion, applied when reviewing a fully-developed project document, is:  
(v) Implementation Arrangements.

5. It is worth noting that at the twenty-second Board meeting, the Environmental and Social Policy (ESP) of the Fund was approved and at the twenty-seventh Board meeting, the Gender Policy (GP) of the Fund was also approved. Consequently, compliance with both the ESP and the GP has been included in the review criteria both for concept documents and fully-developed project documents. The proposal template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the ESP and the GP.

6. At its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both

concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.

8. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

9. The following fully-developed project document titled "Build Resilience to Climate Change and Climate Variability of Vulnerable Communities in Mullaitivu District of Sri Lanka" was submitted for Sri Lanka by the United Nations Human Settlements Programme (UN-Habitat), which is a Multilateral Implementing Entity of the Adaptation Fund.

10. This is the first submission of the fully-developed project proposal, using the two-step submission process.

11. It was first submitted as project concept in the thirty-eighth meeting and the Board decided:

- (a) *To endorse the concept note as supplemented by the clarification responses provided by the United Nations Human Settlements Programme (UN-Habitat) to the request made by the technical review;*
- (b) *To request the secretariat to notify of the observations in the review sheet annexed to the notification of the Board's decision, as well as the following issues:*
  - (i) *The fully developed project proposal should identify all the adaptation options and the precise locations where these will be undertaken;*
  - (ii) *The fully developed project proposal should adjust the proposal's alignment with the Fund's Strategic Results Framework;*
  - (iii) *The proponent should further demonstrate the cost-effectiveness of the adaptation measures also from a sustainability point of view;*
- (c) *To request UN-Habitat to transmit the observations under subparagraph (b) to the Government of Sri Lanka;*
- (d) *To encourage the Government of Sri Lanka to submit, through UN-Habitat, a fully developed project proposal that would also address the observations under subparagraph (b), above.*

**(Decision B.38/26)**

12. The current submission was received by the secretariat in time to be considered in the thirty-ninth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number AF00000279, and completed a review sheet.

13. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with UN-Habitat and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

14. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.



ADAPTATION FUND

## ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project Concept

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**Country/Region:** Mexico/LAC  
**Project Title:** Adaptation to climate change through integrated water management and sustainable practices in vulnerable indigenous communities in Oaxaca and San Luis Potosí, in Mexico  
**Thematic Focal Area:** Rural Development  
**Implementing Entity:** Mexican Institute of Water Technology (IMTA)  
**Executing Entities:** National Institute of Indigenous Peoples (INPI)  
**AF Project ID:** AF00000326  
**IE Project ID:** **Requested Financing from Adaptation Fund (US Dollars):** 1,059,941.30  
**Reviewer and contact person:** Claudia Lasprilla Pina **Co-reviewer(s):** Patricia Marcos Huidobro, Alyssa Gomes  
**IE Contact Person:**

### Technical Summary

The “Adaptation to climate change through integrated water management and sustainable practices in vulnerable indigenous communities in Oaxaca and San Luis Potosí, in Mexico” aims with a large array of activities to construct and expand basic services infrastructure (drinking water, drainage and sanitation, and electrification), as well as territorial integration through land communication works, community infrastructure, and technical support; while supporting local community efforts to conserve their forests, promote water management, and improve governance. This will be done through the three components below:

Component 1: Strengthening of monitoring actions that reduce the vulnerability of indigenous communities to climate change (USD 59,788.07);

Component 2: Development of a sustainable model for integrated water management in indigenous communities (USD 696,605.70);

Component 3: Creation of sustainable agricultural and soil conservation interventions (USD 178,443).

Requested financing overview:

Project/Programme Execution Cost: USD 42,067.66

Total Project/Programme Cost: USD 976,904.43

	<p>Implementing Fee: USD 83,036.87 Financing Requested: USD 1,059,941.30</p> <p>The initial technical review raises several issues, such as the cohesion among the project components, definition of a clear goal, climate rationale, and an initial gender assessment, among others, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.</p> <p>The final technical review finds that the proposal has not addressed of the CRs and CARs requests. Namely, the following issues remain: analysis of duplication with other projects, an initial gender assessment, cost-effectiveness and initial consultations with target communities.</p>
Date:	September 16, 2022

Review Criteria	Questions	Comments Initial Technical Review	Comments Final Technical Review
Country Eligibility	1. Is the country party to the Kyoto Protocol?	<b>Yes.</b>	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	<p><b>Yes.</b></p> <p>Mexico is vulnerable to climate change which is leading to wide ranging social and economic impacts on many communities. In particular, climate change is directly affecting the quality of water resources available for some of the communities in the states of Oaxaca and San Luis Potosi. Throughout the region there is a problem of low crop yields, soil erosion, and pests, directly affecting the livelihoods of the local indigenous communities who are dependent on subsistence farming.</p>	-
Project Eligibility	1. Has the designated government authority for the Adaptation Fund	<p><b>Yes.</b></p> <p>As per the Endorsement letter dated August 8<sup>th</sup>, 2022.</p>	-

	endorsed the project/programme?		
	2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?	<p><b>No.</b></p> <p><b>CAR1:</b> Please adjust the document to 50 pages, including annexes.</p> <p><b>CAR2:</b> The proposal paging seems incorrect. Please amend accordingly.</p>	<p><b>CAR1: Cleared.</b> The document is now 46 pages.</p> <p><b>CAR2: Not cleared.</b></p> <p>Please adjust the page number throughout the document accordingly.</p> <p>Please note that <i>Part III: Implementation Arrangements</i> does not need to be completed at <u>concept note</u> stage.</p>
	3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	<p><b>Not clear.</b></p> <p>The project components are organized around specific activities in five target regions in Mexico located in two target states, Oaxaca and San Luis Potosi. However, to strengthen coherence among project outcomes, it is recommended to include a single objective and rephrase the current “main objectives” into expected outcomes, ensuring that they can easily be mapped to the expected outcomes listed in the Components and Financing table.</p> <p><b>CR1:</b> Please include a single objective and rephrase the current “main objectives” into expected outcomes, ensuring that they can easily be mapped to the expected outcomes listed in the Components and Financing table. Please expand on the titles of each project component to explicitly state what they are aiming at and</p>	<p><b>CR1: Cleared.</b> As per information provided on pages 20 to 26.</p> <p><b>CR2: Cleared.</b> As per information provided on pages 20 to 26, and pages 28 to 32.</p> <p><b>CR3: Cleared.</b> As per information provided in Section A, Part II.</p> <p><b>CR4: Not cleared.</b></p> <p>Given the information in the response sheet, please clarify if the project is not approved by end of 2023 (noting this is only a concept</p>

		<p>how they will help achieve the overall goal of the project. Please incorporate these amendments in the “Project Components” section (Part II).</p> <p><b>CR2:</b> Please clarify how the different components relate and interact to achieve the overarching goal of the project.</p> <p><b>CR3:</b> Please clarify how the proposed activities are different from a business-as-usual environmental project by providing answers to the following sequence: what are the adaptation problems or challenges? What are the threats/root causes? What are the barriers that need to be overcome? How are the activities building adaptive capacity and resilience of the ecosystem and communities?</p> <p>The timeline of the project (from May 2023 to September 2024) is unrealistic given the scope of planned activities, necessary stakeholder consultations, capacity building and training activities envisaged under the project.</p> <p><b>CR4:</b> Please consider revising the duration of the project taking into consideration the scope of proposed activities.</p> <p><b>CR5:</b> Please state alignment with the AF Strategic Results Framework in the</p>	<p>note for now), what are the possibilities of the project’s execution/continuity in case of a change of Government.</p> <p><b>CR5: Cleared.</b> As per information provided in the components and financing table.</p> <p><b>CR6: Cleared.</b> As per information provided in the components and financing table.</p> <p><b>CR7: Cleared.</b> As per the IE comment in the response sheet, the proponent decided not to proceed with this activity.</p> <p><b>CAR3: Not cleared.</b> Please revise and proofread the entire document, as it seems that some elements were incorrectly deleted from the previous version and this impairs the flow of information in the document. Similarly, some elements were not addressed in the right section and others do not have an answer or do not address the question correctly, please amend accordingly.</p>
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		<p>description of the components section. For reference, please consult <a href="https://www.adaptation-fund.org/document/strategic-results-framework-of-the-adaptation-fund-amended-in-march-2019/">https://www.adaptation-fund.org/document/strategic-results-framework-of-the-adaptation-fund-amended-in-march-2019/</a></p> <p><b>CR6:</b> Please consider grouping all hard infrastructure components under one component and specify the communities in the interventions will be carried out. Further specify the activities for operation, maintenance and long-term sustainability of built infrastructure such as anti-rain technologies, water harvesting, supply and sanitation systems etc.</p> <p><b>CR7:</b> Please clarify what the nature of the solutions to be implemented for the aquifer recharge and groundwater management, as some of these could constitute maladaptation.</p> <p>Please note that the details of the proposed outputs and activities doesn't really enable to evaluate its full adaptation potential but can be acceptable for a concept note. The details of the design of many of these elements is needed to be further elaborated at the <u>fully proposal stage</u> (e.g., exact nature of ecosystem restoration and management measures, sustainable land management, pest management measures, water collection and irrigation systems, details of target</p>	
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		<p>areas, ways of working and engaging with the communities etc.). As these details are provided additional questions may arise that stage to ensure that they do not constitute maladaptation and that they will deliver the adaptation objectives of the project.</p> <p>Throughout the document, there is information that is repeated. Likewise, each section should be well developed, where previous information helps to build on the points that follow.</p> <p><b>CAR3:</b> Please eliminate duplicated information throughout the document. Similarly, sections of Programme background/context, objectives and justification part A can be better addressed to avoid redundancy of the data presented.</p>	
	<p>4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p><b>Not clear.</b></p> <p>The proponents state that the project would cover the indigenous regions of the state of Oaxaca and the Wirikuta region of San Luis Potosi; it also subdivides its target into 6 different areas. However, there is a lack of clear information regarding the expected beneficiaries in each area, and what is their current situation (social, environmental, economic).</p> <p><b>CR8:</b> Please provide an explanation of how the project will ensure an equitable</p>	<p><b>CR8: Not cleared.</b></p> <p>This was partially addressed on page 49, where the proponent mentions that a monitoring committee will be formed to ensure an equitable distribution of benefits. However, further clarification is needed on what criteria would be used to ensure equitable distribution within the selected communities. Please clarify the eligibility criteria for selecting beneficiaries as well as</p>

		<p>distribution of benefits amongst vulnerable communities, households, and individuals. Please clarify whether all members of the selected communities would benefit from the activities proposed. If not, please clarify the eligibility criteria for selecting beneficiaries as well as consultation in this regard during the proposal development stage.</p> <p><b>CR9:</b> Please provide initial estimates of the expected beneficiaries of each area, with considerations of gender and youth.</p> <p><b>CR10:</b> Please consider describing the main characteristics of the indigenous communities located in the selected area, and outline the particular benefits that would be provided by the project/programme to these groups.</p> <p><b>CR11:</b> Please clarify, if the project activities are pilot projects or are based on an evidence base of best practices.</p> <p><b>CR12:</b> Please clarify how the project will avoid a maladaptation with regards to activity 2, 'installation of toilets with biodigesters'.</p> <p><b>CR13:</b> Given that some biodigesters require specific a type of toilet paper, particular range of temperature and/or bacteria for its treatment, please clarify, how the communities will continue to afford these in the long term. Please also</p>	<p>consultation in this regard during the proposal development stage.</p> <p><b>CR9: Not cleared.</b></p> <p>Section C, Part II provides the demographics of the target areas, please clarify if all the population in each of the target areas will be direct beneficiaries of the project.</p> <p><b>CR10: Not Cleared.</b></p> <p>The additional information provided in section B part II is based on a number of assumptions that need to be explicitly stated and justified.</p> <p>Please also note that, for the <u>fully developed proposal</u> all these benefits should be quantified.</p> <p><b>CR11: Not cleared.</b></p> <p>Please note that CR11 referred to the activities of rainwater harvesting, biodigesters, meteorological stations, etc. on the components and financing table. Based on the above, please clarify if these are pilot projects or if they are based on best practices which will be scaled up during this project.</p>
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		<p>clarify how other maintenance aspects would be ensured for sustainability.</p> <p><b>The proposal does not include an initial gender analysis.</b> Please note that all AF projects should comply with the AF Gender Policy requirements; at a concept note stage, an initial gender analysis, and/or assessment should be provided. This should consider the different needs, capabilities, roles and knowledge resources of women and men, and/or identify how changing gender dynamics might drive lasting change.</p> <p><b>CAR4:</b> Please provide an initial gender analysis accordingly.</p> <p>Please note that IMTA can apply for a Project Formulation Grant as part of the present concept note to carry out the Gender Analysis, and other needed analyses for the development of the fully-developed proposal; please find the template here:  <a href="https://www.adaptation-fund.org/apply-funding/project-funding/project-proposal-materials/">https://www.adaptation-fund.org/apply-funding/project-funding/project-proposal-materials/</a></p>	<p><b>CR12: Cleared.</b> As per information provided on page 30.</p> <p><b>CR13: Cleared.</b> As per information provided on page 30.</p> <p><b>CAR4: Not cleared.</b> No gender analysis was added to the concept note.</p> <p>Please refer to the <a href="#">AF Gender Guidance</a> document for IEs.</p>
	<p>5. Is the project / programme cost effective?</p>	<p><b>Not clear.</b></p> <p>The proposal includes information on the different activities that will be carried out, but without demonstrating their cost-effectiveness.</p>	<p><b>CR14: Not cleared.</b></p> <p>Cost-effectiveness should be developed in Section C, Part II of the document. The information provided in Section H does not</p>

		<p>The proposal seems to focus on water activities. However, in a few instances electrification (i.e., Ixtlán de Juárez, Oaxaca) and planting of native species are also mentioned. The selected approach of the project and the proposed activities should be further justified, and their cost-effectiveness demonstrated from a sustainability point of view.</p> <p><b>CR14:</b> Please provide a logical explanation of why the project has chosen the selected scope and approach and activities (instead of other adaptation options), and demonstrate the project's cost-effectiveness from a sustainability standpoint. A table presentation is useful and can include cost-effectiveness estimates of the proposed solutions compared to alternative adaptation solutions.</p>	<p>respond to the request of CR14, please amend accordingly.</p>
	<p>6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?</p>	<p><b>Not clear.</b></p> <p>The proposal enumerates 5 programs/strategies with which the program is aligned: 'Special Climate Change Program 2021-2024', 'Special Program for Indigenous and Afro-Mexican Peoples (PEPIA) 2021-2024', 'Social Policy of the National Development Plan 2019-2024', 'Institutional program 2020-2024 of the INPI', 'Program for the Integral Welfare of Indigenous Peoples'. Further analysis of all relevant national plans/strategies is needed.</p>	<p><b>CAR5: Cleared.</b></p> <p>As per information provided on pages 52 to 55.</p>

		<p>Please note that the alignment of the project with all the relevant plans and strategies must be explained in detail only at <u>fully developed proposal stage</u>. A requirement at concept stage (see <a href="#">instructions for preparing a request for project funding</a>) is for proposals to identify all relevant national or sub-national/department sustainable development strategies, national or sub-national/department development plans, poverty reduction strategies, national communications and adaptation programs of action, sectoral plans and other relevant strategies.</p> <p><b>CAR5:</b> Please revise this section by identifying all relevant national or sub-national strategies, including sustainable development strategies, Nationally Determined Contributions and National Adaptation Plans that the project aligns with or contributes to.</p>	
	<p>7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?</p>	<p><b>Not clear.</b></p> <p>The proposal states that the project will comply with the regulations provided by the Ministry of the Environment and Natural Resources (SEMARNAT) and elaborates on the alignment with national indigenous communities' laws, regulations and plans. However, an exhaustive list of all the relevant national technical standards should be identified, and compliance stated in a logical manner. These include climate change</p>	<p><b>CR15: Cleared.</b> As per information provided on pages 57 and 58.</p> <p><b>CR16: Cleared.</b> A participatory process will be built based on indigenous peoples' normative systems and social structures.</p>

		<p>laws/regulations/plans on technical standards related to drinking water, electrification, drainage and sanitation, and any other sector-specific regulations.</p> <p><b>CR15:</b> Please identify all relevant national technical standards that may be applicable to the project.</p> <p><b>CR16:</b> As the project will be specifically implemented in indigenous territories, please clarify how the project will take into account the indigenous customary laws in both states, if applicable.</p>	
	<p>8. Is there duplication of project / programme with other funding sources?</p>	<p><b>Not clear.</b></p> <p>The proposal fails to identify all relevant potentially overlapping projects / programmes and to state the lack of overlap / complementarity in a logical manner.</p> <p><b>CR17:</b> The proposal should identify all relevant potentially overlapping, on-going or soon-to-be-implemented projects and programs from other domestic, international bilateral cooperation and multilateral funding sources, including those implemented by IMTA, itself. As well as lessons learned from similar closed projects (if any).</p> <p>For instance, the proposal mentions that one of the regions (Xniza at Oaxaca Valley) “has been working for over 16 years to recharge the water table and</p>	<p><b>CR17 and CR18: Not cleared.</b></p> <p>No new information was provided in this section.</p> <p>Please note that at <u>concept stage</u> all relevant potentially overlapping projects / programmes should be identified, and lack of overlap / complementarity stated in a logical manner. Similarly, linkages and synergies with all relevant potentially overlapping projects / programmes should be outlined, including areas of overlap and complementarity, drawing lessons from the earlier initiatives during the project design.</p>

		<p>have enough water to grow their products in the field.”</p> <p><b>CR18:</b> Please elaborate on what lessons can be considered from these projects, what are the similarities with this proposal, and how this project complements the existing projects in this area.</p>	
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p><b>Not clear.</b></p> <p>The proposal states that all actions are based on a participatory planning exercise with the beneficiaries, respecting their forms of organization, culture. However, the sections do not describe the knowledge management and dissemination of lessons learned that the project includes.</p> <p><b>CR19:</b> Please clarify how will the project document experiences gained and shared them to contribute to the global, national, and local knowledge on climate change adaptation and to accelerate understanding of what kinds of interventions work.</p> <p><b>CR20:</b> For this section, please provide more details on the specific activities in the proposal that relate to knowledge management (KM) and dissemination of lessons learned.</p>	<p><b>CR19: Cleared.</b> As per information provided on page 58.</p> <p><b>CR20: Cleared.</b> As per information provided on page 58.</p>



	<p>10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p><b>Yes, but needs more information.</b></p> <p>Initial consultations have taken place; however, some elements need to be clarified.</p> <p>A summary of the participants type, numbers, and gender/ vulnerable groups is needed. Also, a summary of the consultation outcomes and how they were considered in the project design is required.</p> <p><b>CAR6:</b> Please provide a summary table of stakeholders who participated in the consultations including which stakeholder or vulnerable groups, they belong to, their gender, etc.</p> <p><b>CR21:</b> Please provide a summary of the consultation outcomes, and inputs received and outline how the these were integrated into the project design (for instance, what particular threats or needs were identified by the communities and how the proposed interventions will address these).</p>	<p><b>CAR6: Not cleared.</b></p> <p>The information provided in section C (cost-effectiveness) refers to demographics. Please address <b>CAR 6</b> in Section H, Part II of the concept note by providing a summary of those stakeholders/vulnerable groups that were consulted for the development of this project.</p> <p>Please always provide all responses in the technical review in English.</p> <p><b>CR21: Not cleared.</b></p> <p>Please provide a summary of the outcomes of the “participatory dialogue” and “internal consultations” and how these were embedded in the project design.</p> <p>Please consider re-writing this section as it is currently difficult to understand the flow of ideas presented.</p>
	<p>11. Is the requested financing justified on the basis of full cost of adaptation reasoning?</p>	<p><b>Not clear.</b></p> <p>Please refer to the <b>CR3, CR10, and CR14</b> above on the need to provide clarity on</p>	<p>Please further develop the section in the <u>concept note document</u>.</p>

		the project's climate rationale, target area/beneficiaries and comparison with alternative options.	
	12. Is the project / program aligned with AF's results framework?	<p><b>Not clear.</b></p> <p>The proposal does not state the alignment with the AF's results framework.</p> <p><b>CR22:</b> Please specify the alignment with the Adaptation Fund revised strategic results framework adopted in 2019  <a href="https://www.adaptation-fund.org/wp-content/uploads/2019/10/Adaptation-Fund-Strategic-Results-Framework-Amended-in-March-2019-2.pdf">https://www.adaptation-fund.org/wp-content/uploads/2019/10/Adaptation-Fund-Strategic-Results-Framework-Amended-in-March-2019-2.pdf</a></p>	<p><b>CR22: Cleared.</b></p> <p>The project is aligned with outcomes 1, 3, 4, 5 and 6.</p>
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p><b>Not clear.</b></p> <p>The proponents mention a 'Justice Plan' that contains information on what needs to be done and how. It is not clear if this Justice Plan will be an output for each of the communities as currently only the Wirikuta Territory has a Justice Plan.</p> <p><b>CR23:</b> Please clarify the role of the 'Justice Plan'.</p> <p>Similarly, it is not clear who will be the owner and/or in charge of the basic infrastructure proposed (particularly for the infrastructure that benefit the entire communities such as drinking water networks, drainage, water collection and</p>	<p><b>CR23: Cleared.</b></p> <p>As per information provided on page 60. Please include the information provided on page 60 as part of section J, Part II.</p> <p><b>CR24: Not cleared.</b></p> <p>The proponent did not address this request.</p>

		<p>irrigation systems) and who will ensure it is properly maintained in the medium/long term. This is also key to complying with the “do not harm” principle of the proposed technology and identifying the potential environmental and social impacts and risks (see comment below in question 14).</p> <p><b>CR24:</b> Please provide an outline of the arrangements through which the activities proposed will be sustained after the project’s end. This should take into consideration any operation and maintenance costs, policies, and governance arrangements to be developed and implemented, and knowledge to be generated, among others. Such description should cover all areas of sustainability, including but not limited to economic, social, environmental, institutional, and financial.</p>	
	<p>14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p><b>Not clear.</b></p> <p>The proposal states that the components of the project do not reveal unwanted environmental or social impacts. However, some previous sections mentioned the possibility of maladaptation, soil pollution, conflicts with agricultural companies.</p> <p>This section should focus on the potential environmental and social impacts of the project’s activities instead of the current</p>	<p><b>CR25: Not cleared.</b></p> <p>No changes were made to this section.</p> <p>Please find the link to the document as requested  <a href="https://www.adaptation-fund.org/wp-content/uploads/2016/07/ESP-Guidance_Revised-in-June-2016_Guidance-document-for-Implementing-Entities-on-">https://www.adaptation-fund.org/wp-content/uploads/2016/07/ESP-Guidance_Revised-in-June-2016_Guidance-document-for-Implementing-Entities-on-</a></p>

		<p>situation in the targeted communities. In addition, the table on the checklist of environmental and social principles should be revised as some of the proposed activities may require further assessment. For instance, possible conflicts due to the co-administration of the aquifers should be considered.</p> <p><b>CR25:</b> Please revise the section by considering and indicating all possible risks and impacts -social and environmental- of the different activities in the project. The risk and impact screening process should consider all potential direct, indirect, transboundary, and cumulative impacts that could result from the proposed project. Please refer to the Fund's guidance on compliance with ESP <a href="https://www.adaptation-fund.org/wp-content/uploads/2016/07/ESP-Guidance_Revised-in-June-2016_Guidance-document-for-Implementing-Entities-on-compliance-with-the-Adaptation-Fund-Environmental-and-Social-Policy.pdf">https://www.adaptation-fund.org/wp-content/uploads/2016/07/ESP-Guidance_Revised-in-June-2016_Guidance-document-for-Implementing-Entities-on-compliance-with-the-Adaptation-Fund-Environmental-and-Social-Policy.pdf</a></p> <p><b>CAR7:</b> Please indicate in section K the category in which the screening process has classified the project (for e.g., Category A, B or C).</p> <p>Please refer to <b>CAR4</b> above on the initial gender analysis.</p>	<p><a href="#">compliance-with-the-Adaptation-Fund-Environmental-and-Social-Policy.pdf</a></p> <p><b>CAR7: Cleared.</b> The project was categorized as Category B.</p>
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Resource Availability	1. Is the requested project / programme funding within the cap of the country?	<b>Yes.</b>	-
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	<b>Yes.</b> The management fee is at 8.5%.	-
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	<b>Pending.</b> <b>CAR8:</b> There are no project execution costs considered in the proposal, please confirm if this will remain. Please refer to the AF description and calculation of the <a href="#">execution cost</a> .	<b>CAR8: Cleared.</b> An execution cost has been included; however, please change all figures in the component table to only include round numbers.
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	<b>Yes.</b> IMTA is a national accredited entity to the Fund.	-
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage	
	2. Are there measures for financial and project/programme risk management?	n/a at concept stage	
	3. Are there measures in place for the management of for environmental and social risks, in line with the	n/a at concept stage	

	Environmental and Social Policy and Gender Policy of the Fund?		
	4. Is a budget on the Implementing Entity Management Fee use included?	n/a at concept stage	
	5. Is an explanation and a breakdown of the execution costs included?	n/a at concept stage	
	6. Is a detailed budget including budget notes included?	n/a at concept stage	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	n/a at concept stage	
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	n/a at concept stage	
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from	n/a at concept stage	

	the Fund's results framework?		
	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage	



ADAPTATION FUND

## ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular Size Full Proposal

**Country/Region:** Sri Lanka/ Asia & Pacific

**Project Title:** Build resilience to climate change and climate variability of vulnerable communities in Mullaitivu District of Sri Lanka

**Thematic Focal Area:** Multisector

**Implementing Entity:** United Nations Human Settlements Programme (UN-Habitat)

**Executing Entities:** Ministry of Environment, Community based organisations in the target locations

**AF Project ID:** AF00000279

**IE Project ID:**

**Requested Financing from Adaptation Fund (US Dollars):** 2,000,000

**Reviewer and contact person:** Martina Dorigo

**Co-reviewer(s):** Imèn Meliane

**IE Contact Person:**

### Technical Summary

The project “Build resilience to climate change and climate variability of vulnerable communities in Mullaitivu District of Sri Lanka” aims to improve climate related socio-economic outcomes in the targeted fishing and agricultural communities through the implementation of community-based adaptation solutions, and aims to support climate resilient development and increase institutional and community capacity to adapt to the changing and variable climate. This will be done through the two components below:

Component 1: Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District. (USD 1,468,204.60);

Component 2: Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity. (USD 200,000).

Requested financing overview:

Project/Programme Execution Cost: USD 175,104

Total Project/Programme Cost: USD 1,843,308.88

Implementing Fee: USD 156,691

Financing Requested: USD 2,000,000



	The initial technical review several issues, such as the need to provide clear provisions for the project's alignment with relevant technical standards; ensuring the sustainability of the small-scale hard investments at community level; the inadequate alignment of the proposal with the Environmental and Social Policy of the Fund, including sound monitoring and budgetary provisions for the Environmental and Social Management Plan, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.
Date:	22 August 2022.

Review Criteria	Questions	Comments	UN-Habitat Response
Country Eligibility	1. Is the country party to the Kyoto Protocol?	<b>Yes.</b>	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	<b>Yes.</b>  Sri Lanka is highly vulnerable to climate change due to its low elevation and high dependence on the ecological systems and the agriculture sector. According to the Global Climate Risk Index, 2018, Sri Lanka was ranked the second most climate change affected country in 2017. The anticipated impacts of climate hazards in the project areas include heavy and intense rainfalls events and produced dry periods.	-
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	<b>Yes</b> , as per the Endorsement letter dated 16 January 2022.	-
	2. Does the length of the proposal amount to no more than One hundred (100) pages for the fully-developed project document, and one hundred (100) pages for its annexes?	<b>Yes.</b>	-
	3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	<b>Yes.</b>  Current climate hazards that are identified and listed in the proposal are inundations during the monsoon rains and droughts during the dry period and saltwater intrusion, with the agriculture sector, including fisheries and aquaculture, as one of the most vulnerable to climate change. The design of the project is founded on the premise of reducing livelihood vulnerability to rainfall variability by introducing alternate sources of resilient crop cultivations, income, food and basic facilities; and building the capacities of vulnerable communities.  The project objectives support outcome 3, 4, 5 and 6 of the Fund's strategic objectives. Activities are described	-

		<p>in detail and will lead to tangible outcomes suited to address the climate change impacts identified in the project target area. The adaptation measures proposed include a set of soft and hard measures against drought, flood and saltwater intrusion, to strengthen the resilience at household and community level. Adaptation measures include: 1km earth bund, renovation of 15 minor tanks for water storage, drinking and irrigation and the renovation of existing evacuation routes. In addition, the proposal will rehabilitate 1.5km of mangroves for improved lagoon fishery and will promote climate resilient sustainable agriculture through the introduction of climate resilient crops (e.g., groundnut and coconuts).</p>	
		<p><b>CR1:</b> Please clarify the selection criteria for the 18 households that will benefit from the climate resilient sanitation facilities, since the project will operate in more than 600 villages.</p>	<p><b>CR1:</b> The selection criteria include, “(1) Frequency and time duration of inundation of household toilets per year. These aspects vary depending on the terrain; (2) Availability of land tenure documents to guarantee ownership to the land; (3) Current sanitary and hygiene situation. For an example, use of a dilapidated toilet with no security for women and children; (4) Economic status of the family, i.e., whether they are under the poverty line, i.e., income level which is a situation of extreme vulnerability and the number of income earners; (5) Family size and situation, e.g., female headed households, families with children under the age of 5 and school going children, elderly, disabled family member etc. were given priority by the District Secretariat, Mullaitivu. However, UN-Habitat will do the final verification and address any grievance that might arise”. Please refer page 12 in the ‘TRACK’ version, and ‘ANNEX 5Q: LETTER FROM GOVERNMENT AGENT/DISTRICT SECRETARY ON SELECTION CRITERIA FOR PROVISION OF TOILETS’, page 107.</p>
		<p><b>CR2:</b> Please also clarify how the monitoring of the replanted/rehabilitated mangroves will be carried out after the project’s finalization.</p>	<p><b>CR2:</b> The monitoring/maintenance will be officially handed over to the Forest Department, Department of Wildlife Conservation and Coast Conservation Department. Please refer page 14 in the ‘TRACK’ version.</p>
		<p><b>CR3:</b> The proposal states that all the hard investments have been fully identified, however output 2.1 aims to develop participatory vulnerability/risk assessments to support the identification/selection of preferred adaptation options. Please clarify the scope of this output and whether results of these proposed assessments would inform/impact the current selected measures.</p>	<p><b>CR3:</b> Output 2.1 will contribute towards the National Adaptation Plan by contributing to ‘anticipatory adaptation’ at the DS level. Please refer page 14 in the ‘TRACK’ version for details.</p>

	4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	<p><b>Yes.</b></p> <p>The proposal will directly benefit 3,024 families in the three selected DS Divisions with a multiplier effect of 4 per household will accrue direct benefits to 12,096 individuals in marginalized/poor income groups and indirectly benefit 4,076 families (16,304 individuals). Table 5 summarizes the expected economic, social and environmental benefits.</p> <p>The project activities in water conservation, harvesting and distribution, establishment of home-gardens with climate resilient crops, replanting of mangroves, and training in fish value addition and processing techniques to prevent economic loss, will lead to safeguarding and increase in income and food security.</p>	-
	5. Is the project / programme cost effective?	<p><b>Yes.</b></p> <p>The proposal demonstrates its cost-effectiveness also from a sustainability and replicability point of view. A description of alternative options to the proposed measures has been provided, however quantitative estimates are absent.</p> <p><b>CAR1:</b> Please provide quantitative estimates where feasible, to demonstrate the cost-effectiveness of the project.</p>	<b>CAR1:</b> Quantitative estimates have been incorporated. Please refer, 'Table 6: Cost Effectiveness Criteria' in pages 20 and 21 in the 'TRACK' version for details.
	6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	<p><b>Yes.</b></p> <p>As presented on pages 19-20, the project identifies and clarifies the alignment with the relevant plans and strategies (e.g., the National Climate Change Policy, the National Adaptation Plan for Climate Change Impacts, the NDCs, the National Agricultural Policy, among others).</p>	-
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	<p><b>Unclear.</b></p> <p>The proposal in the main text provides information related to the Fund's Environmental and Social Policy compliance but does not list any relevant national technical standards.</p> <p><b>CAR2:</b> Please identify the relevant national technical standards including them in the proposal main text, and clearly state how the project will comply with them. These can include building codes, water quality regulations, land use or tenure regulations, etc.</p>	<b>CAR2:</b> The relevant national technical standards were presented in 'ANNEX 1: ENVIRONMENT AND SOCIAL MANAGEMENT PLAN', Table 22 (now Table 24) on 'Compliance with national technical standards, rules, regulations and procedures, and ESP principles'. However, a similar table was incorporated in the main text of the proposal as suggested, please refer Table 9 for details.
	8. Is there duplication of project / programme with other funding sources?	<b>Unlikely.</b>	

		<p>The proposal provides a summary of recently concluded, on-going, and pipeline projects that are related to the sectoral interventions of this project, however timelines for other projects are not systematically reported. In addition, it seems that the project has potential synergies with many different projects, but it is not clear how these will be practically achieved.</p> <p><b>CR4:</b> Please clarify the timeline (approval date; finalization date) for all the listed projects and clarify how the proposal will practically ensure synergies or drawing lessons from other initiatives. Add a column on the project duration.</p>	<p><b>CR4:</b> Please refer the revised 'Table 10: Summary of ongoing/pipeline projects' in pages 26 to 28 in the 'TRACK' version for details.</p>
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p><b>Yes.</b> The proposal has an output and budget dedicated to knowledge management activities and dissemination of lessons learned. KM products envisaged include case studies and policy briefs with recommendations, among others.</p> <p>The project will provide the opportunity to review context specific approaches, establish best practices and provide the basis to up-scale successful interventions to similar ecological and socio-economic conditions.</p> <p><b>CR5:</b> This section mentions the possibility to encourage student study/internships opportunities, however this is not reflected in any project activity. Please clarify and consider adding one specific activity to encourage and monitor these kinds of opportunities engaging students.</p>	<p><b>CR5:</b> A specific activity was not included as suggested. UN-Habitat supports internships, particularly with local Universities for its programmes or projects. Similarly, internships will be promoted under the proposed Project as well. The expected roles and responsibilities of an intern is highlighted under Section G. Please refer page 29 in the 'TRACK' version for details.</p>
	<p>10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p><b>Yes, but more information is needed.</b> Comprehensive consultations have been carried out involving government, professionals and community representatives. These were carried out in person but also via digital media due to the restrictions imposed by the COVID-19 pandemic. The list of representatives consulted at District and Divisional levels is provided in section H and in Annex 4. However, it is unclear whether representatives of the Welioya division were consulted.</p> <p><b>CR6:</b> Please clarify and add relevant information (list of people consulted, date of consultations and main outcomes) on consultations involving representatives from the Welioya district.</p>	<p><b>CR6:</b> The relevant information has already been included, please refer 'stakeholder meeting 5' on 16<sup>th</sup> September 2021 in page 80, 'stakeholder meeting 6' on 2<sup>nd</sup> December 2021 in page 81 and 'Meeting 8' on 2<sup>nd</sup> June 2022 in page 88 in the 'TRACK' version for details. Site visits to potential beneficiary houses were made and photographs included in page 8. Due to space limitations, the attendance sheets of the 'Meeting 8' on 2<sup>nd</sup> June 2022 was not included in the annex.</p>

		<p><b>CR7:</b> Please clarify if consultations with different stakeholders included also the environmental and social safeguards.</p>	<p><b>CR7:</b> The consultations with stakeholders included the ESS of UN-Habitat and ESP. A clarification was included under 'ANNEX 1: ENVIRONMENT AND SOCIAL MANAGEMENT PLAN (ESMP)' page 61 in the 'TRACK' version.</p>
	<p>11. Is the requested financing justified on the basis of full cost of adaptation reasoning?</p>	<p><b>Unclear.</b> The proposal does not include co-financing and will achieve its adaptation objectives without additional funding from other donors. However, the additionality of the proposed outcomes is not well informed.</p> <p><b>CAR3:</b> Please strengthen the justification of the selected measures to achieve the stated climate change adaptation objectives in relation to the climate impacts identified</p>	<p><b>CAR3:</b> The proposed Project will be anchored within the Climate Change Secretariat within the Ministry of Environment and apart from contributing to national level adaptation plan this will also ensure sustainability upon completion of the Project. Please refer page 21 in the 'TRACK' version for further details.</p>
	<p>12. Is the project / program aligned with AF's results framework?</p>	<p><b>Yes, but needs revisions.</b> The proposal is aligned with the Fund's strategic outcomes 1,3,4,5 and 6 according to table 15 (section F), however the alignment with outcome 1 is not reported in table 4. Please revise.</p> <p><b>CAR4:</b> Please revise the tables to ensure coherence and assign the budget to each fund outcome in table 15.</p>	<p><b>CAR4:</b> 'Table 4' has been revised.</p>
	<p>13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?</p>	<p><b>Unclear.</b> The proposal provides a general description of all elements of sustainability: economic, environmental, institutional and financial, however it is not clear how the achieved benefits will be sustained after the project ends.</p> <p><b>CR8:</b> Please clarify the arrangement through which the water tanks, disaster-resilient toilets, and the mangrove nurseries will be sustained and maintained after the project's finalization.</p>	<p><b>CR8:</b> Please refer 'Table 12: Monitoring, Maintenance and Sustainability' page 32 and 33 in the 'TRACK' version for further details.</p>
	<p>14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p><b>Not adequate.</b> The proposal states that all the set of investments are fully identified, however output 2.1 aims to develop participatory vulnerability and risk assessments to support the identification and selection of preferred adaptation options. Further clarification is needed on whether the results of these assessments would inform or impact the current selected measures (see <b>CR3</b>).</p>	<p>Please refer CR3 response.</p>

		<p>Furthermore, the risk screening places the project in the category B, as the investments are small in scale but present some environmental and social impacts and risks, as identified in table 11. The findings of the risk screening, however, do not present any justification in this section. Table 19 in Annex 1 provides a general assessment of potential impacts and mitigation/management measures, however some principles for which no risks were identified present potential risks as per the assessment provided, please ensure consistency.</p> <p><b>CAR5:</b> Please provide a clear substantiation of the risk findings in alignment with the Fund's ESP and ensure consistency throughout the project document and its annexes (e.g., no risks were identified for the principle "access and equity" but the text provided in the assessment column contradicts the risk screening).</p>	<p><b>CAR5:</b> Table 19 (currently, 'Table 21: Risk screening of the project at design stage using the 15 principles of the AF's ESP and the checklist of environmental and social principles' has been revised to ensure consistency.</p>
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	<b>Yes.</b>	-
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	<p><b>Yes.</b> The project management fee amounts to 8.5% of the total project budget before the fee, however the figures need to be a rounded number with no decimals.</p> <p><b>CAR6:</b> Please remove decimals in the IE fee (and budget tables) across the project proposal.</p>	<p><b>CAR6:</b> Decimals have been removed in the IE fee and across the Project proposal.</p>
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	<p><b>Yes.</b> The project execution costs amount to 9.5% of the total project budget, however the figures need to be a rounded number with no decimals.</p> <p><b>CAR7:</b> Please remove decimals in the Execution costs figures and all budget tables across the project proposal.</p>	<p><b>CAR7:</b> Decimals have been removed in the Execution costs figures and all budget tables across the Project proposal.</p>
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	<b>Yes.</b>	-
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	<p><b>Yes.</b> The implementation arrangements include a clear description of the roles and responsibilities of the implementing entity as well as any executing entity and the organizations involved in the project. In addition, the District and Divisional level project support unit and the</p>	-

		village level committees will include representatives from women groups.	
	2. Are there measures for financial and project/programme risk management?	<p><b>Yes, but needs revisions.</b></p> <p>The proposal identifies all major risks, consider their significance, and include a plan of monitoring and mitigating them, however the risk category is not provided.</p> <p><b>CAR8:</b> Please include risk-category information in the table (i.e., financial, environmental, social, institutional).</p>	<b>CAR8:</b> Risk-category included, please refer 'Table 14: Risks and Mitigation Measures' pages 36 in the 'TRACK' version for details.
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	<p><b>Not adequate.</b></p> <p>The environmental and social management plan (ESMP) does not include allocated roles and responsibilities for its implementation, budget provisions or arrangements for the IE to supervise the EE for its implementation. The proposal includes provision for the establishment of an accessible and meaningful grievance mechanism, which will be further defined at project inception stage.</p> <p><b>CAR9:</b> Please amend the ESMP including:</p> <ul style="list-style-type: none"> <li>- clear roles and responsibilities for its implementation;</li> <li>- opportunities for consultation and adaptive management;</li> <li>- budget provisions, as needed, for its implementation (these need to be reflected in the budget table and in the M&amp;E plan);</li> <li>- clear monitoring and evaluation arrangements for ESP compliance;</li> </ul>	<b>CAR9:</b> Please refer 'Table 28: Monitoring Arrangement and Roles/Responsibilities' pages 72 and 73 in the 'TRACK' version for details.
	4. Is a budget on the Implementing Entity Management Fee use included?	<p><b>Yes.</b></p> <p>The budget table includes a breakdown of the Implementing Entity Management Fee.</p> <p><b>CAR10:</b> Please ensure that there are no decimals.</p>	<b>CAR10:</b> Decimals have been removed.
	5. Is an explanation and a breakdown of the execution costs included?	<p><b>Yes.</b></p> <p>The budget table includes a breakdown of the Execution costs.</p>	

		<p><b>CAR11:</b> Please ensure that there are no decimals and that the figures add up and match across the tables – components table vs. budget vs. disbursement table.</p>	<p><b>CAR11:</b> Corrected, please refer Tables 15 and 17 to 20.</p>
	<p>6. Is a detailed budget including budget notes included?</p>	<p><b>Not adequate.</b> The proposal includes a detailed budget with budget notes; however, these do not indicate the break-down of costs at the activity level.</p> <p><b>CAR12:</b> Please include budget notes with the breakdown of information and costs at activity level.</p> <p><b>CAR13:</b> Please allocate adequate resources in the project/programme budget for gender-responsive implementation (i.e., gender and environmental and social safeguard specialist)</p> <p><b>CAR14:</b> Please remove decimals, making sure that all the figures are rounded to a whole number and ensure consistency across different tables.</p>	<p><b>CAR12:</b> Included, please refer Table 19.</p> <p><b>CAR13:</b> Included, please refer Please Tables 15 and 17 to 20.</p> <p><b>CAR14:</b> Corrected, please refer Tables 15 and 17 to 20.</p>
	<p>7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&amp;E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?</p>	<p><b>Not adequate.</b> The proposal includes a budgeted M&amp;E plan (table 13) which includes provisions for mid-term and terminal evaluations, however this is not in compliance with the Gender Policy.</p> <p><b>CAR15:</b> Please revise the M&amp;E Plan to ensure addressing the management of the environmental and social risks identified.</p> <p><b>CAR16:</b> Please ensure that the figures add up and match across the tables – components table vs. budget vs. disbursement table and that the use of decimals is avoided.</p>	<p><b>CAR15:</b> M&amp;E Plan revised accordingly, please refer Table 15, page 38 in the 'TRACK' version for details.</p> <p><b>CAR16:</b> Decimals deleted, and consistency ensured please refer Tables 15 and 17 to 20.</p>
	<p>8. Does the M&amp;E Framework include a breakdown of how implementing entity IE fees will be utilized in the supervision of the M&amp;E function?</p>	<p><b>Yes, but needs revisions.</b> The proposal includes an M&amp;E plane (table 13); however, the numbers include decimals.</p> <p><b>CAR17:</b> Please ensure that the figures add up and match across the tables – components table vs. budget vs. disbursement table and remove all decimals.</p>	<p><b>CAR17:</b> Decimals deleted, and consistency ensured please refer Tables 15 and 17 to 20.</p>



	<p>9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?</p>	<p><b>Yes, but needs revisions.</b></p> <p>The project results framework includes quantified expected results with some targets that are gender responsive and disaggregated by sex.</p> <p><b>CAR18:</b> Please ensure consistency of indicators and targets in between the project RF and the Gender Action Plan.</p> <p>As mentioned above, the proposal includes a table showing its alignment with the Fund's RF, however table 4 and 11 present inconsistencies and need to be revised (see <b>CAR4</b>). In addition, the proposal does not include any core indicators.</p> <p><b>CAR19:</b> Include tables with two core indicators, the "Number of beneficiaries including estimations for direct and indirect beneficiaries" and at least another one, and all those that apply, from: (1) Early Warning System; (2) Assets Produced, Developed; Improved, or Strengthened; (3) Increased income, or avoided decrease in income or (4) Natural Assets Protected or Rehabilitated. See this document for the methodologies to report on core indicators:</p>	<p><b>CAR18:</b> Indicators have been revised. Please see Table 16.</p> <p>Please refer <b>CAR4</b>.</p> <p><b>CAR19:</b> Indicators have been revised. Please see Table 16.</p>
	<p>10. Is a disbursement schedule with time-bound milestones included?</p>	<p><b>Not adequate.</b></p> <p>The disbursement schedule does not include the tranches to be disbursed on a yearly basis.</p> <p><b>CAR20:</b> Please amend the disbursement schedule including the tranches to be disbursed. Please use the disbursement table template (<a href="https://www.adaptation-fund.org/wp-content/uploads/2017/08/Disbursement-schedule-template-3Aug2017.xlsx">https://www.adaptation-fund.org/wp-content/uploads/2017/08/Disbursement-schedule-template-3Aug2017.xlsx</a>). The figures need to add up and match across the tables – components table vs. budget vs. disbursement table, and the use of decimals should be avoided.</p>	<p><b>CAR20:</b> Included, please refer Table 20.</p>



## ADAPTATION FUND

# PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

## PART 1: PROJECT/PROGRAMME INFORMATION

Project/Programme Category	Regular
Country/ies:	<b>Sri Lanka</b>
Title of Project/Programme:	Build resilience to climate change and climate variability of vulnerable communities in Mullaitivu District of Sri Lanka
Type of Implementing Entity:	<b>Multilateral (International Organisation)</b>
Implementing Entity:	<b>United Nations Human Settlements Programme (UN-Habitat)</b>
Executing Entity/ies:	<b>National level</b> Ministry of Environment  <b>Community level</b> Community Based Organisations in the target locations
Amount of Financing Requested:	<b>USD 2,000,000</b>

### Project Summary:

- To improve climate related socio-economic outcomes in the targeted fishing and agricultural communities through the implementation of community-based adaptation solutions.
- To support climate resilient development and increase institutional and community capacity to adapt to the changing and variable climate.

This project is organised under two strategic components:

- Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District, and
- Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.

Components		Budget (USD)
Component 1	Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District.	1,468,205
Component 2	Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.	200,000

*\*Please refer Table 16: Detailed budget for details.*

## Project/Programme Background and Context:

### Geography of Sri Lanka and Mullaitivu District

Sri Lanka is an island located at the tip of Indian subcontinent. The island covers a total area of 65,610km<sup>2</sup> of land area including 2,905km<sup>2</sup> of inland water bodies. Maximum width from east-to-west is 240km and length in north-south direction is 435km. Located between 5055' to 9050' North and 79042' to 81053' East, the island has a humid tropical climate. Extensive faulting and erosion over time have produced a wide range of topographic features with three distinguishable elevation zones within the island: the central highlands, the plains, and the coastal belt. All major perennial rivers originate in the highlands spreading in a cartwheel fashion from the centre towards the coast. Most of the island's surface consists of plains located between 30 and 200m above mean sea level. The coastal belt around the country extending up to about 30m above mean sea level consists of scenic sandy beaches indented by bays and lagoons with 1,600km long coastal stretch, with roughly 30% of the estimated population of over 22 million living in coastal areas.

Mullaitivu District is one of the newly created Districts in Sri Lanka in 1979 which is located on the eastern side of the Northern Province of Sri Lanka and is covered by Kilinochchi, Mannar<sup>1</sup>, Trincomalee and Vavuniya Districts with the sea bordering the East. It covers land area approximately 2,516.9km<sup>2</sup> (including forest area excluding large inland water). It is located approximately 340km northeast of Colombo This District and accounts for 3.8% of the country's total area. The Mullaitivu District has five (5) Divisional Secretariat (DS) Divisions, Manthai East, Maritimappattu, Oddusuddan, Puthukkudiyiruppu, Thunukkai and Welioya with 70km of coastal belt and four (4) lagoons namely Kokkulai, Nayaru, Nanthikadal and Mathalan. There are 127 Grama Niladari (GN) Divisions and 624 villages.

Approximately 64.1% of the total land area in the Mullaitivu District consists of forest, agriculture covers nearly 16.9%, range land accounts for 5.2% another 8.7% constitutes of water and homestead and build-up land accounts for 5.1%.

<sup>1</sup> Annual Performance Report (2019). District Secretariat, Mullaitivu District.

### National climate change scenarios

Sri Lanka is recognised as vulnerable to climate change impacts and ranked 100<sup>th</sup> out of 181 countries in the 2017 ND-GAIN Index.<sup>2</sup> Empirical studies have shown that 96% of the disasters in Sri Lanka are caused by climate, such as flooding, droughts, landslides and extreme winds and is considered as a country with high climate risk (Figure 1). According to the Global Climate Risk Index, 2018, Sri Lanka was ranked the second most climate change affected country in 2017.<sup>3</sup>

Empirical studies have shown that extreme heat threatens human health and living standards, particularly for outdoor labourers in urban areas without adequate cooling systems; this will particularly impact communities in Sri Lanka's Northern region. In addition, there is also potential for adverse implications to Sri Lanka's large tourism sector. Temperature rise is likely to put downward pressure on agricultural yields, including key staples such as rice, and may impact negatively on national and household food security.<sup>4</sup> The current rate of sea level rise in coastal areas of Asia is reported to be 1-3 mm/year which is marginally higher than the global average. However, the specific rate of rise in seas immediately surrounding Sri Lanka is not known.<sup>1</sup>

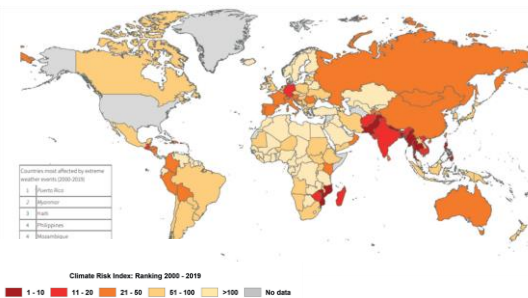


Figure 1: World Map of the Global Climate Risk Index 2000 – 2019<sup>5</sup>

The World Bank Group and the Asian Development Bank (2020) emphasise that without adaptive action, the projected increase in the frequency and intensity of extreme precipitation events may put lives, livelihoods, and infrastructure at risk through their link with riverine flooding, flash floods, and landslides. Moreover, increased incidence of flooding experienced by Sri Lanka also brings the potential for enhanced disease transmission, an area demanding further research and disaster risk reduction efforts. Projected changes are expected to impact on Sri Lanka's poorest and most marginalised communities most strongly, exacerbating poverty and inequality.<sup>6</sup> Estate, rural and urban settlements will have to confront and adapt to these extreme events and the associated physical risks as such extreme weather events induced by changes in climate will certainly alter livelihoods further.

### Current climate in Mullaitivu District

The Northern Province of Sri Lanka is considered a significant climate vulnerable region of Sri Lanka<sup>7</sup> and Mullaitivu District is one of the five administrative districts of the Northern Province. Mullaitivu District belongs to the Dry Zone (Figure 2) which has four (4) agro-ecological regions and falls under the Dry Zone with bimodal rainfall pattern. Average annual rainfall varies from 1300mm to 2416mm. Temperature range from 23.0°C to 39.30°C. During Northeast Monsoon from early October to January get high rainfall leading to floods and annual temperature is low during this period. Meteorological conditions such as rainfall, temperature, wind and sunshine have changed considerably in their intensity, term and duration over recent decades. With the changed weather patterns, the intensity of natural hazards such as floods, cyclones and droughts have risen also increasing the vulnerability.

Mullaitivu District regularly experiences droughts, floods, strong winds and lightning and being a coastal area is open to the threat of coastal hazards. The salinity of water is increased during the drought period with inundations, saltwater intrusion, resulting in lack of drinking water and water for agriculture, pollution of waterways, wells, decreasing agricultural crop yields, seasonal increases in waterborne diseases and increased soil erosion from heavy rainfall events. These have caused significant loss to property, agricultural land, irrigation canals and built infrastructure etc. on a number of occasions over several years.<sup>8</sup>

<sup>2</sup> World Bank Group and Asian Development Bank (2020). Climate Risk Country Profile: Sri Lanka. <https://www.adb.org/publications/climate-risk-country-profile-sri-lanka>

<sup>3</sup> Germanwatch (2018). Global Climate Risk Index 2018: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018.

<sup>4</sup> Ibid

<sup>5</sup> Ibid

<sup>6</sup> Germanwatch (2018). Global Climate Risk Index 2018: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018.

<sup>7</sup> UN-Habitat (2015). *Mullaitivu. Disaster Risk Reduction and Preparedness Plan: Towards a Sustainable and Resilient City*. UN-Habitat, Sri Lanka.

<sup>8</sup> Ibid.

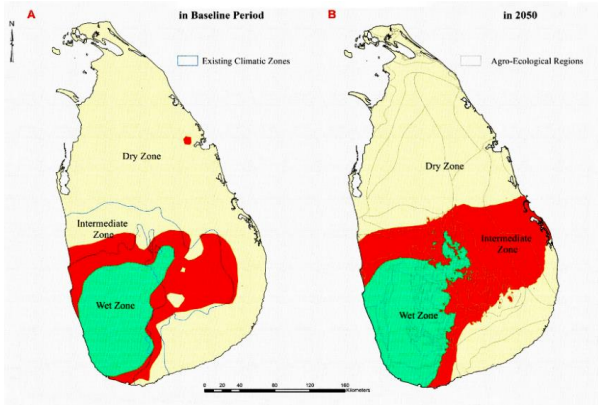


Figure 2: Changes in climatic zones boundaries of Sri Lanka<sup>9</sup>

The Mullaitivu District experiences inundation, coastal erosion and degradation of shorelines, salinisation of estuaries and freshwater aquifers, and changes to and migration of coastal ecosystems and habitats. During the monsoon rains, significant parts of the Mullaitivu gets inundated, and conversely, dries up during the dry period (Figure 3) and also experiences saltwater intrusion that increases salinity levels in lagoons affects marine fish breeding grounds and habitats, resulting in reduced quantity and quality of catch and adverse impacts on fisheries livelihoods. Warnings are issued to Mullaitivu District during the Northeast Monsoon Season (NEMS) – December, January and February and Second Inter Monsoon Season (SIMS) – October and November to avoid the severe impacts due to flood occurrences.<sup>10</sup> Mullaitivu District is considered as one of the districts with a very high vulnerability to climate change and is adversely affected by recurrent disasters, particularly the annual monsoons (Figure 4). According to UNDRR, Sri Lanka is highly vulnerable to climate change due to its low elevation and high dependence on the ecological systems<sup>11</sup> and agriculture sector is expected to suffer the highest costs, especially in districts such as Anuradhapura, Jaffna and Mullaitivu in which communities rely on farming activities<sup>12</sup>.

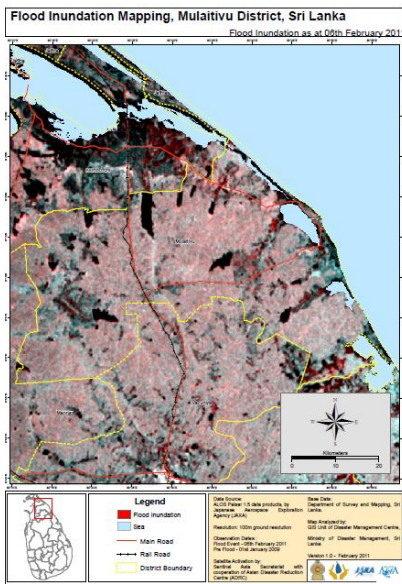


Figure 3: Inundation Map, Mullaitivu District<sup>13</sup>

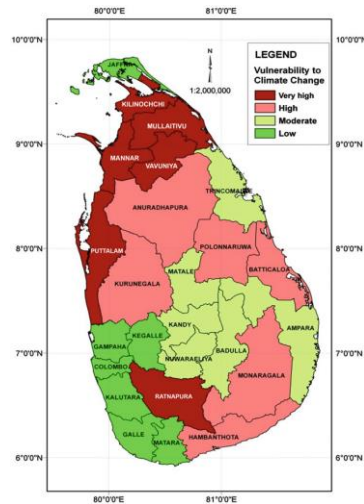


Figure 4: Vulnerability to climate change<sup>14</sup>

### Socioeconomic context of Mullaitivu District

<sup>9</sup> Manthirithilake, H. (2010). *Environmental Change and Water Security*. Workshop on "Future Earth" Colombo, 18<sup>th</sup> September 2013.  
<sup>10</sup> Nagamuthu, P. and Kandiah, R. (2015). Occurrences of Flood Hazards in the Northern Region of Sri Lanka. *South Asia Journal of South Asian Studies* 3 (3)(2015):363-376.  
<sup>11</sup> UNDRR (2019). *Disaster Risk Reduction in Sri Lanka: Status Report 2019*. Bangkok, Thailand, United Nations Office for Disaster Risk Reduction (UNDRR), Regional Office for Asia and the Pacific.  
<sup>12</sup> Wickramasinghe, K. (2019). *Talking Economics. Linking Disaster Risk Management into Economic Policy Planning in Sri Lanka*, 13 March.  
<sup>13</sup> Disaster Management Centre, 2019.  
<sup>14</sup> Punyawardena, R., Dissanaika, T. and Mallawatantri, A. (2018). *Spatial variation of climate change induced vulnerability in Sri Lanka An analysis of the components of vulnerability at district level*.

In 2012 the Mullaitivu District had a population of 92,238<sup>15</sup> with 46,036 male and 46,202 female population. This accounts for 0.454% of the total population in the country. Population density in the District is 36.65 per km<sup>2</sup> and land human ratio is 2.73ha per person (2012).<sup>16</sup> Mullaitivu District has the lowest population density and the highest land human ratio compared to the other Districts of the country. The highest population density (above 45km<sup>2</sup>) reported in Puthukkudiyiruppu DS Division and the lowest population density (Below 14km<sup>2</sup>) reported in Manthai East DS Division.<sup>17</sup>

In the Mullaitivu District (based on statistics of 2014) economically active group (labour force) age 15 - 59 about 67% (83,852) and economically inactive person is age below 15 and above 60 is about 33% (41,328). Among this group 25.5% (31,927) are children under 15 years.<sup>18</sup> The poverty headcount in Mullaitivu District in 2016 was 28.8% and poor households were 24.7% the highest in the Northern Province.<sup>19</sup>

Due to the internal conflict, there has been an increase in widows and women-headed households. There is some qualitative and anecdotal research that suggests that there is an increased incidence of complex mental health and psychosocial problems amongst women who are the head of their house.<sup>20</sup> There is a dearth of information on the number of on the prevalence of disability despite a presumed dramatic rise post-conflict as a result of injury. The examination of 26,847 households in Mullaitivu District revealed that 3,827 (14%) had at least a single person with disability.<sup>21</sup>

Majority of the population is engaged in agriculture sector which includes livestock and fisheries, other occupations are in the industrial activities, employment in the government sector and private establishments. Therefore, the economy of the District mainly depends on agriculture and fishing. Livestock and forestry play a supplementary role in the economic activities. Nearly 23,680 and 4,850 families are engaged in agriculture and fisheries sector respectively. The District has total ha 16,499.3 of suitable land to undertake the paddy cultivation (Irrigation by major tanks – 7,993.9 ha; minor tanks – 4,337 ha; and rainfed – 4,167.9 ha). Three (3) major tanks and 17 medium tanks feed the paddy lands. In addition, there are 228 small tanks used for irrigation.<sup>22</sup>

The coastal belt and the 4 (four) lagoons in the Mullaitivu District are extremely suitable for further developing the fisheries sector. These lagoons are famous for crab and prawn cultivation. There is potential to develop inland fishing in the major and minor tanks. Fishing sector takes an important place in generating employment opportunities and income facilities to a considerable number of families in the Mullaitivu District. According to the District Secretariat, currently, deep-sea fishing is not allowed by concerned authorities.<sup>23</sup>

#### Land use pattern in Mullaitivu District

This District consists of forest land, lands with shrubs, coconut plantation, other agriculture land and water bodies etc. Total land area (including forest area and excluding large inland water bodies) is 251,690 hectares. Approximately 167,850 hectares which is 64.1% of the total land area consists of forest, agriculture covers nearly 44,040 hectares (16.9%), range land accounts for 13,650 hectares (5.2%) another 26,150 hectares constitutes of water and homestead and build up land accounts for 5.1%.<sup>24</sup>

Six (6) major land issues in Mullaitivu District have been identified by the Ministry of Land, (a) Presence of "additional areas that need to be protected"; (b) Presence of low productivity agricultural lands; (c) Presence of low productivity home gardens; (d) Presence of abandoned settlements; (e) Presence of abandoned agricultural areas; and (f) Presence of unutilised land.<sup>25</sup>

#### Climate Change impacts in Mullaitivu District

These impacts include rising temperatures, which are expected to hit Sri Lanka's most important sectors, like tourism, commercial agriculture, and manufacturing, the hardest. On top of this, increased incidence of disease transmission and natural disasters will make the country vulnerable to unexpected catastrophes. The National Adaptation Plan for Climate Change Impacts in Sri Lanka (2015 – 2025) has identified nine (9) key vulnerability sectors, namely, food security, water, coastal sector, health, human settlements, biodiversity, tourism and recreation, export development and industry- energy-transportation.<sup>26</sup> Mullaitivu District regularly experiences droughts, floods, strong winds and lightning and the coastal areas of the District is open to the threat of coastal hazards. The District has been declared by several government and non-government agencies as a disaster-prone and highly vulnerable to multiple disasters due to its physical, socio-economic and environmental situation.<sup>27</sup>

#### Food security (Agriculture and fisheries)

As temperatures rise, and extreme weather events become more frequent and more severe, vulnerable communities in Mullaitivu District are struggling to cope. Communities have adapted to natural 'climate variability' over centuries, however, the rapid changes in climate and extreme events are beyond their coping capacity. Agriculture sector, including fisheries and aquaculture is one of the sectors most vulnerable to climate change, a thorough understanding of its impact is critical in formulating informed and effective adaptation strategies. Empirical studies have shown that the rise in extreme weather conditions have found to increase prolonged droughts and flash floods and these changes have directly and indirectly affected the agriculture sector in Sri Lanka, thus imposing barriers to economic growth and national food security.<sup>28</sup> The impacts of climate change on the agriculture sector in Mullaitivu District are diverse and severe. Climate change impacts and vulnerabilities vary by regions as the country is very diverse in its agro-ecology.<sup>29</sup> However, it has been alarmed that, already dry regions such as Northern (where Mullaitivu District belongs to), and Eastern Provinces are expected to lose large portions of their agriculture with predicted future warming trends.<sup>30</sup>

<sup>15</sup> DCS (2012). Statistical Handbook. Census of Population & Housing, 2011. Department of Census & Statistics, Sri Lanka.

<sup>16</sup> Ibid

<sup>17</sup> Ministry of Lands (2016). LAND USE PLAN MULLAITIVU DISTRICT. Implementations of the Recommendations given by the Lessons Learnt and Reconciliation Commission (LLRC). Land Use Policy Planning Department, Ministry of Land, Sri Lanka.

<sup>18</sup> Ibid

<sup>19</sup> World Bank (2018). Shadows of Conflict in Northern and Eastern Sri Lanka Socioeconomic Challenges and a Way Forward. World Bank Group, Washington DC.

<sup>20</sup> Devakumar, D., Palfreyman, A., Uthayakumar-Cumarasamy, A., Ullah, N., Ranasinghe, C., Minckas, N., Nadkarni, A., Oram, S., Osrin, D. & Jenevieve Mannell (2021). Mental health of women and children experiencing family violence in conflict settings: a mixed methods systematic review. *Conflict and Health*, 74(2021).

<sup>21</sup> Ministry of Health, Indigenous Medicine and Probation & Childcare Services, Northern Province, Sri Lanka (2016). Preliminary Identification Survey for Disabilities & Women Vulnerabilities in Northern Province. Department of Foreign Affairs and Trade (Government of Australia) and the Asia Foundation.

<sup>22</sup> Annual Performance Report (2019). District Secretariat, Mullaitivu District.

<sup>23</sup> Ibid

<sup>24</sup> Ibid

<sup>25</sup> Ministry of Lands (2016). LAND USE PLAN MULLAITIVU DISTRICT. Implementations of the Recommendations given by the Lessons Learnt and Reconciliation Commission (LLRC). Land Use Policy Planning Department, Ministry of Land, Sri Lanka.

<sup>26</sup> Ministry of Mahaweli Development and Environment (2015). National Adaptation Plan for Climate Change Impacts in Sri Lanka. Climate Change Secretariat/Ministry of Mahaweli Development and Environment, Sri Lanka.

<sup>27</sup> UN-Habitat (2015). *Mullaitivu. Disaster Risk Reduction and Preparedness Plan: Towards a Sustainable and Resilient City*. UN-Habitat, Sri Lanka.

<sup>28</sup> Easwaran, R. Climate Change Impacts and Adaptation in the Agriculture Sector of Sri Lanka: What We Learnt and Way Forward. Handbook of Climate Change Communication: Vol. 2 pp 97-110.

<sup>29</sup> Punyawardena B.V.R., Dissanayaka T., Mallawatantri A. (2013) Vulnerability of Sri Lanka to climate change—monograph. Department of Agriculture, Peradeniya.

<sup>30</sup> Seo SN, Mendelsohn R, Minasinghe M (2005) Climate change and agriculture in Sri Lanka. A Ricardian Valuation. *Environ Dev Econ* 10:581–596 Cambridge University Press UK.

Increasing rainfall variability and increasing heavy intense rains (>25 mm h<sup>-1</sup>) will wash away the fertile topsoil in the arable lands.<sup>31</sup> Meanwhile, increasing temperatures could deplete soil organic matter, thus lead to soil fertility degradation and loss of production potential of soils especially in districts like Mullaitivu which are in the Dry Zone of Sri Lanka. Tropical smallholdings are already suffered by low soil fertility, top-soil erosion, sub-optimal crop management and subsistence farming conditions<sup>32</sup> where farmers indiscriminately use synthetic agro-chemicals as a strategy to maintain productivity.<sup>33</sup>

As observed, temperature and water availability affected by climate change remain key factors in determining crop growth and productivity leading to reduced crop yields. Climate-induced changes in insect pest, pathogen and weed population dynamics and invasive have compound such effects, affecting food supply, altering social and economic stability of the communities. Adaptation is considered a key factor that will shape the future severity of climate change impacts on food production.

In addition, farm animal production, fisheries and forestry also seem to be negatively affected by climate change. Sea level rise as a result of global warming, poses another threat to coastal agricultural areas such as Mullaitivu District due to inundation and salinity development<sup>34</sup>.

#### **Water resources**

The surface water potential is the lowest in the Northern and Eastern Provinces (dry zone). The dry zone is highly vulnerable to water shortages. According to Disaster Management Centre, over 337,000 people across 8 (including Mullaitivu District) out of 25 districts in Sri Lanka Sri Lankan districts are facing a water crisis due to dry spells and sea water intrusion into surface water. Lack of water scarcity, further exacerbated by climate change have contributed to the under utilisation of available land in the Mullaitivu District.<sup>35</sup> The decline in rainfall, particularly in the Dry Zone, combined with an increase in temperature and evapotranspiration and soil moisture deficit will have serious impacts on the water resources<sup>36</sup> of the Mullaitivu District.

Physical vulnerabilities of decrease in water resources in Mullaitivu District include—regular fluctuation of water availability in major and medium reservoirs; rapid dry out of minor irrigation facilities; poor and disturbed flow in streams; decreased quality of water due to high salinity; and depletion of ground water sources.<sup>37</sup> Contributing factors include—increased day and night air temperature; increased evaporation and evapotranspiration; regular and extended dry spells; increased frequency and severity of droughts; irregular/erratic changes in established rainfall patterns<sup>38</sup> that is observed in the Mullaitivu District. In addition, saltwater intrusion and inundation of low-lying areas observed in Mullaitivu District have led to decline in water quality due to increased salinity; increased coastal erosion; damage to coastal habitats (estuaries and lagoons, mangroves, salt marshes, beaches, sand dunes, coral reefs etc.) and effects on river mouths.

In addition, Mullaitivu is one of the Districts with socioeconomic resilience to disasters is less than or equal to 30% (other Districts include Trincomalee and Batticaloa), indicating that the average resident of Mullaitivu District struggles to cope with and recover from shocks when they occur. This struggle results in a lower likelihood of recovery in the long-term, and is due to a complex of factors, such as, poverty incidence, diversity of income sources, financial inclusion, and social protection enrollment, the net effects of which, wellbeing losses are designed to measure.<sup>39</sup>

#### **Recommended adaptation interventions**

1. Climate change adaptation measures are constrained by financial barriers, socio-cultural barriers, institutional barriers, technological barriers and a lack of information on climate change characteristics. Therefore, support is required through provision of funding, technical inputs, assistance in planning and coordination, community empowerment, extension initiatives aimed at enhancing social networks within communities, awareness creation etc. in order to overcome the barriers.
2. Climate change continue to affect agricultural productivity in Mullaitivu District (crops, farm animals, forestry and fisheries) through increasing temperatures, rainfall variability and increasing extreme weather events, while agricultural productivity has to be increased to cater ever increasing demands and living standards of people. However, it is observed that the implementation of field level adaptations is far below the rate of increasing trends of climate change aspects. Therefore, the need to strengthen farm level adaptations which can empower the coping capacity of farmers to the negative impacts of climate change. Experiences from the climate-smart agriculture and conservation agriculture programmes could be taken into consideration.
3. Development of sustainable groundwater, promotion and adoption of micro-irrigation technologies, watershed management, restoration of the ancient/large/medium/small tanks, wastewater reuse, increasing water use efficiency and change of allocation practices are other adaptation options under consideration in the water resources sector.
4. The current trends in climate change and disaster risks call for enhanced and coherent adaptive action in both areas by generating more efficient and effective preparedness, response and recovery processes while making more efficient use of financial and human resources; Mangroves in Nandikadal, Nayaru and Kokkilai estuaries (1,040 ha) in the Mullaitivu District<sup>40</sup> have been vital for the protection of the coast and the people who live around them. Mangroves form a green barrier that can hold off coastal erosion, storm surges, and even tsunamis, and create a unique environment for fish, birds, reptiles, amphibians and crustaceans and are sources of wood, fiber, charcoal, and ingredients for cosmetics, perfumes, pharmaceuticals, and tanneries. Despite their unique ecological contributions, mangroves are being destroyed and degraded due to prawn farming, unplanned hotel development (tourism), settlements, logging, agriculture, and pollution.
5. Heavy rains experienced leading to flooding/inundation and waterlogging has had a toll on sanitation infrastructure, affecting the health and hygiene of communities
6. Climate change communication will support appropriate decision making, planning and implementation of adaptation practices.

Attempts have been made and simple tools have been developed to assist communities to cope with and adapt to extreme climate change. However, poorly planned participatory processes and the lack of context-specific approaches in these tools are obstacles when aiming at strengthening the resilience of vulnerable sectors of Mullaitivu District. Given the vulnerability to climate change induced natural disasters, poor socioeconomic and demographic statistics, and the lack of socioeconomic resilience to disasters, Mullaitivu District has been selected under the proposed project.

<sup>31</sup> Marambe B, Punyawardena R, Silva P, Premalal S, Rathnabarathie V, Kekulandala B, Nidumolu U, Howden M (2015). Climate, climate risk, and food security in Sri Lanka: the need Climate Change Impacts and Adaptation in the Agriculture Sector.

<sup>32</sup> De Costa WAJM, Sangakkara UR (2006) Agronomic regeneration of soil fertility in tropical Asian smallholder uplands for sustainable food production. *J Agric Sci* 144:111–133.

<sup>33</sup> Easwaran, R. Climate Change Impacts and Adaptation in the Agriculture Sector of Sri Lanka: What We Learnt and Way Forward. Handbook of Climate Change Communication: Vol. 2 pp 97-110.

<sup>34</sup> Easwaran, R. Climate Change Impacts and Adaptation in the Agriculture Sector of Sri Lanka: What We Learnt and Way Forward. Handbook of Climate Change Communication: Vol. 2 pp 97-110.

<sup>35</sup> Ministry of Lands (2016). LAND USE PLAN MULLAITIVU DISTRICT. Implementations of the Recommendations given by the Lessons Learnt and Reconciliation Commission (LLRC). Land Use Policy Planning Department, Ministry of Land, Sri Lanka.

<sup>36</sup> De Silva, C. (2019). "Impacts of Climate Change on Water Resources in Sri Lanka". Loughborough University.

<sup>37</sup> Ministry of Mahaweli Development and Environment (2015). National Adaptation Plan for Climate Change Impacts in Sri Lanka. Climate Change Secretariat/Ministry of Mahaweli Development and Environment, Sri Lanka.

<sup>38</sup> Ibid

<sup>39</sup> World Bank (2019). Socioeconomic Resilience in Sri Lanka: Natural Disaster Poverty and Wellbeing Impact Assessment. Climate Change Group.

<sup>40</sup> Department of Forest.

### Selected locations

In the current context, the project focuses on selected GN Divisions in three (3) DS Divisions of Mullaitivu District, namely, Maritimpeattu, Puthukkudiyiruppu and Welioya (the 3 DS Divisions cover almost 68% of the population), Annex 3: Maps of Location, in discussion with the relevant stakeholders (Annex 4).

**Table 1: Population of the DS Divisions in Mullaitivu District (2017)**

DS Division	Number of GN Division	Number of Villages	Population	Area km <sup>2</sup>
Maritimpeattu	46	219	42,904	728
Puthukkudiyiruppu	19	179	41,052	350
Oddusuddan	27	114	20,604	618
Thunkkai	20	35	12,613	326
Manthai East	15	68	9,756	494
Welioya	09	17	11,189	Not estimated
<b>Total</b>	<b>136</b>	<b>632</b>	<b>138,188</b>	<b>2,516</b>

### Poverty

Puthukkudiyiruppu DS Division has the highest estimated poverty headcount index in the District, which is 35.66% (8,466 poor people), Maritimpeattu being the second highest, 28.61% (8,096 poor people) and Welioya having estimated poverty headcount index of 18.25% (1,249 poor people).<sup>41</sup>

### Food security

In the three (3) DS Divisions, agriculture sector, including agriculture, livestock and fisheries, still constitute the largest employer, a sector that is expected to suffer the highest costs due to climate change, especially in Mullaitivu District.<sup>42</sup> Changes in rainfall patterns, more frequent and intense storms, flooding and drought are already impacting these communities, making it difficult for them to secure decent livelihoods in the agriculture sector. However, not only agriculture but auxiliary economic activities are also subsistence driven and employment is largely informal and vulnerable in the selected DS Divisions. Although there is a willingness to diversify the production pattern, crop losses are amongst the most frequent impacts of natural hazards. The current socioeconomic condition of these marginalised communities makes them especially vulnerable to the impacts of climate change.

### Health, hygiene and water resources

Extreme heat threatens human health and living standards, particularly for outdoor farming communities; this will particularly impact communities in Northern Province. Increased incidence of flooding also brings the potential for enhanced disease transmission<sup>43</sup> which these communities are vulnerable to. There are 6 Medical Officer of Health (MOH) Divisions functioning in the District, Chronic Kidney Disease of unknown etiology (CKDu) is on the rise in Mullaitivu District due to poor quality of water.<sup>44</sup> The quality of drinking water sources may be further compromised by increased sediment or nutrient inputs due to floods in Mullaitivu District. In addition, changes in precipitation and runoff timing, coupled with higher temperatures due to climate change and saltwater intrusion, may lead to diminished reservoir water quality.

As a result of a lack of access to safe sanitation mainly due to flooding/inundation and waterlogging, the communities of in disaster-affected DS Divisions endure both hardship and physical discomfort. Women and young girls are particularly affected as they are left with little options to maintain privacy and personal hygiene in these conditions exposing them to increased health as well as safety risks. This necessitates an urgent need to develop and design a disaster-resilient toilet with features that will enable toilets to resist flooding/inundation and waterlogging.

### Gender, dependency and disability

As mentioned elsewhere, one of the significant impacts that the internal conflict has had is the increased number of female-headed households (FHH) in the Northern Province including Mullaitivu District. Out of the 5.2 million households in Sri Lanka, an estimated 1.1 million households or 23% of the households are FHH.<sup>45</sup> Of that it is estimated that women head 58,121 households in the Northern Province.<sup>46</sup> According to statistics of 2021, in Puthukkudiyiruppu DS Division 51% are female with a dependent population of 41%. In Maritimpeattu and Welioya DS Divisions the statistics are 44% and 50% (female), and 37% and 40% (dependent population) respectively.<sup>47</sup> Apart from the lack of attitudinal changes regarding the role of women within households and society, the hardships on female have risen due to the loss of male heads of households necessitating socioeconomic support. The Government supports in the form of social security schemes, such as the *Samurdhi* Programme, the Public Assistance Monthly Allowance (PAMA), and disability allowance, provide an important form of assistance to women, especially FHH, but this is not sufficient for communities that are dependent on highly climate change vulnerable sector such as agriculture.

In the current context, the most durable benefits will result from adopting agro-ecological measures that will strengthen the resilience of rural communities. Therefore, the proposed activities will focus on 'Recommended adaptation interventions', which includes, introduction of climate resilient crops, water conservation and harvesting, improving mobility (evacuation routes), sanitation and introducing measures to prevent and control saltwater intrusion to fresh waterbodies and agricultural land. Moreover, the proposed project intends to work with fisher communities in mangrove restoration as community participation is viewed as a key to success in ecosystem restoration. Mangroves will serve as an alternative source of income for the whole community. Moreover, in order to prevent losses and also to increase the margin of income of fisher families, value addition of fish will be introduced. This will not only increase the income of the fisher families, including women and youth, but it will also increase the consumption of fish in one way or the other.

Through the previous work of UN-Habitat, it was recognised that increasing the resilience of the most vulnerable communities is through a participatory, community-led process, based on local priorities, needs, knowledge and capacities, which can then empower people to cope with and plan for the impacts of climate change. The proposed project mainly intends to factor in the potential impact of climate change on livelihoods and vulnerability to disasters by using local and scientific knowledge of climate change and its likely effects. Emphasis will be given to local knowledge includes information about trends and changes experienced by communities themselves and strategies these communities have used in the past to cope with similar shocks or gradual climatic change. Approaches and methods developed in both disaster risk reduction and community adaptation initiatives have demonstrated that for any climate change adaptation interventions to be effective and sustainable, empowering communities is imperative.

<sup>41</sup> DSC (2018). The Spatial Distribution of Poverty in Sri Lanka. Department of Census and Statistics, Sri Lanka.

<sup>42</sup> UNDRR (2019). Disaster Risk Reduction in Sri Lanka: Status Report 2019. Thailand.

<sup>43</sup> World Bank Group and Asian Development Bank (2020). Climate Risk Country Profile: Sri Lanka.

<sup>44</sup> Gobalarajah, K., Subramaniam, P., Jayawardena, U. A., Rasiah, G., Rajendra, S., & Prabagar, J. (2020). Impact of water quality on Chronic Kidney Disease of unknown etiology (CKDu) in Thunukkai Division in Mullaitivu District, Sri Lanka. BMC Nephrology.

<sup>45</sup> Sri Lanka Department of Census and Statistics - Ministry of Finance and Planning. (2013). Household Income and Expenditure Survey 2012/2013. Colombo, Sri Lanka.

<sup>46</sup> United Nations (2018). Sri Lanka, Mapping of Socio-Economic Support Services to Female Headed Households in the Northern Province of Sri Lanka. United Nations, Sri Lanka.

<sup>47</sup> District Secretariat, Mullaitivu District (2021).

Suggestions for addressing multiple threats are, *soft* options, such as awareness raising, planning, political articulation, and professional skills enhancement, to be encouraged immediately at relatively low cost and are reversible. For specific threats, options emphasise change in management practices as pre-emptive measures. Key audiences for this work are communities and Government stakeholders starting to consider priority actions to respond to climate change impacts. The options include, from "defend to co-exist and retreat as impacts become less manageable, and capacity to protect local properties and infrastructure, natural systems, food production, availability of fresh and drinking water and well-being of the local population"<sup>48</sup>. In addition, the proposed project will work with underprivileged e.g., women, the aged, disabled, who are much more vulnerable in terms of obtaining access to safe drinking water (women carry the main responsibility in provision of water needs of the family), housing, loss of livelihoods due to variations of weather induced by climate change.

#### Project/Programme Objectives

- (1) To improve climate related socio-economic outcomes in the targeted fishing and agricultural communities through the implementation of community-based adaptation solutions; and
- (2) To support climate resilient development and increase institutional and community capacity to adapt to the changing and variable climate.

The overall objective of the proposed project: To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District.

#### Project/Programme Components and Financing:

This project is organised under two strategic components:

- (1) Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District, and
- (2) Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.

**Table 2: Project components and financing (Please refer Section A. of 'PART II: PROJECT/PROGRAMME JUSTIFICATION' for details)**

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (USD)
1. Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	1.1 Reduce vulnerability of coastal communities to face risks of climate change by collaborating on (a) measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land through 1km earth bund formation, (b) renovate 15 minor tanks for water storage, drinking and irrigation, (c) construct 20 disaster-resilient toilets and (d) renovate 3km existing evacuation route.	Strengthened livelihoods with increased incomes for vulnerable communities dependent on fishery and agriculture	1,200,000
	1.2 Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in 18 acres of coastal lands.		65,000
	1.3 Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating 1.5km mangroves for improved lagoon fishery.		203,205
2. Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.	2.1 Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.	Improved effectiveness and climate adaptation planning and implementation to increase coping capacity in addressing climate variability	125,000
	2.2 Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities.		75,000
3. Project/Programme Execution cost (9.5%)			175,104
4. Total Project/Programme Cost			1,843,309
5. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable), i.e., Overhead cost (8.5%)			156,691
<b>Amount of Financing Requested</b>			<b>2,000,000</b>

#### Projected Calendar:

**Table 3: Milestones**

Milestones	Expected Dates
Start of Project/Programme Implementation	January 2023
Mid-term Review (if planned)	January 2024
Project/Programme Closing	January 2025
Terminal Evaluation	January 2025

## PART II: PROJECT/PROGRAMME JUSTIFICATION

### A. Project components, focusing on the concrete adaptation activities of the project, and contribution to climate resilience

In Mullaitivu District in 2019, 53% of the families were engaged in agriculture and 14% in fishing, therefore, 67% of the population is solely dependent on a sector that is highly vulnerable to climate change. The impact of climate change on agriculture is generally predicted negative for the entire

<sup>48</sup> USAID Adapting to Coastal Climate Change - A Guidebook for Development Planners, May 2009



sector with significant impacts on paddy sub-sector resulting in significant losses in both quantity and quality. Mullaitivu District has 16,499.3ha of suitable paddy land which are reliant on irrigation from tanks and rainwater and saltwater intrusion has worsened the situation of farmers.

Paddy	Tea	Coconut
<b>Yield:</b> • 0.1-0.5 °C temp increase: 1.2 to 5.9% reduction (Vidamage & Abeygunawardena 1994) • Temp increase + CO <sub>2</sub> increase: 24-39% increase (De Costa et al. 2006) <b>Irrigation Requirement:</b> 13-23% increase in Maha by 2050 (De Silva 2006)	<b>Yield:</b> • 100 mm monthly R/F reduction: 30-80 kg reduction in 'made' tea/ha • Increase in ambient CO <sub>2</sub> concentration to 600 ppm: 33-37% increase (Wijeratne et al. 2007) <b>Spatial Impact:</b> • Cultivations at low and mid elevations more vulnerable (Wijeratne et al. 2007)	<b>Yield:</b> • Production after 2040: not sufficient for local consumption • Increased pest and disease problems - reduce yield (Peiris et al. 2004) <b>Economy:</b> Losses in the range \$32 - \$73 million (Fernando et al. 2007)
<b>Economy: Rs. -11 billion to Rs. +39 billion by 2100 (See et. Al. 2005)</b>		

**Figure 5: Impact on agriculture<sup>49</sup>**  
 (Special note: Tea is not grown in Mullaitivu District)

In 2016, the estimated cost of the damage to the other crops and export crops is Sri Lankan Rupees 331 million and the estimated cost of the loss of the production was Sri Lankan Rupees 1,104 million. Mullaitivu was one of districts with the highest impacts on agriculture.

Coastal zone of Mullaitivu District (70km) is highly vulnerable to the effects of natural disasters and climate change, and impact is strongly felt by the people in the coastal areas who rely heavily on direct natural resource use. Growing development pressure and user conflicts are exacerbated by natural disasters and climate change. As is seen, the majority inhabitants of the coastal zone live in comparative poverty and have poor living standards. Estimates show that the coastal fishery accounts for around 64% of the marine fishery. This in turn provides 91% of the total fish production in Sri Lanka and Mullaitivu District alone produces 6,260Mt,<sup>50</sup> which earns foreign exchange over 6 billion Sri Lankan rupees.<sup>51</sup>

Poverty head count ratio in the Northern, Eastern and Uva Provinces are reported to be higher than the rest of the country, this includes Mullaitivu District as well.<sup>52</sup> Moreover, 34% of the population cannot afford the minimum cost of a nutritious diet.<sup>53</sup>

Climate change induced disasters are annually costing Sri Lanka 50 billion rupees, or around 0.4% of Gross Domestic Product (GDP) in damages, which requires preventive measures to reduce climate risks--On average, Sri Lanka experiences LKR 50 billion (US\$313 million) in annual disaster losses related to housing, infrastructure, agriculture, and relief. Around 32 billion Sri Lankan Rupees of damages are from floods. Cyclones and high winds cause 11 billion Sri Lankan Rupees in losses, while droughts and landslides cause 5.2 billion Sri Lankan Rupees and 1.8 billion Sri Lankan Rupees in damages respectively. Disasters are costly on human lives as well, with the 2017 floods leading to 213 passing away and the 2018 floods leaving another 13 persons dead. The Government provides the thousands who become homeless 1.2 million rupees each to build a house and 0.4 million rupees each to procure land or settle on state-owned land.<sup>54</sup> During the May 2016 floods and landslides, 140 pre-schools were affected. Out of these 73 pre-schools were damaged in Colombo, Gampaha, Kegalle, Ratnapura, Kurunegala and Mullaitivu districts affecting 3,500 students. The damage to preschool buildings, furniture, learning materials, stationery and utensils were estimated at Sri Lankan Rupees 18.4 million. The total damages and losses in Mullaitivu District alone costs Sri Lankan Rupees 476 million; housing, land and settlements sector costing Sri Lankan Rupees 95 million; food security, agriculture, livestock, fisheries sector costing Sri Lankan Rupees 365 million; and transport sector Sri Lankan Rupees 15 million.<sup>55</sup>

To achieve the overall objective of the proposed project-- to support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District, the actions proposed by the project have been designed to target the poorest and most vulnerable people in three (3) selected DS Divisions in the Mullaitivu District. To attain the above, set of soft and hard measures has been proposed to ensure that resilience at the household and community level are strengthened sustainably. The soft measures focus on addressing capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity. All soft measures are designed to support, enhance and sustain the hard investments that the project will make. The hard investments made by the project will all be in small-scale protective infrastructure and ecosystems. These investments have been fully identified.

**Rationale of Component 1:** Component 1 of developing 'resilient, adaptive livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District'. The negative impacts of climate change profoundly affect economies that are primarily driven by climate sensitive sectors, e.g., agriculture sector, including fisheries. In the Mullaitivu District substantial anomalies are seen in rainfall distribution within a season. Late onset of rains, heavy and intense rainfall events, and pronounced dry periods are becoming increasingly common. Such spatial variability is detrimental to crops, especially under rain-fed and minor irrigated conditions. The importance of adaptation measures to support agriculture is well recognised by all stakeholder as communities are already experiencing the effects of climate change on agriculture. In addition, it has been recognised in the National Adaptation Plan for Climate Change Impacts in Sri Lanka (2015 – 2025).

**Identified interventions needs:** The proposed project introduces effective drought, saltwater intrusion, and other preparedness measures to reduce risk levels in Mullaitivu District and increase adaptive capacities and resilience of the most vulnerable sections of the communities. Moreover, it is imperative that local economies are diversified either by expanding climate sensitive sectors or by promoting adaptation measures that increase resilience within the sector. The impacts of climate change on fisheries sector are significant and climate change may have significant impacts on post-harvest activities. Therefore, the proposed interventions under Component 1 mainly focuses on improving resilience (economic resilience included) towards climate change. Agricultural productivity for coastal communities, with women and youth taking a leading role, will be a main activity

<sup>49</sup> Eriyagama, N., Smakhtin, V., Chandrapala, L., Fernando, K. (2010). Impacts of Climate Change on Water Resources and Agriculture in Sri Lanka: A Review and Preliminary Vulnerability Mapping. IWMI Research Report 135. Colombo.

<sup>50</sup> Ministry of Fisheries (2020). Fisheries Statistics 2020. Ministry of Fisheries, Sri Lanka.

<sup>51</sup> Sri Lanka: Managing Coastal Natural Wealth, World Bank 2017.

<sup>52</sup> DCS (2013). Department of Census and Statistics, Household Income and Expenditure Survey 2012/13.

<sup>53</sup> HARTI (2015). Cost of Diet Analysis, 2014.

<sup>54</sup> World Bank (2020). Contingent Liabilities from Natural Disasters: Sri Lanka. World Bank, Washington DC.

<sup>55</sup> Ministry of National Policies and Economic Affairs and Ministry of Disaster Management (2016). Sri Lanka Post-Disaster Needs Assessment. European Union, World Bank and United Nations, Sri Lanka.

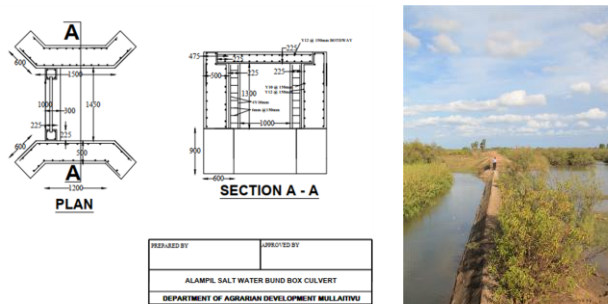
to increase resilience and reduce vulnerability by ensuring food security. Measures to minimise sea water intrusion into freshwater bodies, renovate minor tanks for water storage, improvement of evacuation routes, construction of sanitation facilities, adjusting existing agricultural practices – such as modified cropping patterns, resilient crops (groundnut and coconut), value addition to minimise post-harvest fish losses and rehabilitating mangroves for improved lagoon fishery and developing framework for are proposed.

**Outcome 1:** Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District.

**Output 1.1:** Reduce vulnerability of coastal communities to face risks of climate change by collaborating on (a) measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land through 1km earth bund, (b) renovate 15 minor tanks for water storage, drinking and irrigation, (c) construction of 20 disaster-resilient toilets and (d) renovate 3km existing evacuation routes.

**Activity 1.1.1:** Construction of 1km earth bund with sluice gate with spill arrangement in Irrattai Vaikaal in Puthukkudiyiruppu DS Division to prevent and control saltwater intrusion.

The vulnerability of coastal groundwater resources/coastal aquifers to saltwater intrusion has evolved to become a challenge in Mullaitivu District, an arid and semi-arid climatic region. Overexploitation and mismanagement have increased the potential of saltwater intrusion, which has now negatively affected agricultural yield of coastal crops/plantations through the accumulation of salts causing adverse effects on soils and plants. Soil salinity reduces water infiltration rates, reduces plant growth and yield and decreased quality of crops/plants that reduce the economic attractiveness, thus affecting the income. Therefore, 1km earth bund with sluice gate in Puthukkudiyiruppu DS Division to prevent saltwater intrusion will positively affect the agriculture activities in the area. Surveying has been carried out at the proposed location, and the earth quantity for the formation bund has been estimated using the Longitudinal Section (LS) and Cross Sections (CSs). The barrow location within a close radius has been selected, and the soil quality has been certified as acceptable for earth formation. Very minimal transportation is expected, which will be monitored and regulated through the use of an earth borrowing and transportation permission and a Geological Survey & Mines Bureau (GSMB) permit.



**Figure 6: Design of saltwater intrusion prevention bund (with a photograph of saltwater intrusion prevention bund in Irrattimullivahikal West GN Division in Maritimpeattu DS Division)**

**Activity 1.1.2:** Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, weeding out the bushes, renovation of auxiliary structures and strengthening the tank bund in Maritimpeattu and Puthukkudiyiruppu DS Divisions.

Farmers in Mullaitivu District grapple with weakening and erratic monsoons over the recent years, combined with the menace of groundwater depletion, conserving and sustainably managing water resources has become all the more important. Tank water harvesting and irrigation offer a host of benefits such as replenishing groundwater levels, providing drinking water for rural communities and livestock, crop cultivation, conserving top-soil and harbouring fish. All stakeholders, including farmers urge upscaling of tank restoration as a measure to tackle future droughts and increasing climate resilience.



**Figure 7: Irrigation tanks and channels (to be renovated) with overgrown grasses and bushes in Mulliyawalai GN Division in Maritimpeattu DS Division**

The feasibility studies and preliminary designs with estimations have been completed, and five (5) potential farmer organisations have been identified for the renovation of minor irrigation system. The scope of work mostly involves downstream development, which includes irrigation structure

refurbishment, replacement of farm turnouts in the open channel irrigation systems, and channel renovation. Catchment protection, tank bund strengthening with turbing and rubble packing, and tank access enhancement are all included in the upstream areas.

**Activity 1.1.3:** Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division as well as provision of the early warning system and rescue facilities with the improvement of the causeway in Nayar GN Division in Maritimappattu DS Division.

Adapting to climate change requires a particular focus on disaster risk reduction. Disaster preparedness and response already focus on the effects of weather-related disasters and climate change is likely to change the range, severity and frequency of such hazards. Rather than preparing to respond to the impacts of disasters, it is important to reduce the vulnerability of the communities exposed. Provision of better infrastructure, such as improvement of evacuation routes facilitates adaptation to extreme climatic events faced by the communities in Mullaitivu District.



**Figure 8: Raalkulam in Kallappadu South GN Division, Maritimappattu DS Division and the evacuation centre (temporary safe centre), i.e., Kallappadu G. T. M School**

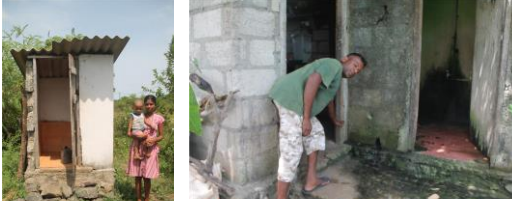
Disaster Management Centre (DMC) has carried out pre-feasibility studies, and the community of Raalkulam has helped to determine the suggested evacuation route. DMC and the community collaborated to identify a causeway restoration, as well as the installation of an early warning system and rescue facilities at Nayar GN Division in Maritimappattu DS Division.



**Figure 9: Raalkulam evacuation path**

**Activity 1.1.4:** Construction of eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at household level and two (2) in common places (evacuation/safe centres used by people during flooding season) for flood-prone/waterlogged/inundated areas and conduct five (5) training sessions on sanitation and hygiene.

The effects of climate change have threatened sanitation systems in Mullaitivu District. For instance, floodwater damage toilets and spread human waste into water supplies, food crops and people's homes. These incidents are now becoming more frequent as climate change worsens, cause public health emergencies and degrade the environment. Climate resilient sanitation systems are able to withstand the climate challenges, but also leverage benefits beyond those of a well-functioning toilet connected to a sanitation system that takes away and deals with human waste. Resilient sanitation systems are mostly important to women and girls. Therefore, 18 sanitation facilities (disaster-resilient toilets) for vulnerable households and two (2) extra toilets in a common space used as evacuation/safe centres during floods in Welioya DS Division will be provided. The implementation of this activity will be done through CBOs. Land tenure documents of beneficiaries will be verified prior to selection. The Medical Officer of Health (MOH) will be contacted to determine the location of the septic tank, which should be distant from any water source, such as a shallow wells.



**Figure 10: Toilets in flood-prone areas in Welioya DS Division**

The eighteen (18) beneficiaries have been selected from two (2) GN Divisions, Janakapura and Kiriibbanwewa GN Divisions. The following criteria have been utilised in the selection of the beneficiaries, (1) Frequency and time duration of inundation of household toilets per year; (2) Availability of land tenure documents to guarantee ownership to the land to ensure sustainability of investment; (3) Current sanitary and hygiene situation. Including dilapidated toilet structure including no security for women and children; (4) Economic status of the family, i.e., whether they are under the poverty line, (5) Family size and situation, e.g., female headed households, families with children under the age of 5 and school going children, elderly, disabled family member etc. based on the poverty data available at the District Secretariat, Mullaitivu. Selection of households was endorsed by the District Secretariat. Grievance Redressal Mechanism (GRM) of UN-Habitat (practiced in community-based projects) is in place to address any grievance that might arise.

**Output 1.2:** Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in 18 acres of coastal lands.

**Activity 1.2.1:** Twenty-five (25) training and capacity building workshops on sustainable land management, water conservation practices and climate change impacts and adaptation strategies in Welioya (10 workshops), Maritimpeattu (8 workshops) and Puthukkudiyiruppu (7 workshops) DS Divisions.

Training and capacity building on aforementioned areas will facilitate both behavioural changes and stakeholder support in climate change adaptation interventions. Not all stakeholders are aware and informed about their vulnerability and the measures they can take to proactively adapt to climate change. Training and capacity building are therefore an important component of the adaptation process to manage the impacts of climate change, enhance adaptive capacity, and reduce overall vulnerability.

**Activity 1.2.2:** Training 250 individuals from vulnerable families (125 individuals in Welioya DS Division, 75 individuals in Maritimpeattu DS Division and 50 individuals in Puthukkudiyiruppu DS Division) on a variety of methods for home garden development with selection of drought-tolerant crop varieties (groundnut and coconut), multi-cropping, adjusting cropping patterns, soil fertility adjustment and agroforestry in selected lands.

Stakeholders, including the community have emphasised the importance of the agriculture sector adapting to climate change, as agriculture and food security are significantly impacted by climate change. Adaptation strategies include changing cropping practices, improving soil fertility, use of improved crop varieties etc. Training on the above will empower farming communities to take appropriate measures to adaptation measures to eliminate negative consequences and determines the nature, quality and strength of climate change adaptation measures, especially in home gardening.

**Activity 1.2.3:** Distribution of equipment (tools) for home gardening and planting material of resilient crops (groundnut and coconut) for 250 individuals from vulnerable families (125 individuals in Welioya DS Division, 75 individuals in Maritimpeattu DS Division and 50 individuals in Puthukkudiyiruppu DS Division).

Provision of tools and planting material will facilitate the poor farmer families to start home gardening. This will also enable establishment of home-based nurseries (where necessary) to ensure a continuous supply of planting material. Regarding the adaptation functions, resilient groundnut and coconut varieties (two varieties of crops with high local demand). Climate change can generate a vicious cycle of increasing poverty and vulnerability, worsening inequality and the already precarious situation of many disadvantaged farmer families in Mullaitivu District. Therefore, increase in income through this activity will reduce the economic vulnerability of poor farmer families.

UN-Habitat through its commitment to Agenda 2030 supports enhancing food security and nutrition. The New Urban Agenda (NUA)<sup>56</sup> of UN-Habitat states that, "We will support the implementation of integrated, polycentric and balanced territorial development policies and plans, encouraging cooperation and mutual support among different scales of cities and human settlements, strengthening the role of small and intermediate cities and towns in enhancing food security and nutrition systems, providing access to sustainable, affordable, adequate, resilient and safe housing, infrastructure and services, facilitating effective trade links across the urban-rural continuum and ensuring that small-scale farmers and fishers are linked to local, subnational, national, regional and global value chains and markets. We will also support urban agriculture and farming, as well as responsible, local and sustainable consumption and production, and social interactions, through enabling and accessible networks of local markets and commerce as an option for contributing to sustainability and food security". The NUA further states that, "We will promote the integration of food security and the nutritional needs of urban residents, particularly the urban poor, in urban and territorial planning, in order to end hunger and malnutrition. We will promote coordination of sustainable food security and agriculture policies across urban, peri-urban and rural areas to facilitate the production, storage, transport and marketing of food to consumers in adequate and affordable ways in order to reduce food losses and prevent and reuse food waste. We will further promote the coordination of food policies with energy, water, health, transport and waste policies, maintain the genetic diversity of seeds, reduce the use of hazardous chemicals and implement other policies in urban areas to maximize efficiencies and minimise waste."<sup>57</sup>

<sup>56</sup> The New Urban Agenda was adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) in Quito, Ecuador, on 20 October 2016. It was endorsed by the United Nations General Assembly at its sixty-eighth plenary meeting of the seventy-first session on 23 December 2016. <https://habitat3.org/the-new-urban-agenda/>

<sup>57</sup> United Nations (2016). New Urban Agenda. Habitat III Secretariat, New York.

**Output 1.3:** Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating 1.5km mangroves for improved lagoon fishery.

**Activity 1.3.1:** Training 100 individuals from vulnerable fisher families (50 from Maritimpeattu DS Division and 50 from Puthukkudiyiruppu DS Division, including women and youth) on proper handling, preservation and value-adding of fish mainly using locally available resources.

The fisher community in Sri Lanka face numerous challenges during their daily fishing operation, which includes, lack of knowledge and skills on fish handling and processing as well as unavailability of quality fishing gears. Due to absence of cold chain facilities, processing, storage, transportation and marketing are often done in very unhygienic conditions which contribute to high post-harvest losses along the fishery value chain. Post-harvest loss of fish is nearly 30% (even 50% at times) along the value chain.<sup>58</sup> In the fisheries sector in Sri Lanka, men and women engage in distinct and often complementary activities that are strongly influenced by the social, cultural and economic contexts they live in. Self-employment initiatives of fisherwomen (through training on value addition) have been well appreciated by the stakeholders towards attaining self-sufficiency in their households. Empowering women to participate fully in economic life across all sectors is essential to build a stronger economies and economic resilience towards coping with climate change.

From an economic viewpoint, there is significant scope for increasing the level of contribution from the fisheries sector through increased output and/or exploiting the potential for value addition.

**Activity 1.3.2:** Training 150 women on establishment of home-based industries and business management (50 from Welioya DS Division, 50 from Maritimpeattu DS Division and 50 from Puthukkudiyiruppu DS Division).

The clear consequences of women's economic marginalisation in poverty-stricken regions such as Mullaitivu District further emphasise the pressing need for gender equality and the economic empowerment of women. Both women and men face challenges in setting up their own home-based businesses, but for women the barriers are often greater and harder to overcome. Traditional socio-cultural factors and limited infrastructure impede women's participation in education/vocational training. As a result, women are often socially/economically excluded from household decision-making. Training will empower women to start their own home-based industries and contribute to the household income and economic resilience.

**Activity 1.3.3:** Provision of relevant equipment for fish value addition to established fisher societies (one in Maritimpeattu DS Division and another in Puthukkudiyiruppu DS Division), facilitate exposure visits.

Value addition initiatives in fish farming refers to the use of production methods, innovation and handling processes intended to improve the farmer's processes and products in order to lead to an enhancement in the customer base for the product and a greater proportion of income accruing to the fish farmer. It goes further to involve the enhancement in the processing, packaging and marketing of the product. Value addition improves the natural and conventional form, quality and appeal of a product subsequently increasing the consumer valuation beginning from the farm level to marketing of finished products. Value addition initiatives have a particular importance in that it offers a strategy for transforming an unprofitable enterprise into a profitable one. Thus, processes connected with value addition initiatives appear to be one of the keys available to unlocking and improving the economic situation of fisher communities. The exposure visits would include tours to producers processing fish for Jadi (salted and smoked fish). These visits would be done in collaboration with the Department of Fisheries Science of University of Jaffna and would also facilitate in identifying best practices that would aid the fisher communities.

**Activity 1.3.4:** Developing business models for long-term functioning and sustainability are developed.

Business model is important because it will provide the community the knowledge of the products and better insight into working of business. A strong business model leads to cash generation and future expansion. The largest advantage of pragmatic business model is the contribution it makes to sustainability of the society and the ability to weather economic storms which is important for sectors highly vulnerable to climate change.

**Activity 1.3.5:** Establishing five (5) community-based mangrove nurseries.

Mangrove restoration requires the cultivation of healthy seedlings and propagules for transplantation. Nurseries established near the restoration sites provide local employment and involvement. The establishment of community-based nursery is the first step to ensure a continuous and localised supply of planting material for mangrove restoration. The activity involves communities from the beginning and allows the co-management of the results. Mangrove nursery practices are designed to assist mangrove seedlings to gradually adapt to the environmental conditions of the restoration sites with minimised mortality rates.

Fisher societies in Nayar GN Division and a CBO in Welioya DS Division have been identified in the above activity with the technical support from the Forest Department and Department of Wildlife.

**Activity 1.3.6:** Replant/rehabilitation of 1.5km of mangrove forests in Irrattai Vaikal in Puthukkudiyiruppu DS Division and Nayar GN Division in Maritimpeattu DS Division to buffer and protect coastal areas from storm surges and sea level rise.

Mangroves offer significant opportunities for climate change adaptation and mitigation, including livelihood support, food security and storm/flood protection. Mangroves may adapt to changes in sea level by growing upward in place, or by expanding landward or seaward. Mangroves, reefs, and fisheries often have a synergistic relationship, based on their connectivity. Areas where mangroves benefit adjacent ecosystems by filtering sediments and pollutants or providing nursery habitats should be granted greater protection. Mangroves also stabilise sediments and trap heavy metals and nutrient rich run-off, thus improving the water quality for seagrasses, corals and fish. In addition to increasing in lagoon fishing due to restored mangroves, alternative livelihood options and diverse income opportunities provided by mangroves allow communities to be flexible to adapt to socioeconomic and climate change.

<sup>58</sup> Kruijssen, F., Tedesco, I., Ward, A., Pincus, L., Love, D., & Thorne-Lyman, A. (2020). Loss and waste in fish value chains: A review of the evidence from low and middle-income countries. *Global Food Security*, Volume 26, September 2020, 100434.



**Figure 11: Proposed site for mangrove replanting**

At the national level, the legal mandate to protect mangroves falls under the Coast Conservation Department, the Forest Department, and the Department of Wildlife Conservation. As mentioned above, technical assistance of the Forest Department will be obtained during Project implementation. Upon completion of the Project, replanted/rehabilitated mangroves areas will be officially handed over to (a) Department of Fisheries and Aquatic Resources for protection under Fisheries and Aquatic Resources Act of 1996 and its subsequent amendments; (b) Department of Forest to monitor the mangrove cover (green cover); and (c) Department of Wildlife to conserve the mangrove areas as part of the annual investment plan and to work with communities.

**Rationale of Component 2:** Component 2 is on 'addressing capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity'. The component underscores the necessity to develop appropriate strategies for integrating locally relevant climate change adaptation priorities that impact on the environment, agriculture and natural resources. As a country that is reliant mainly on rain fed agriculture, and marine fisheries in the coastal belt, increasing climate variability and change are impacting on fishery and agricultural livelihoods as farmers and fisherfolk are unable to survive the multiple stressors or adapt to climate-related risks. The attempt made here will be to strengthen coping capacity through inter-institution collaboration (public and private) and partnerships, water conservation, awareness raising on extreme events, climate resilient fisheries development and agriculture techniques i.e., use drought-tolerant crop varieties, renovating minor tanks, rehabilitating mangroves, provision of alternative livelihood options with required training for women/youth and sharing knowledge and develop framework for implementation of adaptation action. Baseline surveys, maps, preparedness plans, documentation and sharing lessons will address knowledge gaps.

**Identified interventions needs:** The proposed project includes participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans, in addition to sharing knowledge and lessons through documentation of climate resilient actions with increased adaptive capacities. In order to correspond to the complex requirements, the proposed project formulation applied a bottom-up approach, apart from Government stakeholders working at the grassroots level, communities were consulted to understand the most pragmatic adaptation measures, and the recommended activities were built around the identified risks and needs. Emphasis was given on the scalability and the transfer of acquired information and knowledge, and therefore includes information gathering and assessment, capacity-building, awareness-raising activities, and knowledge transfer at each stage (including Component 1). The capacity-building activities and knowledge transfer components associated with each project component enable the absorption and possible replication of project results. The project proposes incorporation of several capacity-building activities, ensuring the timely delivery of knowledge products together with the project implementation. Traditional knowledge acquired by the community over the years is a key asset. Continued community consultations will aid in improving capacities through participatory approaches. The proposed activities, therefore, empower the communities as well as relevant stakeholders.

**Output 2.1.:** Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.

All the hard investments under the proposed Project have already been fully identified and participatory vulnerability/risk assessments were conducted. Proposed output is to identify gaps in terms of adaptive actions (other than identified sub-projects) that need to be addressed in the medium and long-term. Therefore, in line with the National Adaptation Plan for Climate Change Impacts in Sri Lanka (2016 – 2025). Output 2.1 will contribute to the District Climate Action Plan to identify further investment on adaptive actions in coming years and contribute towards 'anticipatory adaptation'<sup>59</sup>. Therefore, this output does not have impact on already identified adaptive actions under this proposal.

**Activity 2.1.1:** Identifying climate change risks and vulnerabilities in the three (3) DS Divisions and documented, including gaps in knowledge and data/information, and identifying and selecting preferred adaptation options with special emphasis on community-based climate change adaptation.

Assessing climate change risks and identifying vulnerabilities facilitate to identify the likelihood of future climate hazards and their potential impacts for communities. It then provides useful/essential recommendations that support future decision-making. This is fundamental for informing the prioritisation of climate action and investment in adaptation.

**Activity 2.1.2:** Three (3) frameworks for implementation of adaptation action (strategy and action plan) in-line with the local and national climate change adaptation strategies and plans developed.

Identification of risks/vulnerabilities and risk prioritisation is paramount in cost-effectiveness of the interventions. Developing a framework will also provide insight into risk interactions for better implementation of adaptation actions. Adaptation strategies can buffer risks and sustain services, but it does require improved cross-sectoral coordination among stakeholders which will also be highlighted in the framework.

**Output 2.2:** Share knowledge and lessons through documentation of climate resilient actions with increased adaptive capacities.

<sup>59</sup> Climate change is an ongoing process. Policy makers can either take decisions in advance anticipating future impacts (anticipatory adaptation) or they can wait till impacts appear (reactive adaptation). Given the uncertainty involved in the whole process of climate change, reactive responses carry an immense risk. Therefore, the National Action Plan (NAP) adopts the principle of anticipatory adaptation.

**Activity 2.2.1:** Conducting 10 participatory dialogues, focused group discussions to deliberate concerns of communities (5 in each DS Division). Communities that are vulnerable to the impacts of climate change need to adapt to increase their resilience. Effective Government policies and plans are a key component of this transition, but they are not sufficient in themselves. Therefore, effective community engagement is key to success in planning for climate change. A changing climate affects us all and is not a problem that Government stakeholders can address independently from the communities affected. Mitigating the causes and adapting to climate change is a shared challenge that can be best addressed through community active community participation and the community being well-informed of the current interventions. In addition, it is important that the community can help each other to better manage and bounce back from such events, that is, to be resilient.

**Activity 2.2.2:** Conduct 6 workshops/seminars to inform the framework for implementation of climate change adaptation actions to relevant stakeholders, with 2 in each DS Division.

Dissemination and communication of the framework should be considered as an integral part to obtain support of all stakeholders, apart from enhancing their comprehension on the work to be done, create a sense of ownership and accountability, in addition to ensuring transparency throughout the Project. This will further facilitate coordination among relevant stakeholders, including the engagement of communities where required.

**Activity 2.2.3:** One (1) video documentary consisting of lessons learnt/experiences, case studies and broader policy interventions developed.

The ultimate purpose of documenting lessons learned is to provide stakeholders with information that can increase effectiveness and efficiency and to build on the experience that has been earned by current climate change adaptation interventions. This process if implemented correctly also allows stakeholders, upon completion of the proposed activities, to apply the knowledge in replicating or on new initiatives.

**Activity 2.2.4:** Conduct at least five (5) periodic media campaigns (print and electronic) at provincial and national levels (in Sinhala, Tamil and English) to improve communication/visibility of climate change adaptation action implemented.

Media plays a significant role in helping communities communicate, including spreading knowledge. With the growing number of climate movements and actions being taken on climate change adaptation, the messages could create more awareness and reach the policymakers at district, provincial and national level.

**Table 4: Project alignment with the Adaptation Fund results framework**

Project Outcome	Project Outputs	Fund Outcome	Fund Outcome Indicator	Fund Output	Fund Output Indicator	Grant Amount
Developed resilient and adaptive livelihoods through improving small-scale infrastructure and ecosystems in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	<p><b>Output 1.1:</b> Reduce vulnerability of coastal communities to face risks of climate change by collaborating on (a) measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land through 1km earth bund, (b) renovate 15 minor tanks for water storage, drinking and irrigation, (c) construction of 20 disaster-resilient toilets and (d) renovate 3km existing evacuation routes.</p> <p><b>Output 1.2:</b> Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in 18 acres of coastal lands.</p> <p><b>Output 1.3:</b> Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating 1.5km mangroves for improved lagoon fishery.</p>	Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets.	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress.	Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability.	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale).	1,468,205
		Outcome 5: Increased ecosystem resilience in response to climate change and variability induced stress.	5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress.	Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability.	5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale).	
		Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted area.	6.1 Percentage of households and communities having more secure access to livelihood assets.	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability.	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies.	
			6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods.		6.2.1. Type of income sources for households generated under climate change scenario.	
		Outcome 1: Reduced exposure to climate-related hazards and threats.	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis.	Output 1.2: Targeted population groups covered by adequate risk reduction systems.	1.2.1. Percentage of target population covered by adequate risk-reduction systems.	
Addressed capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.	<p><b>Output 2.1.:</b> Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.</p> <p><b>Output 2.2:</b> Share knowledge and lessons through documentation of climate resilient actions with increased adaptive capacities.</p>	Outcome 1: Reduced exposure to climate-related hazards and threats.	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis.	Output 1.1: Risk and vulnerability assessments conducted and updated.	1.1. No. of projects/programmes that conduct and update risk and vulnerability assessments (by sector and scale).	200,000
		Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses.	Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities.	3.1 No. of news outlets in the local press and media that have covered the topic	



## B. Economic, social and environmental benefits

The vulnerability of population to climate change impact and climate hazards in Mullaitivu District is extremely high and is ranked high in Sri Lanka. The District has experienced flooding and droughts for a long history, however, the intensification of hazards due to climate change entails a higher magnitude of impact, especially the most vulnerable communities. These communities were directly affected by the internal conflict and as of December 2019, had a resettled population of 138,321, with 31% in Maritimpattu, 30% in Puthukkudiyiruppu and 8% in Welioya. The traditional social settings, the adherence to culture and most importantly the livelihood activities encourage people to remain with the communities and not to give up on their lands—the rate of migration and resettlement in other areas are low. Therefore, this also makes the communities more exposed to the climate change impacts and disasters, increasing their vulnerability as assets are constantly exposed to disasters that have now become frequent.

**Economic:** As mentioned elsewhere, the poverty headcount in Mullaitivu District is the highest in the Northern Province. Destructive impacts of climate change like droughts and floods are the primary culprits behind decreased farming output in Mullaitivu District, effecting food security and nutrition. In addition, flooding and rising sea levels have resulted in saltwater intrusion threatening coastal farmland and fresh water supply. In addition, climate change directly affects the earning capacity of the poorest through its impacts on agriculture, exacerbating uncertainty of the farmers and fisher communities in Mullaitivu District, making it more difficult for them to escape and remain out of poverty. The income from agriculture, including fisheries has primary importance in the three (3) selected DS Divisions in Mullaitivu District, as all communities are engaged in agriculture-dominated rural areas. These vulnerable communities face compounded crises, with climate change compromising the harvest, disruption of market value chains due to COVID-19 pandemic, lack of required fertilizer and the current economic crisis faced by Sri Lanka. Previous work carried out in by UN-Habitat in Mullaitivu District revealed that the decision to adapt to climate change in agriculture depends on the availability of resources (mainly cultivable land and water), experience (knowledge gained over the years) and availability of extension services and cooperative societies. Creating a system that is more climate resilient through improved adaptation actions as proposed in the project will facilitate substantial ancillary effects, therefore, the adaptation actions yield benefits other than direct financial benefits.

Several new and innovative approaches are adopted in this project to help fishers and smallholder farmers in improving their production. Applying a participatory approach to collaborate with state and private sector as well as communities, empower stakeholders in autonomous decision making will be implemented. Building stakeholder capacity in particular in adopting new technology such as heat tolerant crop varieties and seeds, water management, and by planning and application of new techniques (i.e., value addition techniques) by sharing of knowledge from other successful initiatives both locally and other countries in the region such as Bangladesh, Pakistan and India would be new thinking. Transparent technology infusion would also encourage acceptance and understanding among farmers who have been left out of these processes so far. With the close collaboration of relevant public and private sector agencies better climate forecasting and early warning systems can be designed and disseminated at the earliest possible to reduce loss and damages from extreme weather conditions (i.e., stormy weather resulting in increased risk for fisherfolk in Maritimpattu DS Division). Blending in traditional knowledge, promoting women as champions, adopting low-tech solutions in the absence of knowledge of adaptation technologies at present related to agriculture and coastal protection, will be approaches adopted to mitigate climate shocks felt by the poor in the three (3) DS Divisions.

**Social:** Empirical evidence has shown that climate change is deeply intertwined with patterns of inequality in Sri Lanka, especially Mullaitivu District where the most vulnerable farmer/fisher communities bearing the brunt of climate change impacts, yet they contribute the least to the crisis. It is critical that communities are brought along in the decision-making process, which requires transparency and access to information. Moreover, stakeholder, including communities bring unique perspectives, skills, and a wealth of knowledge to the challenge of strengthening resilience and addressing climate change. In addition, by implementing the proposed activities which include structural and institutional solutions, the Government stakeholders can assist in addressing impacts of climate change on the small farmers of the agricultural and fisheries sectors and help to reverse losses of production from climate hazards, improve food security and livelihood opportunities. This denotes a high possibility in scaling of the adaptation practices, tools and technologies adopted by the project.

**Women empowerment, youth and persons with disabilities:** Poor women and men face challenges of climate change, but the brunt is felt greatly by women. Women in the selected DS Divisions are still largely responsible for securing food, water and energy for daily use. With frequent droughts being experienced in the Mullaitivu District, women need to travel great distances to access clean water sources, an added burden to their busy schedule, giving them limited time to earn an income, get an education to empower themselves or for leisure. It is observed that in general women from rural villages in Sri Lanka find it difficult to recover from a natural disaster as they do not own land or other liquid assets that can be sold to secure income in an emergency.

It is estimated that nearly 23% of Sri Lanka's households are female headed and about 8.7% of the total population above the age of 5 live with some form of disability. This is specifically relevant to the Mullaitivu District, which was subject to an internal conflict. As mentioned elsewhere, there has been an increase in widows and women-headed households due to the internal conflict. The project's participatory methodology encourages an inclusive Leaving No One Behind (LNOB) approach which will safeguard involvement of youth disadvantaged groups in project activities. In terms of climate change, these groups, particularly women can play a pivotal role in helping to mitigate the effects of climate change. The project will adopt a gender-sensitive approach with women's (youth and persons with disabilities) full participation in decision-making, implementation and developing skills through training with the intent of empowering and building resilience. The participatory approach adopted will ensure not only active engagement but also empowerment of these groups and thereby accrue benefits.

The gender analysis was conducted based on the available data/information in the public domain, consultations with the community, experience from development activities carried out by UN-Habitat in the Mullaitivu District and data/information shared by the District Secretariat of Mullaitivu. The ability to conduct field verifications at length on the gender analysis was restricted by continued lockdowns, travel limitations due to the COVID-19 pandemic and related health regulations, therefore, verifications on the gender analysis was conducted virtually and physical verifications were bound by COVID-19 national health guidelines. These will further highlight (and not limited to), ensure that risk assessments are informed by the gender analysis, gender equality and women's empowerment are mainstreamed in activities, assessing different implications of planned activities on women and men, ensuring that women participate equally and actively alongside men and are enabled to take up leadership positions throughout the project cycle etc.

**Beneficiaries:** The project will deliver on economic, social and environmental benefits to vulnerable groups in particular women and marginalised groups in the targeted project locations. The project interventions will directly benefit 3,024 families in the three (3) selected DS Divisions with a multiplier effect of 4 per household will accrue direct benefits to 12,096 individuals in marginalised/poor income groups and indirectly benefit 4,076 families (16,304 individuals). Emphasis will be given to FHH and families with persons with disability in the beneficiary selection, with at least 40% of the beneficiary families being FHH and a maximum of 50% of the households with persons with

disability (due to the internal conflict or otherwise). Beneficiary selection criteria will encompass vulnerability aspects such as (and not limited to) head of the household, family size, income level, assets, dependents (including persons with disabilities) etc. A range of other activities among which are water conservation/harvesting and distribution, training in fish value addition/processing techniques to prevent economic loss, will lead to safeguarding and increase in income and food security. The building of resilient livelihoods safeguarding cash crops, protecting assets against hazards are actions of adaptation to climate change which are delivering on social and environmental benefits as well. The process will have a gendered approach of providing equal access to opportunities to women who are marginalised although carrying the majority burden in household upkeep. Women, persons with disabilities, youth will be a special focus in training.

As mentioned elsewhere, *soft* interventions of resilience improvement through the protection of habitats and vulnerable ecosystems and adoption of climate adaptation strategies improve local environment, natural resources with less pollution and better air and water quality. Infrastructure developments - the *hard* interventions, of strengthening renovate minor tanks for water storage, evacuation routes, construction of disaster resilient toilets and replanting of mangroves are actions that address intense climate change events. Value addition of fish and establishment of home gardens with climate resilient crops will enable the communities withstand economics shocks due to climate change.

**Non-climatic barriers:** Since stakeholders at different levels, including beneficiaries are involved in the implementation of adaptation measures, decision-making barriers may reduce the desired level of adaptation. Therefore, an active participatory approach (as done so in the development of the concept note) will be adopted throughout the project to ensure the full benefit of the proposed activities are reaped. Coordination and information sharing among all stakeholders will be ensured. Capacity barriers were identified during stakeholder consultations, and these will be addressed through training and capacity-building initiatives. In addition, a lack of locally relevant and practical information about potential climate impacts may be compounded by a lack of technical expertise to interpret climate change projections. Therefore, the proposed activities provide the required support in planning. Moreover, there is still uncertainty about the scale of the changes, magnitude and timing of climate risks, where precise forecasts are difficult to obtain. Therefore, planning would acknowledge and accommodate uncertainty. As UN-Habitat has done so in the past, continuous dialogue/engagement and sharing of information of the project will enable the support from political leaderships as well the buy-in for the project without which the implementation would be hindered.

The table below provides a summary of economic, social and environmental benefits adopting a gendered approach the project will provide.

**Table 5: Summary of economic, social and environmental benefits adopting a gendered approach**

Benefit Type	Baseline	Benefits of project actions
Economic	<p>Unsustainable agricultural practices, lack of support to diversify livelihoods, extreme events such as floods and droughts lead to economic losses with drastic consequences for women, the disabled, youth, loss of community infrastructure and livelihood options.</p> <p>Longer-term stresses such as sea level rise, and droughts impact on the economic well-being of agriculture/fisheries households, communities and reduce the ability to cope.</p> <p>Rural settlements in the Northern Province still lack basic and resilient infrastructure and residents have limited livelihood options.</p>	<p>Practice of climate smart agriculture, high participation of women in home garden development, training of youth and disabled leading to increase in income; less damages to community infrastructure, training and capacity building for resilient communities who will safeguard physical and natural assets, ecosystems and livelihoods.</p> <p>Training on adaptation methods to face extreme events lessen the social and economic impact and will lead to a reduction in climate induced poverty; active participation of women and marginalised groups will lead to strengthened lives for all.</p> <p>Maintaining a gender balance in activities/measures taken will lead to improved food security with promotion of agriculture, provision of water, other livelihood means leading to better resource management, more involved participation of residents in actions of climate change adaptation.</p> <p>Capacity development of poor/youth/women/persons with disability gain new skills and employment opportunities.</p> <p>New climate resilient infrastructure (evacuation routes, toilets, minor irrigation tanks) and services contributes to economic benefits.</p>
Social	<p>Extreme events such as floods/inundation, saltwater intrusion, droughts are definite contributors to poverty and compound social problems such as, disease, sanitation, food security, safety and adds to further degrading lives for women, marginalised groups.</p> <p>Longer-term stresses such as sea level rise, floods and droughts impact on the social well-being and cohesion of local communities and reduce the ability to cope.</p> <p>The lack of (resilient) infrastructure, high poverty incidences in informal settlements lead to social conflicts, diseases and safety issues, especially for women, elderly, the disabled and youth.</p>	<p>Further strengthening strong social networks with women, youth in leadership roles to protect against disasters, fatality rates, diseases and food security and safety issues due to increased resilience of settlement, communities and physical and natural assets, ecosystems and livelihoods.</p> <p>Improved adaptive capacity through a greater awareness of climate risks and adaptation options at the community level.</p> <p>Capacity development and involvement in adaptation actions increases the resilience of disadvantaged women and other marginalised groups.</p> <p>New climate resilient infrastructure and services contribute to social wellbeing.</p>
Environmental	<p>Extreme events such as floods and droughts increasingly lead to environmental losses, in particular important ecosystem services and loss of livelihood options, flood protection etc.</p> <p>Longer-term stresses such as sea level rise, floods and droughts impact on local environmental conditions.</p> <p>Ecosystem degradation and increased waste production lead to reduction of livelihood options, health issues and flood risks because of waste.</p>	<p>Reduction in climate-induced environmental degradation and losses and improved planning and preparation for disasters.</p> <p>Improved resource management practices with trained men and women ensure a protected and conserved environment with sustainable livelihoods</p> <p>Promotion of ecosystem-based adaptation, leading to environmental benefits.</p> <p>Environmental benefits due to resilience actions in the informal settlements, clean-up campaigns and awareness raising.</p> <p>Improvement of community resilience.</p>

### C. Cost-effectiveness of the proposed project

In ensuring cost-effectiveness of the project, several approaches are highlighted and will entail a combined approach of the quantification of beneficiaries/stakeholder and benefits. The project will provide both increased cash income of communities through improvement of livelihood and improved resilience through small-scale infrastructure and the project will contribute to the generation of evidence-based practices.

The project proposes highly replicable and development-oriented solutions ensuring cost effectiveness, in particular financial, human and material resources will be used cost effectively. It will make use of existing Government extension services and administrative platforms<sup>60</sup> by complementing and supporting their activities/objectives and will avoid duplication of funds. The three key concepts of Economy, Efficiency and Effectiveness will be used to measure value for money throughout the project cycle. UN-Habitat already has worked in the project target sites and excellent relationships with Government stakeholders/Local Authorities and communities, enabling implementation through existing structures at minimum logistic cost. Safeguard analyses and observed data will give feedback on how strategically money has been spent at the local scale. In analysing effectiveness, scientific rigor and "on-the-ground" approach ensure investments are targeted appropriately and ensure quality necessary for cost-effectiveness.

The proposed project has the two principal foci of resilient, adaptive livelihoods and addressing capacity needs and gaps on adaptation measures for reducing vulnerability of selected marginalised rural settlements. Adopting a participatory process, the project will work with local communities in the provision of the above targets. It will advocate access to resources and finances for communities who have had limited access to climate finance. So far, the local level responses to extreme events and its associated impacts on settlements and livelihoods have been largely reactive. The project approach will enable climate finance to flow to activities that will be implemented by vulnerable groups and will provide an important complementary adaptation response to higher level systemic responses.

The participatory process adopted in working with local communities in achieving targets, will advocate access to resources and investments for communities. UN-Habitat will implement the *hard* components of the project through the People's Process where possible. The project will be implemented in close partnership with communities and local government institutions. This implementation approach has been shown to reduce implementation costs by 30% over the life of the project, by using community labour instead of external contractors, procuring local materials where they are available.

The design of the project is founded on the premise of reducing livelihood vulnerability to rainfall variability by introducing alternate sources of resilient crop cultivations, income, food and basic facilities; and building capacities to face challenges of climate change and climate variability in rural scenarios of Mullaitivu District. So far, the local level responses to extreme events and its associated impacts on livelihoods have been largely reactive. The projects' approach will enable pre-emptive actions flowing into activities that will be implemented by vulnerable groups and will provide an important complementary adaptation response to higher level responses. The proposed activities (both *hard* and *soft* components) under cost-effectiveness could be replicated to the majority of farming areas and fisher communities of the country with long-lasting positive impacts. The livelihood actions were derived through consultation with the relevant technical agencies, local government authorities and farmer families through dialogues and discussions as stated in the project consultation process.

The main actions in the project highlight that livelihood development, food security and improved income are necessary conditions for resilience building. For farmers battling with climate variability and water scarcity at crucial times of cultivation, provision of water is a survival measure. Activities for surface water storage therefore are essential actions. The project recommends renovation of minor irrigation tanks as a priority intervention measure. At the initial stages water retention capacity of a small/medium irrigation tank might be a few months, experience shows that the period increases with time and sustain for longer period. The minor tanks -- water storing modality has been tried and tested with tremendous success by the GEF Small Grants Programme<sup>61</sup> in Sri Lanka for over 15 years for farming in areas of water scarcity. Long term benefits show results of increasing greening of gardens with moisture accumulation and water recharge which in turn helps in retaining water in ponds for longer periods<sup>62</sup>. The costs of minor irrigation tanks are minimal with direct access to water to the farming household as opposed to mega irrigation projects at extremely high cost. It demonstrates that surface water storage and delivery is the most cost-effective way of improving irrigation for rural farm families.

Provision of climate resilient sanitation facilities are able to withstand the climate challenges of the future. These leverage benefits that would facilitate the use of a well-functioning toilet even during seasons of flooding. A resilient sanitation system is not only able to keep all communities (not just the households) healthy and functioning throughout unanticipated shocks and stresses and minimises environmental and social negative impacts.

The cost incurred in restoring mangroves have to be compared with costs incurred in alternative actions such as building seawalls which is costlier. Furthermore, restoring mangroves is a cost-effective solution to address productivity loss due to saltwater intrusion into coastal farming lands or costs incurred through damages to infrastructure, roads in a storm/cyclone, biodiversity loss, where mangroves have been destroyed and denuded. Mangrove forests are highly productive. According to IUCN, "mangroves support rich biodiversity and high levels of productivity, supplying seafood at capacities large enough to feed millions".<sup>63</sup> Mangrove and other land cover types (e.g., sand dunes) have the potential to act as protective buffers for coastal zone.

Saltwater intrusion processes lead to poor quality groundwater, which can lead to soil salinisation problems and soil degradation thus contributing to loss of productivity of coastal agriculture. Coastal overexploitation also leads to saltwater intrusion. Loss of agriculture productivity is associated with economic implications, further burdening the vulnerable communities. In addition, coastal aquifers are subjected to more pronounced climate change effects, including sea level rise and growing populations, further negatively affecting the quantity and quality of groundwater resources. Therefore, interventions to minimise/eradicate saltwater intrusion will have profound economics benefits.

The maintenance of small-scale infrastructure facilities (a) formation of 1km earth bund, (b) renovation of 15 minor tanks, (c) renovation of 3km existing evacuation route, and (d) rehabilitation of 1.5km of mangroves will be under the purview of (a) Coast Conservation Department and Central Environment Authority, (b) Department of Irrigation and Department of Agrarian Development, (c) Road Development Authority at the Provincial level respectively, and (d) Coast Conservation Department and Central Environment Authority. The ownership of the

<sup>60</sup>Sri Lanka has a well-established district and sub-district level extension services under a number of Government departments such as Department of Agriculture, Department of Agrarian Services, Department of Fisheries and Aquatic Resources etc.

<sup>61</sup> Community Based Adaptation (CBA) Programme of GEF/SGP Sri Lanka 2011 – 2015 funded by AusAid

<sup>62</sup> 'Coping with Climate Change and Variability: Lessons from Sri Lankan Communities', 2016 CBA Programme of GEF/SGP Sri Lanka

<sup>63</sup> IUCN (2017). <https://www.iucn.org/news/forests/201708/mangroves-nurseries-world%E2%80%99s-seafood-supply>

disaster-resilient toilets will be with the beneficiaries; however, this activity will be supported by the Medical Officer of Health (MOH) and Public Health Inspector (PHI).

The cost effectiveness criteria are given in Table 6.

**Table 6: Cost Effectiveness Criteria**

Proposed Action	Cost Effectiveness Criteria		Alternative Action	Cost Effectiveness Criteria	
Construction of 1km earth bund with sluice gate with spill arrangement in Puthukkudiyiruppu DS Division to prevent saltwater intrusion	Future cost of climate change	✓	Building concrete /cement seawalls for protecting saltwater intrusion and sea level rise	Future cost of climate change	✓
	Project efficiency	✓		Project efficiency	×
	Community involvement	✓		Community involvement	✓
	Cost/Feasibility	✓		Cost/Feasibility: If a concrete structure is used as an alternative to the estimated 10,000m <sup>3</sup> of locally available earth for earth bund, there will be the usage of high energy embodied material with high costs. The cost will be approximately eight (8) times higher than the proposed investment.	×
	Environmental and social safeguarding risks	✓		Environmental and social safeguarding risks	More Risk
Rehabilitation of exiting 15 minor irrigation tanks for water storage	Future cost of climate change	✓	Rehabilitation of medium or large/medium tanks	Future cost of climate change	✓
	Project efficiency	✓		Project efficiency	×
	Community involvement	✓		Community involvement	less
	Cost/Feasibility	✓		Cost/Feasibility: Subject matter experts will have to be outsourced to conduct a detailed hydrological study that will be required for tank capacity augmentation that may also affect low-lying areas with flooding/inundation and possible relocation of families. In addition, highly energy embodied reinforced structures that are 50% costlier will be required.	×
	Environmental and social safeguarding risks	Less Risk		Environmental and social safeguarding risks	More Risk
Improvement of 3km long evacuation route	Future cost of climate change	✓	Building elevated bridge with walking path	Future cost of climate change	×
	Project efficiency	✓		Project efficiency	×
	Community involvement	✓		Community involvement	×
	Cost/Feasibility	✓		Cost/Feasibility: As an alternative solution, the elevated bridge across the lagoon will not be cost-effective as it requires soil investigation, pillar construction through piling, use of reinforced concrete material, and steel. These will almost certainly be more expensive (approximately 75% more) than the proposed solutions. The intervention will also have an impact on the lagoon's ecological system.	×
	Environmental and social safeguarding risks	Less Risk		Environmental and social safeguarding risks	More Risk
Construct eighteen (18) disaster-resilient toilets in households and two (2) in common places	Future cost of climate change	✓	Constructing large-scale sanitation facilities with septic tank, sewerage and offsite treatment of faecal sludge and effluent	Future cost of climate change	×
	Project efficiency	✓		Project efficiency	×
	Community involvement	✓		Community involvement	×
	Cost/Feasibility	✓		Cost/Feasibility: Because the selected houses are dispersed across two (2) GN Divisions, a significant investment in sewerage plumbing and reinforced concrete material, as well as pumping systems, will be required, resulting in high operating costs which would be more than 100% of the proposed investment	×
	Environmental and social safeguarding risks	Less Risk		Environmental and social safeguarding risks	More Risk
Climate resilient agriculture crops (groundnuts and coconut)	Future cost of climate change	✓	Improve soil conditions with chemical fertilizer for alternative crops	Future cost of climate change	✓
	Project efficiency	✓		Project efficiency	×
	Community involvement	✓		Community involvement	✓
	Cost/Feasibility	✓		Cost/Feasibility: Continues use of chemical fertilizer is unaffordable for low-income famer families. Furthermore, extensive use of chemical fertilizer will have a negative impact on ecosystems.	×
	Environmental and social safeguarding risks	Less Risk		Environmental and social safeguarding risks	More Risk
	Future cost of climate change	✓		Future cost of climate change	×

Replant/rehabilitation of 1.5km of mangrove	Project efficiency	✓	Building seawall	Project efficiency	×
	Community involvement	✓		Community involvement	×
	Cost/Feasibility	✓		Cost/Feasibility: Building seawalls would be the alternative action to achieve the same result, but would be much less cost effective and create substantial additional ESS risks.	×
	Environmental and social safeguarding risks	Less Risk		Environmental and social safeguarding risks	More Risk

#### D. Consistency with national or sub-national sustainable development strategies

In terms of consistency with national sustainable development and poverty reduction strategies laid down in the current government's policy of "Vistas of Prosperity & Splendour", national communications along with SDG goals, the project components are designed to align with (adaptation) priorities of key government plans. This includes the National Adaptation Plan for Climate Change, National Environment Action Plan, and Second National Communications to UNFCCC, which consider climate change impacts under four sectors i.e., agriculture, water resources, human health and coastal zone. The adaptation options proposed for crops are to promote varieties that are tolerant to increased temperatures and water deficits and in the case of rice, to high salinity as well. The National Climate Change Adaptation Plan underscores the country's vulnerability to the impacts of climate change, increases in the frequency and intensity of disasters such as droughts and floods; variability and unpredictability of rainfall patterns, increase in temperature and sea level rise. The strategy lays out a framework for action and investment to systematically move towards a climate change resilient future. The holistic approach adopted by Sri Lanka's poverty reduction strategy paper (PRSP) in March 2003 was considered to be successful by the World Bank in mainstreaming key environmental and climate change considerations. The project considers all requirements stipulated in the above documents to act to achieve stated targets.

Sri Lanka ratified the United Nations Framework Convention on Climate Change (UNFCCC) on 16 March 1993 and submitted its Initial National Communication (INC) to the UNFCCC October 2000. The country ratified the Kyoto Protocol on 3 September 2002. The Second National Communication on Climate Change for Sri Lanka was submitted in February 2012. Many environmental and natural resources related policies have been prepared and adopted by the Government to guide implementation of initiatives that address climate change. In 1992 the Government launched its National Environment Action Plan (NEAP), which identified 12 components aimed at responding to pressing environmental problems of the time which might have an impact on the local environment in the future. The holistic approach adopted by Sri Lanka's poverty reduction strategy paper (PRSP) in March 2003 was considered to be successful by the World Bank Environment Department in mainstreaming key environmental and climate change considerations. The policy changes required to guide the implementation of initiatives that address climate change includes the National Environment Action Plan (NEAP) first launched in 1992, which identified 12 targets, directly aimed at responding to pressing problems that impact on the local environment. Sri Lanka's PRSP in March 2003 was considered to be successful by the World Bank in mainstreaming key environmental and climate change considerations.

In the proposed Project, both poverty and environment components are designed to align with (adaptation) priorities in several key government plans (see below and Table 4). This includes the National Plan for Sustainable Development, the National Adaptation Plan for Climate Change Impacts 2016 – 2025, Coastal Zone Management Plan 2018 – 2023, and the Second National Communication to UNFCCC. The proposed Project will be anchored within the Climate Change Secretariat of the Ministry of Environment and will directly contribute towards the aforesaid plans and the Climate Change Policy. In addition, upon completion of the *hard* investments, monitoring and maintenance will be officially handed over to the relevant Departments and District/Divisional Secretariat, Mullaitivu to ensure sustainability. Monitoring, maintenance, and sustainability of *hard* investments will be part of key functions/services under the relevant Departments and District/Divisional Secretariat, Mullaitivu with budgetary allocations through the annual budget on recurrent expenditure. Moreover, the *hard* investments will be part of the District Development Plan and supervision of maintenance will be through the District Development Committee.

The proposed project is consistent with the priorities laid out in the Second National Communication which considers climate change impacts under four sectors i.e., agriculture, water resources, human health and coastal zone. The adaptation options proposed for crops are to develop varieties that are tolerant to increased temperatures and water deficits and in the case of rice, to high salinity as well. Other options are changes in cropping calendars and farmer education, adoption of soil and water conservation measures. The importance of providing financial assistance to small-scale farmers to adopt recommended measures is highlighted. The increase in temperature and shortage of water that will affect people's health has been emphasised, the direct impacts of which are increased vector population, deaths and injuries caused by increasing extreme events and resulting spread of disease and illnesses brought about due to non-availability of clean water. Policy measures on improving the public health system and educating the people are among the adaptation measures suggested. Sea level rise is one of the direct impacts that is felt in the coastal zone. Intrusion of salinity into low lying agriculture land and water ways are expected to limit agricultural activities and usage of water. Relocation of coastal communities, i.e., those in close proximity to water intakes, developing infrastructure and strengthening the sea defense structures are some of the adaptation measures recommended.

The National Climate Change Adaptation Plan of Sri Lanka 2016 - 2025, underscores the country's vulnerability to the impacts of climate change, mainly increases in the frequency and intensity of disasters such as droughts, floods and landslides; variability and unpredictability of rainfall patterns; increase in temperature; and sea level rise. The strategy lays out a prioritised framework for action and investment to systematically move towards a climate change resilient future. The National Climate Change Adaptation Plan of Sri Lanka mirrors and supports Sri Lanka's national development strategy as articulated in the government policy Vistas of Prosperity and Splendour and is aimed at ensuring its success and sustainability. Table 4 presents the key Government policies on which the project is based on.

Table 7: Key Government policies/strategies/plans adopted in the project

Key National Policy and Responsible Agency	Project elements consistent with policy
1. National Climate Change Policy, Ministry of Environment	Community awareness on vulnerability to climate change. Adaptive measures to avoid/minimise adverse impacts of climate change to livelihoods and ecosystems. Enhance knowledge on issues related to climate change and build capacity to make prudent choices in decision making. Mainstream and integrate climate change issues in development.
2. National Adaptation Plan for Climate Change Impacts in Sri Lanka: 2016 – 2025, Ministry of Environment	Enable climate resilient and healthy human settlements. Minimise climate change impacts on food security, improve climate resilience of economic drivers, safeguard natural resources and biodiversity from climate change impacts. Key relevant sectors in the plan are food security; water resources; coastal and marine sector; health; human settlements and infrastructure; ecosystems and biodiversity; tourism and recreation; export agriculture; and industry, energy and transportation.

3. National Policy Framework Vistas of Prosperity and Splendour, Ministry of Finance	One of the key policies include 'Sustainable Environmental Management' that emphasises on environmental regulation for conservation and protection, updating the existing environmental policies, rules and regulations, integrating the SDGs into development framework, incorporating the indigenous knowledge and technologies into sustainable development and coordinating at all administrative levels to ensure upgrading living standards.
4. Nationally Determined Contributions (NDCs) under the Paris Agreement for Climate Change Sri Lanka	NDCs of adaptation to adverse effects of climate change-- Minimising climate change impacts on food security in agriculture and fisheries. Promote heat/drought/flood/salt tolerant varieties, land and water management under the agriculture sector and (although not highlighted in the NDCs) promotion of brackish water fisheries and fish value addition.
5. The National Framework for Women-headed Households (2017–2019), State Ministry of Women and Child Development (discussions were held to update the framework)	Improve the socio-economic situation of women affected by conflict. Programmes supporting the economic empowerment of rural women, encouraging women to enter technological fields to improve employment opportunities.
6. National Agricultural Policy, Department of Agriculture	Irrigation water management, soil moisture conservation, soil conservation, land conservation in watersheds, organic agriculture, home gardening, integrated pest management and integrated plan nutrition systems, conserving agro-biodiversity and promoting tolerant species.
7. National Disaster Management Policy, Ministry of Disaster management	Early warning systems linked to community preparedness and risk assessment.
8. National Forest Policy, Department of Forest	Increasing tree cover in non-forest areas, reducing pressure on natural forests by supporting community woodlots, management of multiple-use forests.
9. National Environmental Policy, Ministry of Environment	Restoration and conservation of eco systems, conservation of native species and agro-biodiversity, water resources conservation and management, soil conservation.
10. National Fisheries and Aquatic Resources Policy, Department of Fisheries and Aquatic Resources	Improvement of sustainability of fish and other aquatic resources; post-harvest marketing and development aspects; protection of fish breeding ecosystems.
11. National Action Programme (NAP) for Combating Land Degradation in Sri Lanka 2015 - 2024, Ministry of Environment	Reduce land degradation and mitigate the effect of drought with the participation of affected communities, addressing causes, identifying measures to combat land degradation and drought, land related socio-economic issues and poverty alleviation and to ensure environmental stability. Promoting active stakeholder participation in planning, implementation, monitoring and evaluation

**Table 8: Project alignment with national plans and strategies**

Project Components	National Policy Framework Vistas of Prosperity and Splendour - Strategies and Indicators	National Adaptation Plan for Climate Change Impacts in Sri Lanka - Strategy Priorities	Second National Communication - Adaptation Priorities	Nationally Determined Contributions under the Paris Agreement for Climate Change Sri Lanka
1. Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	<ul style="list-style-type: none"> <li>*Create healthy environment by preventing pollution of air, water soil through sustainable environment policy</li> <li>*Introduction of environmentally friendly farming</li> <li>*Improve the environmental conditions in lagoons</li> <li>*Identify appropriate lands for development activities to minimise the environmental impacts</li> <li>* Improve the environmental conditions in lagoons</li> <li>*Ensure coastal erosion mitigation</li> <li>* Introduction of environmentally friendly farming</li> </ul>	<ul style="list-style-type: none"> <li>*Stimulate greening of settlements and preservation of natural ecosystems</li> <li>*Increase awareness on climate impacts on food security &amp; potential adaptive measures</li> <li>*Pilot test and scale up community level agriculture/livestock/fisheries adaptation models</li> <li>*Livestock development</li> <li>*Promoting organic agriculture and integrated pest management</li> </ul>	<ul style="list-style-type: none"> <li>*Drought resistant crop varieties</li> <li>*Efficient agronomic practices such as, soil moisture conservation: mulches, ground cover crops.</li> <li>*Improve soil organic matter</li> <li>*Sustainable fishing practices</li> <li>*Coastal habitat conservation</li> <li>*Rainwater harvesting.</li> </ul>	<ul style="list-style-type: none"> <li>*Minimising climate change impacts on food security in agriculture and fisheries.</li> <li>*Promote heat/drought/flood/salt tolerant varieties, land and water management under the agriculture sector</li> <li>*Promotion of brackish water fisheries and fish value addition.</li> </ul>
2. Address capacity needs and gaps on adaptation measures for rural settlements that can reduce vulnerability to climate change and increase coping capacity.	<ul style="list-style-type: none"> <li>* Promote awareness and positive attitude change</li> <li>*Develop targeted programmes for school children, youth and community to promote awareness and positive attitude change</li> </ul>	<ul style="list-style-type: none"> <li>*Increasing available water, improving ground water recharge, and enhancing micro climate</li> <li>*Safeguarding available irrigation</li> <li>*Improve utilisation of field level coordination mechanisms and civil society organisations</li> </ul>	<ul style="list-style-type: none"> <li>*Rehabilitation of small ponds to improve irrigation water availability and ground water recharge</li> </ul>	<ul style="list-style-type: none"> <li>*Enhancement of education, awareness and capacity building under relevant sectors.</li> </ul>

## E. National technical standards and compliance with the Environmental and Social Policy of the Adaptation Fund.

The proposed project has an obligatory requirement to follow and comply with national technical standards and relevant legislation. The project was selected for submission to the Adaptation Fund through a national consultation process and going forward, will be implemented and monitored in line with national legislation and standards outlined below.

They have relevance to principals of Adaption Fund such as compliance with the law, marginalised and vulnerable groups, gender equity, women's empowerment, land and soil conservation among others. The implementation and monitoring of the project will ensure that the principles of the AF, as well as the relevant national technical standards, are adhered to during the lifetime of the project.

Project components and outputs will meet technical standards prescribed in agriculture, agrarian services, fisheries, disaster management and water resources management technical guidelines and norms. Technical safeguards for minimisation of saltwater intrusion through bunds, restoration of minor irrigation tanks and evacuation routes etc. will be followed and incorporated during activity design and implementation by the relevant focal agencies engaged in implementing and monitoring the project at national and divisional level. The project will also identify needs and gaps in appropriate sector technologies aligned with adaptation needs and develop field test suitable solutions with community participation. Please also refer 'ANNEX 1: ENVIRONMENT AND SOCIAL MANAGEMENT PLAN', Table 23 on 'Compliance with national technical standards, rules, regulations and procedures, and ESP principles' for further details.

**Table 9: National Technical Standards**

Activity	Applicable National Standards	Application to Project	Monitoring
Construction of 1km earth bund with sluice gate with spill arrangement in Irattai Vaikaal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion	Technical Guidelines for Irrigation Work, Irrigation Department Sri Lanka, Colombo. Ponrajah, AJP 1988	By Department of Agrarian Development's Technical Officers and Irrigation department's Engineers	Engineers and Technical officers from Department of Agrarian Development & Irrigation Department
	Standard Specifications for Construction and Maintenance of Roads and Bridges [2 <sup>nd</sup> Edition, June 2009]	Project Management Team	UN-Habitat Field Coordinator
	Specification for site investigation for Building and Civil Engineering Works [3 <sup>rd</sup> Edition, May 2013]		District Secretariat, Mullaitivu
Rehabilitation of existing 15 minor irrigation tanks for water storage	Rehabilitation Guideline for Minor Irrigation Headwork, Irrigation Department, Ministry of Irrigation, November 2020	By Department of Agrarian Development's Technical Officers and Engineers	Engineers and Technical officers from Department of Agrarian Development
	Technical Guidelines for Irrigation Work, Irrigation Department Sri Lanka, Colombo. Ponrajah, AJP 1988		
	Designs of Irrigation Headwork for Small Catchments, Irrigation Department Sri Lanka, Colombo Ponrajah, AJP 1984	Project Management Team	UN-Habitat Field Coordinator
	Specifications for Irrigation & Land Drainage – [1 <sup>st</sup> Edition – January 2017]		
The National Environmental (Ambient Water Quality) Regulations, No. 01 of 2019- <a href="http://www.cea.lk/web/images/pdf/epc/2148-20_E-1.pdf">http://www.cea.lk/web/images/pdf/epc/2148-20_E-1.pdf</a>		District Secretariat, Mullaitivu	
Improvement of 3km long evacuation route	Standard Specifications for Construction and Maintenance of Roads and Bridges [2 <sup>nd</sup> Edition, June 2009]	By Department of Agrarian Development's Technical Officers and Irrigation Department's Engineers	Engineers and Technical officers from Department of Agrarian Development & Irrigation Department
	Specification for Site investigation for Building and Civil Engineering Works [3 <sup>rd</sup> Edition, May 2013]	Project Management Team	UN-Habitat Field Coordinator District Secretariat, Mullaitivu
Construct eighteen (18) disaster-resilient toilets in households and two (2) in common places	<i>Specifications and Guidelines for Domestic Septic Tanks and Soakage Pits from National water Supply &amp; Drainage Board</i> Design Considerations on Accessibility for Person with Disabilities by Ministry of Health	By Public Health Inspector (PHI)	Medical Officer of Health (MOH) from Health Department
	<i>General Regulation by Urban Development Authority</i>	Project Management Team	UN-Habitat Field Coordinator District Secretariat, Mullaitivu

## F. Describe if there is duplication of project/programme with other funding sources.

The project is being proposed for three (3) DS Divisions with minimal initiatives on climate adaptation being implemented. No activities are included that are already being supported from other funding sources. The project will complement, build on and learn from a number of on-going projects as detailed below for additional knowledge in activity implementation. This will add to the understanding gained from the stakeholder mapping and consultation that took place at the design stage of the project, with interactions of provincial and local government members and communities. As a government-led effort to implement an adaptation project based on policy and identified priorities on the ground, the project will be responsive and responsible for above-board execution. It will complement on-going government programs that are being implemented to manage sea level rise, drought and landslides, improve rural agricultural productivity, water management and conservation of biodiversity.



The focus of the project is community resilience of rural and coastal settlements and preservation of ecosystems as an adaptation strategy, to this end, the experience of lessons and practices from many donor-implemented micro projects, especially the successful Community Based Adaptation pilot projects of UNDP GEF/SGP Sri Lanka, have influenced the design of activities and delivery/monitoring and assessment modality of the project.

Table 10 presents a summary of recently concluded, on-going, and pipeline projects that deal with rural livelihoods, water management, climate change, habitat conservation, biodiversity and peace building and empowerment.

**Table 10: Summary of ongoing/pipeline projects**

Project Name/Funding Institution	Objectives/Description	Potential Synergies/Complementarities	Agency/Geographical Coverage	Project Duration
1. Model Villages Programme, Api Wawamu-Rata Nagamu Programme of the Ministry of Agriculture  National Budget	Demonstrate new technologies from crop production to consumption for farmers in cultivating of higher-yielding crop varieties, minimisation of pre/post-harvest losses, increasing food and nutrition security. Educate farmers in conservation of natural resources	The current Project proposes several similar capacity development and local livelihood development activities including home gardens. Therefore, the Project could complement this national initiative in targeted Divisional Secretariat Divisions (DS Divisions) delivery for a more effective package of DS Divisional level developmental benefits. Previous donor funded projects have complemented national level initiatives such as 'Divi Neguma (National Livelihood and Food Security Programme)'	GoSL - Ministry of Agriculture  All Districts	Api Wawamu-Rata Nagamu Programme is annually implemented during the Yala and Maha seasons.
2. Addressing Climate Change Impacts on Marginalised Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka. World Food Programme (WFP), 2012  Adaptation Fund	Secure community livelihoods and food security against climate change-induced rainfall variability, through - developing household food security and resilient livelihoods and, building institutional capacity in service delivery to reduce risks associated with rainfall variability	The proposed Project will draw lessons on addressing specific vulnerabilities faced by rural settlements, strategies to overcome food and income security; diversified income sources to broad-base risk, improved water storage, improved soil quality and fertility for increased production of small farmers.	Then Ministry of Mahaweli Development and Environment (MMDE)  Two (2) locations in Nuwara Eliya and Polonnaruwa Districts  WFP	4 <sup>th</sup> November – 30 <sup>th</sup> September 2020
3. Strengthening the resilience of smallholder farmers in the Dry Zone to climate variability and extreme events through an integrated approach to water management  Green Climate Fund	Strengthen the resilience of vulnerable smallholder farmers in the country's Dry Zone, particularly women, who are facing increasing risks of rising temperatures, erratic rainfall, and extreme events attributable to climate change	The proposed Project will learn lessons from the experience of women farmers who are facing extreme events, similar to experience of women in the three (3) selected DS Divisions.	Then MMDE/ United Nations Development Programme (UNDP)  North Central Province	30 <sup>th</sup> June 2016 – under implementation
4. Purchase for Progress (P4P)  World Food Programme (WFP)	P4P is part of the Strategic Plan of WFP. P4P commits continuation of buying increased food amounts from smallholder farmers, and support the Government, other buyers to assist smallholder farmers to access lucrative markets. In addition, it supports production improvement of soya and maize, and develop marketing chain for its eventual processing into a nutritional dietary supplement for children.	The proposed Project will draw lessons from farmer organisation-based and women-focused production, storage and marketing of agricultural produce.	North Central and Northern Provinces  WFP	2014 to 2017
5. Community Based Adaptation to Climate Change  AusAid and Global Environment Facility, Small Grants Programme (GEF SGP)	GEF SGP attempted to improve livelihood resilience and ensure water and food security to communities at risk by directly engaging in aspects of science, technology, and research. The combination of laying a scientific basis for the interventions, implementation of projects through CBOs and the engagement of local government actors strengthened the delivery of project targets and laid the foundation for their eventual sustainability.	The proposed Project will seek replicable actions and risk reduction strategies in Project output implementation, with special emphasis being given to lessons learnt from, 'Rehabilitation of Imbulgodayagama Village Reservoir through Community Participation'; 'Climate Related Disaster Management in Thoduwawa Lagoon in Barudelpola'; 'Minimising Land Degradation in Serupitiya Village to Facilitate Community Based Adaptation to Climate Change'; 'Developing Community-led Strategies and Infrastructure to Ensure Adaptation to Drought Conditions'; 'Community Based Adaptation to Floods in the Elapatha DS Division of the Ratnapura District/provincial governments as key barriers'.	Five (5) Districts of Sri Lanka.	2010 to 2014

<p>6. Mainstreaming agro-biodiversity conservation and use in Sri Lankan agro-ecosystems for livelihoods and adaptation to climate change</p> <p>United Nations Environment Programme (UNEP) and GEF 1V</p>	<p>To ensure that agrobiodiversity in Sri Lanka is optimally conserved and used to meet the challenges of climate change and improve rural livelihoods.</p>	<p>Lessons for the proposed Project will be drawn from areas devoted to sustainably managed agrobiodiversity increased through use of practices, procedures, institutions, and the improved maintenance and access to new and traditional crops and livestock diversity by local communities, and market mechanisms that provide farmers with additional rewards (improved income from gains from production, wellbeing, better cost-control e.g., reduced external inputs) from maintenance and use of the agrobiodiversity and increased returns for specific products and services (any market pull that could offer any benefits for farmers).</p>	<p>National</p> <p>Project activities more concentrated in three ecologically diverse agriculture landscapes, village tanks, suburban paddies and forest home gardens of the mid-country.</p>	<p>2014 to 2019</p>
<p>7. Mainstreaming biodiversity conservation and sustainable use for improved human wellbeing and nutrition</p> <p>GEF 1V, UNEP and United Nations Food and Agriculture Organisation (FAO)</p>	<p>To strengthen the conservation and sustainable management of agricultural biodiversity through mainstreaming into national and global nutrition, food and livelihood security strategies and programmes, by: Providing evidence of the nutritional potential of biodiversity for food and nutrition and create an integrated knowledge base to build support for biodiversity conservation and enhanced well-being among relevant sectors, including agriculture, environment and public health in the four partner countries; Enhancing policy frameworks and markets that support the mainstreaming of biodiversity conservation and sustainable use across sectors; and Providing tools, knowledge and best practices that are adopted and scaled up in development programs, value chains and local community initiatives.</p>	<p>The proposed project will learn lessons on developing a long-term development framework including guidelines, strategies and systematic approaches for conservation and utilisation of agro-biodiversity (for improved nutrition) in Sri Lanka using an ecosystem approach and substantial knowledge on traditional crops, with high nutrition value to improve home garden design.</p>	<p>National.</p> <p>Project No. 7 was a multi-country, cross-sectoral initiative aimed at researching and promoting the conservation and sustainable use of underutilised, wild and cultivated food biodiversity in Brazil, Kenya, and Turkey in addition to Sri Lanka</p>	<p>2<sup>nd</sup> May 2013 to 30<sup>th</sup> October 2017</p>
<p>8. Building peace through the economic empowerment of women in Northern Sri Lanka</p> <p>UN Peace Building Fund</p>	<p>The objective of this project is to increase access to economic empowerment, social integration, resilience and peacebuilding participation for conflict affected women in Mullaitivu, one of the most conflict-affected Northern Districts of Sri Lanka.</p>	<p>The proposed Project will draw lessons from increased economic participation of conflict-affected women by enhancing their access to new market opportunities, resources and information that have opened as a result of a more peaceful environment and enhanced the voice and representation of conflict-affected women in peacebuilding through increased social status. Special emphasis will be given to lessons on developing analytical, social networking and business strategy skills; improving social and business language skills; improve business start-up management; improving peace awareness and skills; and strengthening, supporting actions to maintain peace.</p>	<p>Mullaitivu District in Northern Province</p> <p>Implemented by the International Labour Organisation (ILO), WFP and Puthukkudiyiruppu Women Entrepreneurs' Cooperative Society</p>	<p>9<sup>th</sup> January 2019 to 8<sup>th</sup> June 2019</p>
<p>9. Operationalising Hazard Maps and Development controls in landslide hazard areas</p> <p>UNDP Bureau for Crisis Prevention and Recovery (BCPR)</p>	<p>To initiate hazard-map based awareness and rational development planning in landslide and drought prone Districts and divisions.</p>	<p>The proposed Project will draw lessons from elements of complementarity with the early warning and community-based natural resource management outputs of Project No. 9.</p>	<p>All Districts identified as being prone to drought and floods</p>	<p>October 2021 to October 2022, extension of the project requested up to March 2023.</p>

<p>10. Enabling activities for the preparation of Sri Lanka's Second National Communication to the UNFCCC</p> <p>GEF through UNDP</p>	<p>To strengthen the technical and institutional capacity of Sri Lanka in mainstreaming climate change concerns into the country's sectoral and national development planning processes.</p>	<p>The proposed project will draw lessons on mainstreaming climate change concerns into the country's sectoral and national development planning processes will complement the proposed Project in terms of collaboration with relevant agencies and seeking continuation of Project activities beyond the Project period. The Third National Communication is yet to be published, and upon wider dissemination, the proposed Project will use it as reference.</p>	<p>National Ministry of Environment</p>	<p>2012</p>
<p>11. Promoting Reconciliation in Sri Lanka through Strengthening Processes and Mechanisms</p> <p>UN Peace Building Fund</p>	<p>Processes and mechanisms promoting social cohesion and conflict prevention, including through dialogue and early warning, institutionalized at national and sub-national levels</p>	<p>The proposed Project will draw lessons from promoting social cohesion and conflict prevention, including through dialogue and early warning, institutionalised at national and sub-national levels.</p>	<p>UNDP</p>	<p>December 2021 to June 2023</p>
<p>12. UNDP GEF Small Grants Programme</p> <p>GEF</p>	<p>Sixth operational phase: To enable community-based organisations to take collective action for adaptive landscape management for socio-ecological resilience through design, implementation, and evaluation of grant projects for global environmental benefits and local sustainable development in three ecologically sensitive landscapes.</p>	<p>Socio-ecological resilience and adaptation models that can be replicated in this project.</p>	<p>Three landscapes in Colombo, Matale/Kandy and Mannar districts</p> <p>UNDP United Nations Office for Project Services (UNOPS)</p>	<p>2016 to 2020</p>
<p>13. Disaster Resilient City Development Strategies for four Cities in the Northern and Eastern Provinces of Sri Lanka (Phase II)</p> <p>Government of Australia (AusAid)</p>	<p>To prepare land use plans and development plans incorporating DRR features through support provided to the selected Municipal Council/LAs to embark on assessing the vulnerability, preparing Disaster Preparedness Plans and developing building guidelines and empowering communities of the selected LAs through better awareness and will be linked to LAs through a well-defined structure. Trained community-based Disaster Response Teams will closely work with LAs to implement the Disaster Preparedness Plans.</p>	<p>The proposed Project will draw lessons from the key outputs of Project No. 13, namely, Vulnerability assessments conducted to promote disaster resilient Local Development Plans. Preparation of Disaster Preparedness Plans for Local Authorities; Capacity building of LAs to promote disaster resilient human settlements (i.e., housing, community infrastructure); DRR features incorporated into Local Authorities' building guidelines and regulations; Creating awareness and building capacity of the community on disaster resilient construction methods; Community partnerships with LAs on disaster response activities promoted in lagging regions; Guidelines for the incorporation of DRR aspects in housing construction introduced to LAs, local house builders and communities; Guidelines and methodology for retrofitting to reduce disaster risk introduced to LAs, local house builders and communities; and Lessons learned and good practices in selected Municipal Councils/LAs are well captured, documented and disseminated in local and international forums.</p>	<p>Mannar, Vavuniya and, Mullaitivu in the Northern Province and, Akkaraipattu in the Eastern Province</p> <p>UN-Habitat implemented the project in close partnership with the Urban Development Authority, Ministry of Local Government and Provincial Councils and Disaster Management Center (DMC)</p>	<p>April 2013 to March 2014</p>

## **G. Learning and knowledge management component to capture and disseminate lessons learned.**

Learning and knowledge management to capture and disseminate lessons learned is a key area of the proposed project. Initiatives on adaptation are being practiced increasingly and providing empirical evidence with factual data is a prerequisite for projects that work with communities on adaptation, to disseminate information and share lessons with those in similar circumstances facing rapid and intense changes of climate challenged by coping capacities, as well as for policy makers and academics in discussion of the topic. Sri Lanka has limited experience in working with communities on adaptation practices. Thus, it is obligatory to document the practices as part of the learning curve of all stakeholders. Diligent monitoring and assessment of results and impacts is crucial in order to test effectiveness of government-prescribed adaptation measures, especially in agriculture and water management. The proposed project will serve as part of that learning curve that will allow national technical agencies to test out their own assumptions for community-based adaptation. It will provide the government with the opportunity to review context specific approaches and scale up successful activities to achieve resilience of communities and ecosystems to climate impacts on a wider landscape. The project has included the output 'Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities' especially targeting the up-scaling of lessons and best practices; and generating opportunities for autonomous adaptation in communities with similar ecological and socio-economic conditions.

Around the globe, communities are coping with changing environmental conditions as a result of climate change, with decreasing natural resources and ecosystem services, lack or intensified rains, severe storms, sea level rise among others. Initiatives on adaptation are being practiced increasingly and a central claim of community-based adaptation (CBA) is that it increases resilience. Providing empirical evidence with factual data is a prerequisite for projects that work with communities on adaptation, to disseminate information and share lessons with those in similar circumstances facing rapid and intense changes of climate challenged by coping capacities as well as for policy makers and academics in discussion of the topic.

Sri Lanka has limited experience in working with communities on adaptation practices and it obliges to document the practices as part of the learning curve of all stakeholders. Diligent monitoring and assessment of results and impacts is crucial in order to test effectiveness of government-prescribed adaptation measures, especially in agriculture and water management. The proposed project will serve as part of that learning curve that will allow national technical agencies to test out their own assumptions for community-based adaptation. This is especially true of the strategy (in the National Sustainable Development Plan and National Environment Action Plan) to protect food security and agricultural livelihoods from climate related impacts. This will provide the government with the opportunity to review context specific approaches establish best practices and scale up successful activities to achieve resilience of communities and ecosystems to climate impacts on a wider landscape. To meet this requirement the project has included output 2.4. – 'Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities. This output especially targets the up scaling of lessons and best practices; and generating opportunities for autonomous adaptation in communities with similar ecological and socio-economic conditions.

In addition, the proposed workshops and seminars will be an opportunity for exchange of ideas on challenges and successes and to form a supporting network in particular with government authorities. A social media platform to promote regular interaction can also be an opportunity to forge partnerships with a broader adaptation network partner. In both districts provincial and national media persons will have access to knowledge products such as photos, testimonials, interviews, case studies for publication. Stories of success and challenges will be developed and shared in relevant national or international climate change fora. Policy briefs with recommendations will help inform local and national policy development. UN-Habitat will work with university networks to encourage student study/internship opportunities for learning as well as to encourage support and mentorship. UN-Habitat has worked with engineering and planning students from the University of Moratuwa (a national technical university in the areas of DRR planning, housing and small infrastructure) and will encourage internships from other Universities as well. The interns can actively participate in the areas of preparation of work plans for Executing Entities, monitoring, analyse and produce reports for overall development of communication related work of the Project; in collecting and updating of information of the Project, evidence based research, collect, analyse, and edit documents related to evidence for effective implementation of monitoring and evaluation systems; support and facilitate consultant teams on advocacy and knowledge sharing fore, training programmes. The student study/internship activities will be highlighted and reported.

## **H. Consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.**

Initiated by the Ministry of Environment (Climate Change Secretariat), the concept note formulation started upon a wide range of consultation process at different levels: governmental stakeholders, decision-makers, technical professionals, community representatives. The Ministry of Environment was involved from the beginning of the formulation and supported the process to define the activities corresponding to the national adaptation priorities. During discussions held with the Ministry of Environment the request to formulate the project was received in September 2019, based on previous discussion on climate change adaptation potential in Mullaitivu District (earlier Nuwara Eliya District was also included). Throughout the formulation, several bilateral discussions were held with the Ministry for feedback and validation—This ensured that the project was designed in alignment to the priorities of the Government, namely the National Adaptation Plan for Climate Change Impacts in Sri Lanka (2015 – 2025).

UN-Habitat has built a good rapport with the District level entities through the previous development work (sustainable human settlements development under the post-conflict resettlement, reconstruction and rehabilitation), this facilitated the consultation process. Once the project idea was initiated and discussions with the District and Divisional Secretaries were held over an 18-months' period. As mentioned elsewhere, Sri Lanka was under sporadic lockdowns/curfews due to the COVID-19 pandemic with travel restrictions imposed, with strict health guidelines which limited the travel to the field. In all discussions, the initiative had an overwhelmingly welcome as the communities in the Mullaitivu District have been facing increasing climate hazards with minimum infrastructure, economic and social facilities. The stakeholder mapping and consultation process for Mullaitivu District were initially done through dialogues with GN Officials of the Divisional Secretary Division of Maritimpattu and discussions with community representatives. With extensive travel restrictions being imposed for a major part of the 18-months' period later discussions were held using digital media with the District Secretary for Mullaitivu, planning officers, District officials of Disaster Management Centre and Central Environment Authority, key Fishery Department and Coconut Development Board officials. The consultative process at the District and Divisional levels with local stakeholders is an on-going process to ensure optimum participation in project actions. The data/information was further verified prior to the development of the full proposal. The list of stakeholders consulted in Mullaitivu District include, District Secretary/Government Agent (District Secretariat); Director – Planning; Assistant Director of Planning (District Secretariat); District Engineer (District Secretariat); District Rural Development Officer (Department of Rural Development); Additional Director (Land Use Policy Planning Division of the Department of Land Use and Policy Planning); District Agriculture Director; District Director (Samurthi Division); Assistant Commissioner of Agrarian Development (Department of Agrarian Development); Assistant Director (Disaster Management Centre); Wildlife Ranger (Oddusudan), Department of Wildlife; Additional Divisional Forest Officer (Department of Forest); Assistant Commissioner (Department of Fisheries and Aquatic Resources); Farmers, Maritimpattu Divisional Secretariat Division; Fisher people Community members in Chemmalai East GN Division (in Maritimpattu); and Farmers, Welioya Divisional Secretariat Division.

## I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The sustainability of the project has been taken into account from project planning stage. The project outcomes are designed to address gaps in adaptation and community needs in facing climate challenges. They align government priorities as detailed in the National strategies, Plans and Policies on adaptation, and outcomes of the Adaptation Fund as stated in the Adaptation Fund results framework. They are designed to complement each other and thereby reinforce actions taken to achieve sustainability. Activities could be seen as traditional adaptation approaches, but they support broader resilience actions that pursue to reduce current day vulnerabilities and build a strong platform for future adaptation pathways. They are therefore efficient climate finance instruments that can support local level adaptation needs of vulnerable members in the two selected targeted areas and sustain, once AF investment concludes. Livelihood options for communities challenged by climate change, with training, learning and capacity building uphold avoiding of future costs related to climate change and can be integrated into national plans and policies. The project approach will also provide robust lessons and insights for future funding opportunities.

By fully engaging communities, in particular women and youth, social integration of the project outputs will be achieved. The awareness raising and capacity enhancement of the households will also lead to long-lasting interest. Most importantly the increased resilience of communities will reduce vulnerabilities in the long run. Once the benefits are shared nationally, it is likely that other district authorities will also welcome adaptation initiatives for their communities. This will facilitate the up-scaling/out-scaling of project activities and open ways for local and national governments to replicate and reach out to other areas needing such initiatives. Trained government officials at different levels with planning and implementing experience, will support in aligning adaptation planning processes at district, provincial and national levels, with a view to influencing an enabling policy environment.

The Project maximises the funding amount for the investments programmed under Component 1. It allocates 88 per cent of the Project budget (excluding executing costs and project cycle management) to investments in Component 1 which focuses on small-scale climate resilient infrastructure. The funding for soft activities under Components 2 is required for complementarity/support for Component 1, and sustainability and quality assurance of the Project. The table below provides a justification for the funding requested, focusing on the full cost of adaptation reasoning by showing the impact of AF funding compared to no funding (baseline) related to expected Project outcomes.

**Table 11: Effect of project outcomes with AF funding compared to no funding (baseline)**

Project Components	Project Outcomes	Baseline (without AF)	Results achieved (with AF)
1. Developing resilient, adaptive livelihoods in the selected locations in the three (3) DS Divisions in Mullaitivu District.	Outcome 1 - Resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District developed.	<p>Poor adaptive capacity within relevant development sector services and infrastructure assets.</p> <p>Reduced ecosystem resilience in response to climate change and variability induced stress.</p> <p>Undiversified and weakened livelihoods and sources of income for vulnerable people in targeted areas.</p> <p>Increased exposure to climate-related hazards and threats.</p> <p><b>Description:</b> The targeted population current lack climate resilient infrastructure, access to natural assets and improved livelihood options to withstand conditions resulting from climate variability and change.</p>	<p>Physical infrastructure improved to withstand climate change and variability-induced stress.</p> <p>Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress.</p> <p>Households and communities having more secure access to livelihood assets.</p> <p>Targeted population have sustained climate-resilient alternative livelihoods.</p> <p>Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis.</p> <p>12,096 individuals will directly benefit from this component reaching at least 40% of Female Headed Households (FHH) and more than 50% of disabled people (As mentioned elsewhere, the target area was affected by a 25-year conflict)</p>
2. Address capacity needs and gaps on adaptation measures for rural settlements that can reduce vulnerability to climate change and increase coping capacity	Outcome 2 – Capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity developed.	<p>Increased exposure to climate-related hazards and threats.</p> <p>Poor awareness and ownership of adaptation and climate risk reduction processes at local level.</p> <p><b>Description:</b> The most vulnerable people (women, youth, disabled, agriculture workers, fishers), are not identified or reached by local authorities/agencies through their plans and programmes as officers have limited capacity to act on climate change adaptation activities.</p>	<p>Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis.</p> <p>Targeted population aware of predicted adverse impacts of climate change, and of appropriate responses.</p> <p>Capacity is enhanced, enabling the implementation of adaptation actions identified as a result of work undertaken in Component 1.</p>

## J. Sustainability of the project/programme outcomes has been taken into account when designing the project.

The project will deliver on economic, social and environmental benefits to vulnerable groups in particular women and marginalised groups in the two targeted project locations. With access to funding to implement sustained adaptation practices in particular agricultural interventions embracing climate smart agriculture, income poor households will benefit from improvements in income security. In Mullaitivu district having undergone an internal conflict, beneficiaries will be selected from over 40% female headed households and 50% households with disabled members. Income improvements are attempted through land management, water conservation, cultivation of climate resilient crops (groundnut and coconut) and minimising post-harvest losses

are important revenue sources for vulnerable members. A range of other activities i.e., training in value addition of fish, storage and processing techniques to prevent economic loss will lead to food security and safeguarding a better quality of life. The building of resilient livelihoods safeguarding cash crops, protecting assets against hazards are actions of adaptation to climate change which are delivering on social benefits such as access to credit, accruing savings leading to personal material wellbeing and environmental benefits as well. Provision of water and sanitation will further facilitate socioeconomic wellbeing. The gendered approach of providing equal access to opportunities to women who are marginalised although carrying the majority burden in household upkeep, including persons with disabilities, youth in horticulture activities will deliver on household food security and dietary diversity and income per se. 'Soft' interventions of resilience improvement through the protection of habitats and vulnerable ecosystems improves local environment and natural resources with less pollution and better air and water quality.

The project outcomes are designed to address gaps in adaptation and community needs in facing climate challenges. They align government priorities<sup>64</sup> as detailed in the National strategies, Plans and Policies on adaptation, and outcomes of the Adaptation Fund as stated in the Adaptation Fund results framework. They are designed to complement each other and thereby reinforce actions taken to achieve sustainability. Activities could be seen as traditional adaptation approaches, but they support broader resilience actions that pursue to reduce current day vulnerabilities and build a strong platform for future adaptation pathways. They are therefore well-planned climate finance instruments that can support local level adaptation needs of vulnerable members in the two selected targeted areas and sustain, once AF investment concludes.

**Economic Sustainability:** The project activities promote investing in the resilience of vulnerable physical, natural and social assets and ecosystems as a sustainable economic approach. This approach enhances livelihood options for communities challenged by climate change and promotes training, learning and capacity building to avoid future costs related to climate change and impacts of extreme climate events or disasters. The approach plans for future savings in high costs, for example of infrastructure such as damaged housing, roads due to flooding. For communities it will include economic and resilience building opportunities. These economic benefits of resilience can be integrated into national plans and policies. The project approach will also provide robust lessons and insights for future funding opportunities.

**Social Sustainability:** By fully engaging communities in the targeted settlements with the involvement of most members of the households in particular, women and youth and maintaining a gender balance in project activities to ensure participation of both men and women, social integration of the project outputs will be achieved. The participants are involved in development of plans/strategies, assessments, and monitoring of the project to ensure their interest in adaptation in the long term. The awareness raising and capacity enhancement of the households will also lead to long-lasting interest. Most importantly the increased resilience of communities and their infrastructure will reduce community vulnerabilities in the long run. Once the benefits to local, vulnerable communities are shared nationally, it is likely that other district authorities will also welcome adaptation initiatives for their communities. This will facilitate the up-scaling/out-scaling of project activities to other areas for vulnerable communities.

**Environmental Sustainability:** Ensuring environmental sustainability is central in planning of the project and is considered an integral and necessary condition. An eco-system-based adaptation approach based on natural resource management is essential in fragile coastal habitat. Agriculture, including rain-fed farming needs measures for soil, and water conservation, especially in lands with high salinity. Home garden development practices will take into account the necessity to manage lands well to conserve soil and biodiversity. Agro-forestry techniques will be practiced for both economic gain and ecosystem conservation. Likewise, in the coastal settlement, habitat protection with mangrove rehabilitation and possible near shore habitat conservation will yield a better fish catch and an increased income encouraging the communities to continue the practices in the long term.

**Institutional sustainability:** The project will open ways for local and national governments to carry forward the adaptation work implemented in two selected locations, to replicate and reach out to other areas needing such initiatives. Trained government officials at different levels with planning and implementing experience, will support in aligning adaptation planning processes at district, provincial and national levels, with a view to influencing an enabling policy environment. The stakeholder interactions and consultations of the project, promoting a participatory approach will lead to establishing a strong relationship with District, Divisional and the Local authorities. Interactions with local and district government at the design phase created a sense of local ownership and this relationship will be fostered further. Where relevant, lessons learned will explore the potential to implement and/or amend local by-laws and influence national policy/legislation. The project has the potential not only to be well aligned with climate change adaptation priorities of the government but also to obtain the buy-in and support of district/divisional/local authorities for programmes and initiatives on adaptation that go beyond the time frame of this project.

**Financial sustainability:** Financial sustainability of project outputs and outcomes are foremost in designing of the project as assurances for long term consistency is needed for community livelihoods and income generation. The government investment and interest in the project can be maintained when financial assurances are in place. The project promotes joint management of project components especially in delivering public utilities (e.g., provision of water) where additional resources are necessary going forward. Better service provision will avoid future high costs such as relocation of households due to saltwater intrusion in drinking water. At the community level, improved skills, livelihoods, income (or avoided losses) are expected to enhance the financial strength of households. Infrastructure elements, if necessary, will be designed using resilience and building back better principles, to ascertain durability/sustainability. Community participation in maintenance of public utilities ensure that after the project, infrastructure systems are maintained. Empowered communities able to utilise skills developed through the training and implementation processes of the project, are able to manage resources effectively and are better equipped to access additional climate finance resources. They have improved ability to identify risks and priorities, formulate and implement further responses to climate change that can be sustained in the long-term.

All infrastructure under this investment will be officially handed over to the respective Government entities based on the mandate. Below table shows the planned actions to ensure sustainability of each activity.

<sup>64</sup> Five thrust areas of the National Climate Change Adaptation Strategy for Sri Lanka 2011 to 2016, 2010

**Table 12: Monitoring, Maintenance and Sustainability**

Activity (Hard Investments)	Monitoring, Maintenance and Sustainability
<p><b>Activity 1.1.1:</b> Construction of 1km earth bund with sluice gate with spill arrangement in Irrattai Vaikaal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion.</p> <p><b>Activity 1.1.2:</b> Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, weeding out the bushes, renovation of auxiliary structures and strengthening the tank bund in Maritimpeattu and Puthukkudiyiruppu DS Divisions.</p>	<p>The completed structure(s) will be officially handed over to the Department of Agrarian Development. Therefore, monitoring, maintenance and sustainability will be under the direct purview of the Department of Agrarian Development as part of its key services under the 'Development Division'. Budgetary allocations will be through the annual budget on recurrent expenditure. Furthermore, supervising of maintenance will be through the District Development Committee. Activities 1.1.1 and 1.1.2 will also contribute towards the performance of Mullaitivu District in achieving Sustainable Development Goals (SDGs).</p>
<p><b>Activity 1.1.3:</b> Improvement of existing 3km long evacuation route with culvert and causeway in Raakkulam Grama Niladhari (GN) Division as well as provision of the early warning system and rescue facilities with the improvement of the causeway in Nayar GN Division in Maritimpeattu DS Division.</p>	<p>As mentioned above, the completed structure will be officially handed over to the Disaster Management Centre (DMC) and the Department of Agrarian Development, with monitoring, maintenance and sustainability being under the direct purview of the DMC and the Department of Agrarian Development and will be as part of its key functions/services of the DMC under 'Coordination of climate change adaptation programmes' and under the 'Development Division' of the Department of Agrarian Development. Budgetary allocations will be through the annual budget on recurrent expenditure. Similarly, as mentioned above, supervising of maintenance will be through the District Development Committee. Activity 1.1.3 will also contribute towards the performance of Mullaitivu District in achieving Sustainable Development Goals (SDGs).</p>
<p><b>Activity 1.1.4:</b> Construction of eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at household level and two (2) in common places (evacuation/safe centres used by people during flooding season) for flood-prone/waterlogged/inundated areas and conduct five (5) training sessions on sanitation and hygiene.</p>	<p>Sanitation facilities (disaster-resilient toilets) provided to families will be maintained by the households. Construction of the two (2) disaster-resilient toilets in common places (evacuation/safe centres used by people during flooding season), will be done through Community Implementation Agreement (CIA), i.e., an agreement signed with two (2) established grassroot level community organisations. The responsibility of monitoring, maintenance and sustainability will be officially handed over to these two (2) grassroot level community organisations with monitoring being done by the Public Health Inspector (PHI) and Medical Officer of Health (MOH). Similarly, as mentioned above, supervising of maintenance will be through the District Development Committee. Activity 1.1.4 will also contribute towards the performance of Mullaitivu District in achieving Sustainable Development Goals (SDGs).</p>
<p><b>Activity 1.3.6:</b> Replant/rehabilitation of 1.5km of mangrove forests in Irrattai Vaikal in Puthukkudiyiruppu DS Division and Nayar GN Division in Maritimpeattu DS Division to buffer and protect coastal areas from storm surges and sea level rise.</p>	<p>The responsibility of monitoring, maintenance and sustainability of Activity 1.3.6 will be officially handed over to the Forest Department, Department of Wildlife Conservation and Coast Conservation Department. As mentioned elsewhere, these three (3) Departments are legally obliged to protect mangroves. In addition, the five (5) grassroot level community organisations formed for the establishment of mangrove nurseries will also be responsible for monitoring, maintenance and sustainability. Budgetary allocations will be through the annual budget on recurrent expenditure of Forest Department, Department of Wildlife Conservation and Coast Conservation Department and will be part of the overall District plan. In addition, as mentioned above, supervising of maintenance will be through the District Development Committee. Activity 1.3.6 will also contribute towards the performance of Mullaitivu District in achieving Sustainable Development Goals (SDGs).</p>

## K. An overview of the environmental and social impacts and risks identified as being relevant to the project.

The proposed project has an obligatory requirement to follow and comply with national technical standards and relevant legislation. The project is selected for submission to the Adaptation Fund through a national consultation process and going forward, will be implemented and monitored in line with national legislation and standards. The relevance to principals of Adaptation Fund such as compliance with the law, marginalised and vulnerable groups, gender equity, women's empowerment and land and soil conservation, are ensured. The implementation and monitoring of the project will guarantee that the principles of the Adaptation Fund, as well as the relevant national technical standards, are adhered to during the lifetime of the project. Project components and outputs will meet technical standards, guidelines and norms prescribed in agriculture, agrarian services, forestry, disaster management and water resources management. Technical standards and safeguards for proposed small scale infrastructure will be followed. Relevant focal agencies engaged in implementing and monitoring the project at national and divisional level.

The proposed project has been designed in compliance with the set of environmental and social principals as detailed in the Environment and Social Policy of the Adaptation Fund. Environmental and social safeguards are essential tools to prevent and mitigate the potential for undue and unintended harm that could arise from project activities. In line with the Adaptation Fund's ESP and Gender Policy and UN-Habitat's Environmental and Social Safeguard Policy (ESSS Version 3)<sup>65-66</sup>, UN-Habitat and its partners are required to conduct risk screenings and impact assessments of all activities that have even a negligible risk of causing unintended harm. The checklist of UN-Habitat's Environmental and Social Safeguards ESSS version 3 will be used at technical design stage of all identified sub-projects. The project outputs and activities have been crafted ensuing a participatory, consultative process with communities and local authorities articulating their concerns. This process has further ensured that no project component will impact adversely on any priority biodiversity or ecosystem support areas, and that there are no negative impacts on local communities, or vulnerable groups.

During implementation, particular attention will be given to the monitoring and mitigation of any identified minor risks, and of any unanticipated environmental and social risks through visits to project sites, annual ESP screening and risk assessment by the project team based on the reports received

<sup>65</sup> See Annex 1 – ESMP and UN-Habitat – Environmental and Social Safeguards System

<sup>66</sup> [https://unhabitat.org/sites/default/files/2021/09/un-habitat\\_esss3.0.pdf](https://unhabitat.org/sites/default/files/2021/09/un-habitat_esss3.0.pdf)



from the Facilitating Agencies and the field offices. Through this process, environmental and/ or social risks will be identified, remedial actions will be executed immediately and a set of recommendations for how these should be addressed in future implementation activities will be developed.

It should be noted at this point that only activities under Component 1 involve physical works (construction, installation of facilities, maintenance and so on). All other activities in the balance outputs proposed by the project are *soft* activities that involve training, reports and publications. As such, the investments under Component 1 are considered category B risk and require further screening. The remaining activities under Components 2 are considered Category C and, as no risks arise, impact assessments are not required yet follow UN-Habitat ESSS for factors such as where training need to be emphasised gender equality and women's empowerment. Please refer, 'ANNEX 1: ENVIRONMENT AND SOCIAL MANAGEMENT PLAN' Table on 'Risk screening of the project at design stage using the 15 principles of the AF's ESP' for further details.

**Table 13: Checklist of AF environmental and social principles**

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>	-	√
<i>Access and Equity</i>	√	-
<i>Marginalised and Vulnerable Groups</i>	-	√
<i>Human Rights</i>	√	-
<i>Gender Equity and Women's Empowerment</i>	-	√
<i>Core Labour Rights</i>	√	-
<i>Indigenous Peoples</i>	√	-
<i>Involuntary Resettlement</i>	√	-
<i>Protection of Natural Habitats</i>	-	√
<i>Conservation of Biological Diversity</i>	-	√
<i>Climate Change</i>	-	√
<i>Pollution Prevention and Resource Efficiency</i>	-	√
<i>Public Health</i>	-	√
<i>Physical and Cultural Heritage</i>	√	-
<i>Lands and Soil Conservation</i>	-	√

## PART III: IMPLEMENTATION ARRANGEMENTS

### A. Describe the arrangements for project/programme implementation

The proposed project will be executed by the Ministry of Environment (MoE). The MoE will act as the 'executing entity' (EE) and is responsible for the management of the project in accordance with the agreed work plan and budget of the project document. The MoE will undertake the overall responsibility of project coordination. The management arrangements of this project will be in compliance with the gender policy of the Adaptation Fund which can be assessed by the structural and regulatory measures taken to address gender concerns and be gender responsible in all its management and implementation actions as detailed out in the project document.

As an overarching focus, UN-Habitat will support the MoE, and the Government of Sri Lanka to strengthen the resilience of vulnerable communities through this project. The UN-Habitat will serve as the AF Multilateral Implementing Agency (MIE) of the project. It will, together with the Project Team appointed by MOE oversee and coordinate the overall management, especially the adherence of the project to AF gender policy guidelines, oversee monitoring, provide technical backstopping and report to the AF ensuring that the project meets the standards, rules and regulations of both AF and UN-Habitat.

At the national level, The MoE will undertake the overall responsibility of project coordination, which will be overseen by the UN- Habitat Country Office, with coordination at the district and community level done mainly through the UN-Habitat Field Office in Mullaitivu and District Secretariat.

The National Steering Committee (NSC) will be established and will tentatively comprise of Secretary, Ministry of Environment; Secretary Ministry of Agriculture; Director, Climate Change Secretariat; Director, Disaster Management Centre; Representatives from the National Planning Department; Department of External Resources; Central Environmental Authority; Department of Project Management and Monitoring; and UN-Habitat. Department of Agrarian Development, Forest Department, Department of Wildlife Conservation, Coast Conservation Department, Department of Fisheries and Aquatic Resources will be invited to the NSC based on the requirement.

Through the MoE, the project lead will be the Climate Change Secretariat. As the responsible entity for overall project coordination, the MoE will recruit consultants to manage the project based at the MoE and District level. MoE will practice a fair policy of opening the opportunity to competent and qualified individuals of all genders. The Project Manager will work under the overall technical and management guidance of the Climate Change Secretariat and Policy Planning Division (PPD) of the MoE.

The overall monitoring and oversight of the project will be provided by UN-Habitat. It will appoint a Project Coordinator and a Field Coordinator for the main function of monitoring and verification of the implementation of activities in accordance with the approved work plan.

At the District and Divisional level, a Project Support Unit (District level working group/committee) will be established which will be housed in the Divisional Secretary's office or a relevant technical agency i.e., Department of Agrarian Development. It will comprise the Divisional Secretary, representatives from the District Disaster Management Centre, Department of Agrarian Development, Department of Agriculture, Forest Department, Department of Wildlife Conservation, Coast Conservation Department, Gender Officer and others as needed. A staff member paid by the project execution budget will be appointed to coordinate and report the meetings and other activities being implemented at the Divisional level. The composition of the Project Support Unit will be finalised in discussion with the District Secretary.

At the Village level, committees will be formed headed by relevant local government officers in particular by the Village Administrative Officer (Grama Niladhari/Village Official) and with participation of village level Women's Development Committees, Farmer/Fisherfolk Organisations to help develop village level strategies of the project, their implementation, monitoring and reporting. They will facilitate focus group discussions, dialogues on climate change, vulnerability risk assessment workshops and report findings to the Divisional Secretary.

Currently, five (5) farmer organisations have been identified for the renovation of minor irrigation tanks and two (2) CBOs have been identified for improving sanitation facilities have been identified. Further, if required, a local Non-Governmental Organisation (Sri Lanka's Sarvodaya Shramadana Movement or another technically competent entity) will be identified for the construction of a saltwater intrusion prevention bund and evacuation route. All the trainings will be delivered by the respective CBOs with technical assistance from relevant Departments. Project execution will be done through Agreement of Cooperation (AoC) and Community Implementation Agreement (CIA). Moreover, all required approvals will be obtained either through the MoE, District Secretariat or other stakeholders.

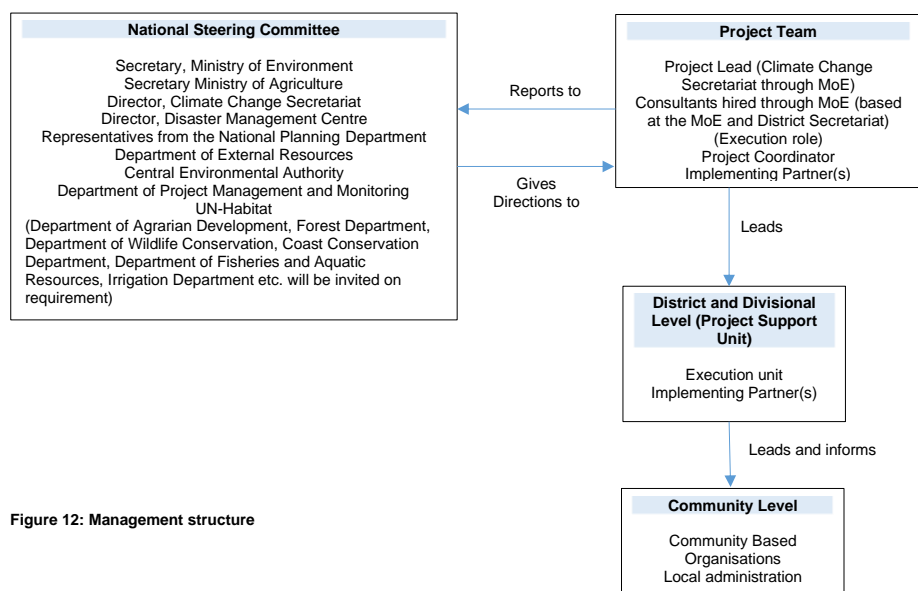


Figure 12: Management structure

**B. Describe the measures for financial and project/programme risk management.**

Key risks underlying the project have been analysed during the formulation phase in connection with the target sites of the Project. The risks facing the project and the risk mitigation strategy, i.e., countermeasures are summarised below:

Table 14: Risks and Mitigation Measures

Identified Risks	Risk Categorisation	Risk rating	Mitigation Measures
Current climate hazards or seasonal variability and delay in information transfer result in disturbed project actions in particular agricultural productivity impacting on achieving outputs and outcomes	Environmental	Medium	*Develop detailed inception work plan to guide inception phase activities taking current climate hazards/variability into account with methods of quick transfer of information. *Drought and flood-resilient crop species used as well as techniques to assist plant growth to reduce risk of damage from climate change hazards. *Diversify species and plant in appropriate seasons to reduce risk of hazards.
Interventions for implementing adaptation measures are not found to be cost-effective.	Financial	Low	*Cost-effectiveness is a core principle in the implementation of adaptation measures in order community interest can be ensured. Cost-effectiveness of measures will be discussed in detail with information widely disseminated.

Disagreement amongst stakeholders and poor collaboration between project partners	Institutional	Medium	*Roles and responsibilities clarified at project inception with team building activities for stakeholder collaboration. *Participatory approach of the project will help resolve differences.
Lack of awareness impacting commitment/buy-in from local communities	Social	Low	*Developing a stakeholder engagement plan will be a priority at project inception phase. *Participatory approach adapted of community consultations at every level including with women and marginalised groups. *A detailed survey with sex, age disaggregated data will provide essential information followed by focus group discussions and continuous interactions at village level will keep information flowing and awareness raised.
Institutional capacities and inter agency collaborations are not sufficient to provide effective solutions for climate issues that are complex and multi-sectoral.	Institutional	Medium	*Institutional capacity enhancement is built into the project design to improve awareness and understanding of the benefits of project activities. Priority attention will be given to capacity building especially for those at the local and provincial level. This will lead to influencing a wider policy to initiate an appropriate institutional framework for analysing climate change impacts on settlements, livelihoods and food security and implementing appropriate interventions.
Loss of government support may result in lack of prioritisation of AF project activities and political instability may cause delays in approval process.	Institutional	Medium	*Regular stakeholder consultation and involvement will be undertaken to ensure that government maintains its commitment and considers the Adaptation Fund project as a support to its forestry and agriculture programmes.
COVID-19 resurgence/ future waves may occur and will delay field operations	Environmental and social	Low	Follow all COVID-19 national and World Health Organisation guidelines in all project operations activities.

### C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The project has been designed from the perspective of reducing vulnerability and increasing adaptive capacity of rural communities facing increasing climate change hazards. The 15 ESP principles of the Adaptation Fund form the foundation of the activity design, beneficiary selection, activity implementation, stakeholder rights safeguards, partnership building, and monitoring and evaluation. A detailed Environmental and Social Management Plan (ESMP) will be developed identifying measures and actions that will reduce potential adverse environmental and social impacts with compensatory measures if applicable. The baseline survey and VRA to be conducted, will contain detailed environmental and social appraisals with comprehensive climate change vulnerability and disaster risk assessments in the selected DS Divisions, keeping the 15 ESP Principles as a priority. As mentioned elsewhere, the assessments were conducted adhering to the COVID-19 national health guidelines.

The proposed project identifies and summarises adverse environmental and social impacts and describes mitigation measures mostly under planned activities, upholding all ESP principles. The project is predicated on the premise of Climate Change (Principal 10) and proposes its work to a large extent on Principal 15 Lands and soil conservation. The first 5 principals of Compliance with the Law, Access and Equity, Marginalised and Vulnerable Groups, Human Rights and Gender Equity and Women's Empowerment are fundamental to the success of project activities. Principals 9 and 10 Protection of Natural Habitats and Conservation of Biological Diversity are embedded in design of activities. As a project working with marginalised, underserved communities, Principal 6 Core Labour Rights, Principal 8 Public Health and Principal 13 Involuntary Resettlement are core concerns project will address.

Prior to the start of this project, all potential environmental and social risks will be identified/assessed and measures to mitigate these risks proposed synchronised with UN-Habitat's Environmental and Social Safeguards System<sup>67</sup>. The overall responsibility for compliance with the ESMP will be with the project manager and the project team leadership. This includes the training of partners on ESMP and ESP of the Adaptation fund. In addition, all partners and a broader group of stakeholders will receive briefings on gender concerns, involvement of women and youth in activities (and mainstreaming of specific concerns) as well as the environment and climate change dimensions of the ESMP.

In addition to the ESMP, the project will ensure compliance with the ESP through a) including detailed reference to the ESMP and the 15 ESP Principles in All MoUs and Agreements with executing partners (b) The ToR of Steering Committees, project personnel and focal points (c) All key Partners including community members will receive awareness/capacity development on the 15 Principles, the ESMP and their responsibilities. (d) The Monitoring and Evaluation Framework and project activities will be screened against the 15 principals as well as gender policy concerns of the AF. (e) A grievance mechanism will be in place as part of the plan which will allow any affected stakeholder to raise concerns, anonymously if they wish, to the responsible project management team. This will encourage women and other marginalised members to come forward to voice their concerns. Modalities for raising grievances will be easy methods for community members where they can use any language, an email address on the project's website and a confidential telephone number will also be given. In addition to the grievance mechanism, local staff will be trained to have an 'open-door' policy with communities, so that communities in particular women, can discuss any aspect of the project at any time. This less formal mechanism will also enable project staff to listen to communities' concerns and promote their participation in activity implementation.

<sup>67</sup> See Annex 1 – ESMP and UN-Habitat's Environmental and Social Safeguards System

**D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan, in compliance with the ESP and the Gender Policy of the Adaptation Fund.**

**Table 15: M & E arrangement**

Type of M&E activity	Responsible parties	Budget USD	Time Frame
First steering committee meeting, Inception Workshop and Report	Project Manager (PM) and Monitoring and Reporting Manager (M&RM)	USD 2,800 (USD 1,400 from ESP & GP compliance, USD 900 travel and USD 500 workshop costs)	Within first three months of project start up
Inception Report	Monitoring and Reporting Manager (M&RM)	USD 900 includes the cost of contribution by M&RM	Three weeks after workshop
Measurement of Means of Verification for Project Progress on output and implementation.	Monitoring & Evaluation Associate (M&EA) and Gender & Environment Advisor (G&EA)	USD 450 includes the cost of contribution by M&EA	Annually prior to Annual Progress Reports and Annual Work Plan
Quarterly Technical Reports from the Divisional level committees	Monitoring & Evaluation Associate (M&EA) and Gender & Environment Advisor (G&EA)	USD 450 includes the cost of contribution by M&EA	End of each quarter
Annual Progress Reports	Project Manager (PM), Field Coordinator (FC), Monitoring & Evaluation Associate (M&EA) and Monitoring and Reporting Manager (M&RM)	USD 2,738 Includes the cost of contribution by PM, FC, M&EA and M&RM	Annually
Compliance with ESP & GP	Monitoring & Evaluation Associate (M&EA) and Gender & Environment Advisor (G&EA)	USD 5,250 includes the cost of contribution by G&EA, M&EA and PM	Annually, mid evaluation, as well as upon receipt of grievances and complainants
Meetings of Project Steering Committee	Project stakeholders that include government and implementing partners (local and national levels)	USD 5,500 that includes 4 steering committee meetings at the national level	After the Inception workshop and thereafter as determined by PM
Periodic progress reports	Monitoring and Reporting Manager (M&RM)	USD 1,800 that includes the cost of contribution by M&RM	End of every six (6) months
Visit to field sites	Project Manager (PM), Country Programme Manager (CPM), Programme Management Officer (PMO), Gender and Environmental Advisor (G&EA) and Monitoring and Reporting Manager (M&RM)	USD 3,600 that includes four-time travel of three staff to field (USD 2,500 utilised for monitoring on Environmental and Social Safeguards (ESS), Environment and Social Management Plan (ESMP) and Gender Action Plan (GAP)	Every six (6) months
Mid-term Evaluation	Monitoring and Reporting Manager (M&RM)	USD 2,400 that includes the cost of contribution by M&RM and related travel (USD 1,350 for ESS, ESMP and GAP)	At mid-point of project execution, after twelve (12) months
Final Evaluation	External consultant and Monitoring and Reporting Manager (M&RM)	USD 10,000 that includes the cost of external consultant (Total USD 35,888)	2023 - at least three months prior to the end of project implementation
Financial information audit	External consultant	Financial information audit (UN-Habitat Contribution)	As per UN-Habitat regulations

**E. Include a results framework for the project proposal, including milestones, targets and indicators, including one or more core outcome indicators of the Adaptation Fund Results Framework, and in compliance with the Gender Policy of the Adaptation Fund.**

Table 16: Results framework

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Outcome(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
<p>To improve climate related socio-economic outcomes in the targeted fishing and agricultural communities through the implementation of community-based adaptation solutions.</p> <p>To support climate resilient development and increase institutional and community capacity to adapt to the changing and variable climate.</p>	<p>Percentage increase in resiliency of the target population in the selected DS Divisions to climate variability and change.</p>	<p>Percentage of the population in the selected GN Divisions of the three (3) DS Divisions with/without the knowledge of climate adaptation measures.</p> <p>Percentage/number of farmers/rural individuals who are constrained by extreme rainfall events, saltwater intrusion and droughts in the selected GN Divisions of the three (3) DS Divisions.</p> <p>Percentage/number of farmers/rural individuals affected by water, sanitation facilities and evacuation routes in the selected GN Divisions of the three (3) DS Divisions.</p> <p>Percentage/number of fisher people who are subjected to extreme weather conditions and post-harvest losses that are affecting their household income.</p> <p>Percentage/number of women/youth/persons with disability and other vulnerable groups dependent on rainfed farming and fishing who are equally affected by the issues identified.</p>	<p>All officers working in the District/DS Divisions/GN Divisions, including national, provincial and local government are made aware and collaborating with the project implementation.</p> <p>At the end of year one - more than 60% of households made aware, trained and practicing one or more adaptive measures to increase resilience.</p> <p>At the end of year one – measures have been taken to prevent and control saltwater intrusion in selected GN Divisions.</p> <p>At the end of year one – measures have been taken to renovate minor tanks, construct climate resilient toilets and evacuation routes in selected GN Divisions.</p> <p>By mid of year two – selected farmers/rural individuals are engaged in cultivation of climate resilient crops and engaged in climate smart agriculture practices.</p> <p>By mid of year two – selected fisher people are engaged in value addition of fish.</p> <p>By mid of year two – mangrove nurseries are established, and mangroves replanted.</p> <p>By mid of year two - measures have been taken to renovate minor tanks, construct climate resilient toilets and evacuation routes in selected GN Divisions.</p> <p>By mid of year two – the three DS Divisions have adopted the framework for implementation of climate change adaptation actions.</p>	<p>More than 60% increase in resiliency of the target population in the selected DS Divisions to climate variability and change.</p>	<p>With training, capacity building and provision of <i>hard</i> investments, the target population can make informed decisions on adopting measures for increasing resilience.</p>

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Outcome(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
			All data is verified through assessments and reference to the baseline data through survey after completion of activities.		
<b>Outcome 1</b> Developing resilient and adaptive livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	Number of physical infrastructures improved to withstand climate change and variability-induced stress.	Number of physical infrastructures required to be improved in the targeted locations.	At the end of year one – At least 50% physical infrastructure proposed are completed.	Proposed physical infrastructure proposed are completed.	All stakeholders are collaborative in order to complete and reap the full benefit of the interventions proposed.
	Percentage improvement in ecosystem services and natural resource assets maintained and improved under climate change and variability-induced stress.	Percentage in ecosystem services and natural resource assets in the targeted location.	At the end of year one – At least 50% of the ecosystem services/natural resources assets are maintained and improved.	Proposed ecosystem services/natural resources assets are maintained and improved	
	Percentage of population in the selected DS Divisions having more secure access to livelihood assets.	Percentage of the targeted population with poor or no access to livelihood assets.	At the end of year one – At least 50% population in the selected DS Divisions having more secure access to livelihood assets.	100% of the targeted population in the selected DS Divisions are having more secure access to livelihood assets.	
	Percentage of targeted population with sustained climate-resilient alternative livelihoods.	Percentage of targeted population with engaged in unsustainable alternative livelihood (related to agriculture and fisheries).	At the end of year one – At least 50% targeted population with sustained climate-resilient alternative livelihoods.	100% targeted population with sustained climate-resilient alternative livelihoods.	
	Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis.	Number of relevant threat and hazard information currently generated and disseminated to stakeholders on a timely basis.	At the end of year one – At least 25% of the work related to dissemination of relevant threat and hazard information among stakeholders completed.	100% of the work related to dissemination of relevant threat and hazard information among stakeholders completed.	
<b>Output 1.1:</b> Reduce vulnerability of coastal communities to face risks of climate change by collaborating on measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land, rehabilitate minor	Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (Overall).  Number of natural resource assets created, maintained or				All stakeholders are collaborative in order to complete and reap the full benefit of the interventions proposed.

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
tanks for water storage, drinking and irrigation, and evacuation routes.	<p>improved to withstand conditions resulting from climate variability and change (Overall).</p> <p>Number of measures introduced to prevent and control saltwater intrusion into freshwater bodies and agricultural land (Specific).</p> <p>Number of minor tanks rehabilitated (Specific).</p> <p>Number/distance of the evacuation routes rehabilitated (Specific).</p>	<p>Groundwater salinity profiles/groundwater sampling of observation and active wells of the GN Division(s) selected.</p> <p>Percentage/number of dilapidated minor tanks that are abandoned in the selected GN Division(s).</p> <p>Number of unusable evacuation routes in the selected GN Division(s).</p>	<p>At the end of year one – measures have been taken to prevent and control saltwater intrusion, renovate minor tanks, construct climate resilient toilets and evacuation route(s) in selected GN Divisions.</p>	<p>Formation of a 1 km earth bund with sluice gate in Puthukkudiyiruppu DS Division to prevent saltwater intrusion completed.</p> <p>Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, renovation of auxiliary structures and strengthen the tank bund in Maritimpeattu and Puthukkudiyiruppu DS Divisions completed.</p> <p>Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division and Nayar GN Division in Maritimpeattu DS Division completed.</p> <p>Eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at the household level and (2) in common places for flood-prone/waterlogged/inundated areas in Welioya DS Division completed and five (5) training sessions on sanitation and hygiene conducted.</p> <p>At least 40% of the families living in the selected GN Divisions have better living conditions with access to water, improved sanitation and evacuation routes.</p> <p>At least 25% increase in agricultural productivity due to reduction in salinity.</p>	

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Output(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
<p><b>Output 1.2:</b> Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in coastal lands.</p>	<p>Number and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies (Overall).</p> <p>Percentage/number of persons trained in climate resilient sustainable agriculture practices (including soil/water and microclimate conservation) (Specific).</p> <p>Number of tools, planting material etc. distributed (Specific).</p> <p>Percentage/number of families actively engaged climate resilient sustainable agriculture practices and home-gardening.</p>	<p>Percentage/number of farmers from vulnerable families in the selected GN Divisions engaged in non-resilient/non-adaptive agricultural practices and lacks resilience to face extreme weather conditions to increase the sustainability of the human settlements.</p>	<p>By mid of year two – twenty-five (25) training and capacity building workshops on sustainable land management, water conservation practices and climate change impacts and adaptation strategies held.</p> <p>By mid of year two – two-hundred and fifty (250) individuals of vulnerable families are trained on a variety of methods for home garden development with selection of drought-tolerant crop varieties (groundnut and coconut), multi-cropping, adjusting cropping patterns, soil fertility adjustment and agroforestry in selected lands.</p> <p>By mid of year two – equipment (tools) for home gardening and planting material of resilient crops for 250 individuals of vulnerable families are distributed and families are engaged in smart agriculture practices.</p>	<p>Twenty-five (25) training and capacity building workshops on sustainable land management, water conservation practices and climate change impacts and adaptation strategies in Welioya (10 workshops), Maritimé pattu (8 workshops) and Puthukkudiyiruppu (7 workshops) DS Divisions completed.</p> <p>Two-hundred and fifty (250) individuals of vulnerable farmer families (125 families in Welioya DS Division, 75 families in Maritimé pattu DS Division and 50 families in Puthukkudiyiruppu DS Division) are trained on a variety of methods for home garden development with selection of drought-tolerant crop varieties (groundnut and coconut), multi-cropping, adjusting cropping patterns, soil fertility adjustment and agroforestry in selected lands.</p> <p>Equipment (tools) for home gardening and planting material of resilient crops for 250 families (125 families in Welioya DS Division, 75 families in Maritimé pattu DS Division and 50 families in Puthukkudiyiruppu DS Division) are distributed.</p>	<p>Selected individuals from vulnerable farmer/rural families are actively engaged and committed towards smart agriculture practices and shift harmful practices to increase the sustainability of the human settlements.</p>



Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Outcome(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
				<p>More than 70% of the targeted fisher families are actively engaged in sustainable fishing practices and conservation of mangrove forests.</p> <p>At least 60% of the targeted fisher families have better living conditions due to increase in income.</p>	
<p><b>Output 1.3:</b> Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating mangroves for improved lagoon fishery.</p>	<p>Number and type of adaptation assets (tangible and intangible) created and strengthened in support of individual/community livelihood strategies (Overall).</p> <p>Percentage/number of fisher families (in particular women and youth) who are trained in value addition of fish (Specific).</p> <p>Percentage/number of women trained on establishment of home-based industries and business management (Specific).</p> <p>Number of fish value addition centres established (Specific).</p>	<p>Percentage of fisher people from vulnerable fisher families engaged in non-value addition practices of fish in the selected GN Divisions.</p> <p>Percentage of women in the selected GN Divisions who are unskilled.</p>	<p>By mid of year two – selected fisher families are trained, fisher societies are equipped with resources, engaged in value addition of fish and business models developed.</p> <p>By year one – selected unskilled women are trained on establishment of home-based industries and business management.</p>	<p>Hundred (100) fisher people from vulnerable fisher families (50 from Maritimpattu DS Division and 50 from Puthukkudiyiruppu DS Division, including women and youth) trained on proper handling, preservation and value-adding of fish mainly using locally available resources.</p> <p>Hundred and fifty (150) women trained on establishment of home-based industries and business management (50 from Welioya DS Division, 50 from Maritimpattu DS Division and 50 from Puthukkudiyiruppu DS Division).</p> <p>Relevant equipment for fish value addition to established fisher societies (one in Maritimpattu DS Division and another in Puthukkudiyiruppu DS Division) are provided.</p>	<p>Selected fisher people from vulnerable fisher families are actively engaged in fish value addition and committed towards protection of mangrove forests.</p> <p>Ability to identify members with initiative and drive to be trained and financially supported for sustainable ventures.</p>

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Outcome(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
	<p>Number of business models developed (Specific).</p> <p>Number of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (Overall).</p> <p>Number of community-based mangrove nurseries established (Specific).</p>	Percentage of deforested mangrove areas in selected GN Divisions.	By mid of year two – mangrove nurseries are established, and mangroves replanted.	<p>Business models for long-term functioning and sustainability are developed.</p> <p>Five (5) community-based mangrove nurseries are established.</p> <p>1.5 km of mangrove forests replanted to buffer and protect coastal areas from storm surges and sea level rise.</p> <p>More than 75% of the targeted fisher families are actively engaged in sustainable fishing practices and conservation of mangrove forests.</p> <p>At least 60% of the targeted fisher families have better living conditions due to increase in income.</p>	
<p><b>Outcome 2</b> Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.</p>	<p>Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis (Overall).</p> <p>Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses (Specific).</p>	Percentage of the target population with little or no knowledge of climate impacts on livelihoods and have no training on adaptive responses.	By year one - at least 70% of the stakeholders made aware and able to voice concerns and take action on climate events that affect their lives and living conditions.	80% of the target population trained in resilience strategies to adapt to the changing climate with ability to protect/adjust livelihoods.	Interest of the target population – communities, institutions and service delivery to meet challenges of climate change, to respond and adapt
<p><b>Output 2.1.</b> Participatory vulnerability/risk assessments to mainstream</p>	Number of projects that conduct and update risk and vulnerability				

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Output(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.	<p>assessments (Overall).</p> <p>Percentage/number of community members and others participating in risk assessment activities with analyses and planning (Specific).</p> <p>Percentage/number of provincial and local government officers and community members empowered to voice concerns (Specific).</p>	<p>Percentage of community participation in decision making on climate change issues.</p> <p>Percentage of local government officers not proficient in climate change issues.</p> <p>Percentage of community members and other stakeholders at local, provincial levels unaware of risk assessment methods.</p>	By the middle of year two - At least 30% of community members and service delivery officers understand adaptive and climate resilient measures and able to voice concerns in relevant fora.	<p>Climate change risks and vulnerabilities in the three (3) DS Divisions identified and documented, including gaps in knowledge and data/information, and identifying and selecting preferred adaptation options with special emphasis on community-based climate change adaptation.</p> <p>Three (3) frameworks for implementation of adaptation action (strategy and action plan) in-line with the local and national climate change adaptation strategies and plans developed.</p> <p>At least 40% of the target population empowered, (gender balance maintained) to voice and represent at fora with collaboration of relevant officers.</p>	<p>Participatory approaches are encouraged for inclusion of all in particular for decision making on livelihoods.</p> <p>All stakeholders are willing to learn and share information of climate effects on lives and livelihoods.</p>
<b>Output 2.2:</b> Share knowledge and lessons through documentation of climate resilient actions with increased adaptive capacities.	<p>Number of news outlets in the local press and media that have covered the topic (Overall).</p> <p>Number participatory dialogues, focus group discussions conducted (Specific).</p> <p>Number of workshops/seminars conducted to inform the framework for implementation of climate change adaptation actions (Specific).</p>	<p>Case studies, best practices in climate adaptation not reaching marginalised communities.</p> <p>Popular newspapers not carrying success stories of climate adaptation</p> <p>Videos only accessible to limited groups.</p>	By end of year two – Ten (10) participatory dialogues, focus group discussions conducted; 6 workshops/seminars conducted; 1 video documentary developed and at least 5 periodic media campaigns conducted.	<p>Ten (10) participatory dialogues, focused group discussions to deliberate concerns of communities (5 in each DS Division) conducted.</p> <p>Six (6) workshops/seminars to inform the framework for implementation of climate change adaptation actions to relevant stakeholders, with 2 in each DS Division conducted.</p>	Support is received by all stakeholders in developing and sharing knowledge and lessons learnt.

Goal	To support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District				
Objective(s)/Outcome(s)/Output(s)	Indicator	Baseline	Milestone	Target	Assumptions
	<p>Percentage/number of stakeholders made aware climate adaptation action taken (Specific).</p> <p>Number of articles in print media and social media (Specific).</p> <p>Number of video documentaries circulated (Specific).</p>			<p>At least five (5) periodic media campaigns (print and electronic) at provincial and national levels (in all languages) to improve communication/visibility of climate change adaptation action implemented.</p> <p>One (1) video documentary consisting of lessons learnt/experiences, case studies and broader policy interventions developed.</p>	

**Adaptation Fund Core Impact Indicators**

**Adaptation Fund Core Impact Indicator "Number of Beneficiaries"**

Description	Baseline (absolute number)	Target at project approval (absolute number)	Adjusted target first year of implementation (absolute number)	Actual at completion <sup>7</sup> (absolute number)
<b>Direct beneficiaries supported by the project</b>				
<i>Female direct beneficiaries</i>	Output 1.1: 2,850 Output 1.2: 1,100 Output 1.3: 550 Output 2.1: 15,100 (covering all sectors, agriculture/fisheries etc.) Output 2.2: 25,700	Output 1.1: 2,850 Output 1.2: 1,100 Output 1.3: 550 Output 2.1: 15,100 (covering all sectors, agriculture/fisheries etc.) Output 2.2: 25,700	Output 1.1: 2,850 Output 1.2: 1,100 Output 1.3: 275 Output 2.1: 7,550 (covering all sectors, agriculture/fisheries etc.) Output 2.2: 12,850	Output 1.1: 2,850 Output 1.2: 1,100 Output 1.3: 550 Output 2.1: 15,100 (covering all sectors, agriculture/fisheries etc.) Output 2.2: 25,700
<i>Youth direct beneficiaries</i>	Output 1.1: 950 Output 1.2: 290 Output 1.3: 185 Output 2.1: 4,250 covering all sectors, agriculture/fisheries etc.) Output 2.2: 8,200	Output 1.1: 950 Output 1.2: 290 Output 1.3: 185 Output 2.1: 4,250 covering all sectors, agriculture/fisheries etc.) Output 2.2: 8,200	Output 1.1: 950 Output 1.2: 290 Output 1.3: 95 Output 2.1: 2,125 covering all sectors, agriculture/fisheries etc.) Output 2.2: 4,100	Output 1.1: 950 Output 1.2: 290 Output 1.3: 185 Output 2.1: 4,250 covering all sectors, agriculture/fisheries etc.) Output 2.2: 8,200

<b>Indirect beneficiaries supported by the project</b>				
<i>Female indirect beneficiaries</i>	Output 1.1: 5,500 (skilled workers, vendors etc.) Output 1.2: 2,200 Output 1.3: 1,700 Output 2.1: 31,200 (in all 3 DS Divisions) Output 2.2: 35,300 (in all 3 DS Divisions)	Output 1.1: 5,500 (skilled workers, vendors etc.) Output 1.2: 2,200 Output 1.3: 1,700 Output 2.1: 31,200 (in all 3 DS Divisions) Output 2.2: 35,300 (in all 3 DS Divisions)	Output 1.1: 5,500 (skilled workers, vendors etc.) Output 1.2: 2,200 Output 1.3: 850 Output 2.1: 15,600 (in all 3 DS Divisions) Output 2.2: 17,650 (in all 3 DS Divisions)	Output 1.1: 5,500 (skilled workers, vendors etc.) Output 1.2: 2,200 Output 1.3: 1,700 Output 2.1: 31,200 (in all 3 DS Divisions) Output 2.2: 35,300 (in all 3 DS Divisions)
<i>Youth indirect beneficiaries</i>	Output 1.1: 2,750 (skilled and unskilled workers, vendors, transporters etc.) Output 1.2: 750 (skilled workers, vendors, transporters etc.) Output 1.3: 300 (fish vendors, transporters etc.) Output 2.1: 6,500 (in all 3 DS Divisions) Output 2.2: 10,500 (in all 3 DS Divisions)	Output 1.1: 2,750 (skilled and unskilled workers, vendors, transporters etc.) Output 1.2: 750 skilled workers, vendors, transporters etc.) Output 1.3: 300 (fish vendors, transporters etc.) Output 2.1: 6,500 (in all 3 DS Divisions) Output 2.2: 10,500 (in all 3 DS Divisions)	Output 1.1: 2,750 (skilled and unskilled workers, vendors, transporters etc.) Output 1.2: 750 (skilled workers, vendors, transporters etc.) Output 1.3: 150 (fish vendors, transporters etc.) Output 2.1: 3,750 (in all 3 DS Divisions) Output 2.2: 5,250 (in all 3 DS Divisions)	Output 1.1: 2,750 (skilled and unskilled workers, vendors, transporters etc.) Output 1.2: 750 (skilled workers, vendors, transporters etc.) Output 1.3: 300 (fish vendors, transporters etc.) Output 2.1: 6,500 (in all 3 DS Divisions) Output 2.2: 10,500 (in all 3 DS Divisions)

**Adaptation Fund Core Impact Indicator "Early Warning Systems"**

Description	Baseline	Target at project approval	Adjusted target first year of implementation	Actual at completion
<b>Adopted Early Warning Systems</b>	(2) Monitoring and warning service			
<b>Hazard</b>	Flooding			
<b>Geographical coverage</b>	Currently the Navaru GN Division in Maritimappattu DS Division lacks an early warning system.	Early warning system for Navaru GN Division in Maritimappattu DS Division.	Partially established early warning system for Navaru GN Division in Maritimappattu DS Division.	Fully established early warning system for Navaru GN Division in Maritimappattu DS Division.
<b>Number of municipalities</b>	Navaru GN Division in Maritimappattu DS Division.			

**Adaptation Fund Core Impact Indicator "Assets Produced, Developed, Improved, or Strengthened"**

Description	Baseline	Target at project approval	Adjusted target first year of implementation	Actual at completion
<b>Sector (identify)</b>	Community infrastructure			
<b>Targeted Asset</b>	Currently there is no earth bund with sluice gate with spill arrangement in Irrattai Vaikaal in Puthukkudiyiruppu	Formation of a 1 km earth bund with sluice gate in Irrattai Vaikaal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion.	Eighty percent (80%) of the 1 km earth bund with sluice gate in Irrattai Vaikaal in Puthukkudiyiruppu DS	Formation of a 1 km earth bund with sluice gate in Irrattai Vaikaal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion completed.
<b>1) Health and Social Infrastructure (developed/improved)</b>				

<b>2) Physical asset (infrastructure) (produced/improved/strengthened)</b>	DS Division to prevent saltwater intrusion.		Division to prevent saltwater intrusion completed.	
	Currently the fifteen (15) minor irrigation tanks in Maritimpeattu and Puthukkudiviruppu DS Divisions are not in use.	Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, renovation of auxiliary structures and strengthen the tank bund in Maritimpeattu and Puthukkudiviruppu DS Divisions.	Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, renovation of auxiliary structures and strengthen the tank bund in Maritimpeattu and Puthukkudiviruppu DS Divisions completed.	Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, renovation of auxiliary structures and strengthen the tank bund in Maritimpeattu and Puthukkudiviruppu DS Divisions completed.
	Currently the evacuation route is in a dilapidated state.	Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division and Navaru GN Division in Maritimpeattu DS Division.	Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division and Navaru GN Division in Maritimpeattu DS Division completed.	Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division and Navaru GN Division in Maritimpeattu DS Division completed.
	Currently the selected eighteen (18) households and the two (2) common places do not have appropriate sanitation facilities (disaster-resilient toilets).	Construction of eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at the household level and (2) in common places for flood-prone/waterlogged/inundated areas in Welioya DS Division and conduct five (5) training sessions on sanitation and hygiene.	Eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at the household level and (2) in common places for flood-prone/waterlogged/inundated areas in Welioya DS Division completed and five (5) training sessions on sanitation and hygiene conducted.	Eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at the household level and (2) in common places for flood-prone/waterlogged/inundated areas in Welioya DS Division completed and five (5) training sessions on sanitation and hygiene conducted.
<b>Changes in Asset (Quantitative or qualitative depending on the asset)</b>	Currently there is no earth bund with sluice gate with spill arrangement in Irattai Vaikaal in Puthukkudiviruppu DS Division to prevent saltwater intrusion. At the end of the proposed Project the investment will be completed for usage.			
	Currently the fifteen (15) minor irrigation tanks in Maritimpeattu and Puthukkudiviruppu DS Divisions are not in use. At the end of the proposed Project, the tanks will be renovated for continuous usage.			
	Currently the evacuation route is in a dilapidated state, and upon completion of the proposed Project the communities will be able to use it.			
	Currently the selected eighteen (18) households and the two (2) common places do not have appropriate sanitation facilities (disaster-resilient toilets). At the end of the proposed Project the households and common places will have appropriate sanitation facilities which could be used even during periods of disasters, i.e., flooding/waterlogging/inundation.			
<b>Adaptation Fund Impact Indicator "Increased income, or avoided decrease in income"</b>				
<b>Description</b>	<b>Baseline</b>	<b>Target at project approval</b>	<b>Adjusted target first year of implementation</b>	<b>Actual at completion</b>
<b>Income Source</b>	The selected communities are currently engaged in agriculture/agribusiness and fisheries sector. *Agriculture/agribusiness sector currently rarely practice climate resilient sustainable agriculture and poor productivity is observed with the lack of usage of climate resilient crops. *Value addition of fish is scarcely practiced, directly affecting the livelihood during off seasons.			
<b>Income level (USD)</b> At 1 USD = 359.73 LKR	USD 125	USD 125	USD 130	USD 145
<b>Number of households</b>	Total population in the three (3) selected DS Divisions (2019) Maritimpeattu 13,935 families (42,977 individuals) Puthukkudiviruppu 13,794 families (41,139 individuals) Welioya 3,339 families (9,758 individuals)  Selected beneficiaries (Average family size of Mullaitivu District is 4.2 according to Department of Census and Statistics, 2020) 500 coastal fisher and farming families (2,000 individuals) 280 coastal fisher families (1,120 individuals)			
<b>Adaptation Fund Core Impact Indicator "Natural Assets Protected or Rehabilitated"</b>				
<b>Description</b>	<b>Baseline</b>	<b>Target at project approval</b>	<b>Adjusted target first year of implementation</b>	<b>Actual at completion<sup>9</sup></b>
<b>Natural asset/ecosystem</b>	Mangroves			

<u>Change in state</u> <u>Ha or km</u> <u>Protected/rehabilitated, or</u> <u>Effectiveness of protection/rehabilitation -Scale (1-5)</u>	<u>Currently the selected area does not have a mangrove cultivation.</u>	<u>Establish five (5) community-based mangrove nurseries and replant 1.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise</u>	<u>Establish five (5) community-based mangrove nurseries and replant 0.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise</u>	<u>Establish five (5) community-based mangrove nurseries and replant 1.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise</u>
<u>Total number of natural assets or ecosystems protected/rehabilitated</u>	<u>Currently the selected area does not have a mangrove cultivation.</u>	<u>1.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise.</u>	<u>0.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise.</u>	<u>1.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise.</u>

**F. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund**

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Table 17: Alignment with results framework of AF

Project Objective(s) <sup>68</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
To improve climate related socio-economic outcomes in the targeted fishing and agricultural communities through the implementation of community-based adaptation solutions.  To support climate resilient development and increase institutional and community capacity to adapt to the changing and variable climate.	Percentage of target population adapting measures to meet climate challenges	Outcome 1: Developing resilient and adaptive livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	1.1 Agriculture and fishery-based households with strengthened livelihoods and increased income.	1,468,205
		Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress.	
		Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress.	5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress.	
		Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure access to livelihood assets.	
			6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods.	
		Outcome 2: Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.	2.1. Target population is made aware of extreme events of climate change and adaptive responses to safeguard lives and living conditions.	
Outcome 1: Reduced exposure to climate-related hazards and threats.	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis.	200,000		
	Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level.		3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses.	
			3.2. Percentage of targeted population applying appropriate adaptation responses.	
Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
Outcome 1: Developing resilient and adaptive livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	Percentage of agriculture and fishery-based households with strengthened livelihoods and increased income	Output 1.1: Reduce vulnerability of coastal communities to face risks of climate change by collaborating on measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land, rehabilitate minor tanks for water storage, drinking and irrigation, and evacuation routes.	4.1.2. Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale	1,200,000
		Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability.		
		Output 1.2: Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in coastal lands.	6.1.1. Number and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies.	65,000
		Output 1.3: Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating mangroves for improved lagoon fishery.		
		Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability		

<sup>68</sup> The AF utilised OECD/DAC terminology for its results framework. Project proponents may use different terminology, but the overall principle should still apply



		Output 1.3: Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating mangroves for improved lagoon fishery.	5.1. Number of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale).	203,205
		Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability		
<b>Outcome 2:</b> Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.	Percentage of target population made aware of extreme events of climate change and adaptive responses to safeguard lives and living conditions.	Output 2.1: Participatory risk assessment and planning to help mainstream community-based climate change adaptation.	1.1. Number of projects that conduct and update risk and vulnerability assessments (by sector and scale).	125,000
		Output 1.1: Risk and vulnerability assessments conducted and updated.		
		Output 2.1: Participatory risk assessment and planning to help mainstream community-based climate change adaptation.	2.1.2 Number of targeted institutions with increased capacity to minimise exposure to climate variability risks (by type, sector and scale).	
		Output 2.1: Strengthened capacity of national and sub-national centers and networks to respond rapidly to extreme weather events.		
		Output 2.2: Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities.	3.1.1 Number of news outlets in the local press and media that have covered the topic	75,000
		Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities		

**G. Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.**

Table 18: Detailed budget

WBS	Activity	Cost (USD)	Year 1	Year 2	Annual Total
<b>Component 1.</b>	<b>Developing resilient and adaptive livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District</b>	<b>1,468,205</b>	<b>724,673</b>	<b>743,532</b>	<b>1,468,205</b>
<b>Output 1.1.</b>	<b>Reduce vulnerability of coastal communities to face risks of climate change by collaborating on measures to prevent and control saltwater intrusion into freshwater bodies, rehabilitate minor tanks for water storage, drinking and irrigation, and evacuation routes.</b>				
Activity 1.1.1	Construction of 1km earth bund with sluice gate with spill arrangement in Irrattai Vaikaal in Puthukkudiyiruppu DS Division to prevent and control saltwater intrusion	200,000	90,000	110,000	200,000
Activity 1.1.2	Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, weeding out the bushers, renovation of auxiliary structures and strengthen the tank bund in Maritimpeattu and Puthukkudiyiruppu DS Divisions.	525,000	236,250	288,750	525,000
Activity 1.1.3	Improvement of existing 3km long evacuation route in Raalkulam Grama Niladhari (GN) Division as well as provision of the early warning system and rescue facilities with the improvement of the causeway in Nayaru GN Division in Maritimpeattu DS Division.	400,000	200,000	200,000	400,000
Activity 1.1.4	Provide twenty (20) appropriate sanitation facilities (disaster-resilient toilets) including two (2) toilets in a common space as a safe centre for flood-prone/waterlogged/inundated areas in Welioya DS Division and provide training on sanitation and hygiene.	75,000	37,500	37,500	75,000
<b>Output 1.1. Sub total</b>		<b>1,200,000</b>	<b>563,750</b>	<b>636,250</b>	<b>1,200,000</b>
<b>Output 1.2.</b>	<b>Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in coastal lands.</b>				
Activity 1.2.1	Carryout twenty-five (25) training and capacity building workshops on sustainable land management, water conservation practices and climate change impacts and adaptation strategies in Welioya (10 workshops), Maritimpeattu (8 workshops) and Puthukkudiyiruppu (7 workshops) DS Divisions.	15,000	9,000	6,000	15,000
Activity 1.2.2	Train and build capacities of 250 families (125 families in Welioya DS Division, 75 families in Maritimpeattu DS Division and 50 families in Puthukkudiyiruppu DS Division) on a variety of methods for homegarden development with selection of drought-tolerant crop varieties (groundnut and coconut), multi-cropping, adjusting cropping patterns, soil fertility adjustment and agroforestry in selected lands.	20,000	12,000	8,000	20,000
Activity 1.2.3	Distribute equipment (tools) for homegardening and planting material of resilient crops for 250 families (125 families in Welioya DS Division, 75 families in Maritimpeattu DS Division and 50 families in Puthukkudiyiruppu DS Division).	30,000	18,000	12,000	30,000
<b>Output 1.2. Sub total</b>		<b>65,000</b>	<b>39,000</b>	<b>26,000</b>	<b>65,000</b>

<b>Output 1.3.</b>	<b>Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating mangroves for improved lagoon fishery.</b>				
Activity 1.3.1	Train hundred (100) fisher families (50 from Maritimé pattu DS Division and 50 from Puthukkudiyiruppu DS Division, including women and youth) on proper handling, preservation and value-adding of fish mainly using locally available resources.	10,000	6,000	4,000	10,000
Activity 1.3.2	Train 150 women on establishment of home-based industries and business management (50 from Welioya DS Division, 50 from Maritimé pattu DS Division and 50 from Puthukkudiyiruppu DS Division). Special note: This activity is also linked to Output 1.2.	15,000	9,000	6,000	15,000
Activity 1.3.4	Provision of relevant equipment for fish value addition to established fisher societies (one in Maritimé pattu DS Division and another in Puthukkudiyiruppu DS Division) and develop business models for long-term functioning and sustainability.	25,000	15,000	10,000	25,000
Activity 1.3.5	Establish five (5) community-based mangrove nurseries and replant 1.5 km of mangrove forests to buffer and protect coastal areas from storm surges and sea level rise.	153,205	91,923	61,282	153,205
<b>Output 1.3. Sub total</b>		<b>203,205</b>	<b>121,923</b>	<b>81,282</b>	<b>203,205</b>
<b>Component 2.</b>	<b>Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.</b>	<b>200,000</b>	<b>89,000</b>	<b>111,000</b>	<b>200,000</b>
<b>Output 2.1.</b>	<b>Participatory risk assessment and planning to help mainstream community-based climate change adaptation.</b>				
Activity 2.1.1	Assessing identified climate change risks and vulnerabilities in the three (3) DS Divisions, including gaps in knowledge and data/information, and identifying and selecting preferred adaptation options with special emphasis on community-based climate change adaptation.	75,000	37,500	37,500	75,000
Activity 2.1.2	Develop three (3) frameworks for implementation of adaptation action (strategy and action plan) in-line with the local and national climate change adaptation strategies and plans.	50,000	25,000	25,000	50,000
<b>Output 2.1. Sub total</b>		<b>125,000</b>	<b>62,500</b>	<b>62,500</b>	<b>125,000</b>
<b>Output 2.2.</b>	<b>Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities.</b>				
Activity 2.2.1	Conduct ten (10) participatory dialogues, focused group discussions to deliberate concerns of communities (5 in each DS Division). Special Note: This activity is also linked to Output 2.1.	10,000	5,000	5,000	10,000
Activity 2.2.2	Conduct six (6) workshops/seminars to inform the framework for implementation of climate change adaptation actions to relevant stakeholders, with 2 in each DS Division.	20,000	8,000	12,000	20,000
Activity 2.2.3	Develop one (1) video documentary consisting of lessons learnt/experiences, case studies and broader policy interventions.	25,000	7,500	17,500	25,000
Activity 2.2.4	Conduct periodic media campaigns (print and electronic) at provincial and national levels (in all languages) to improve communication/visibility of climate change adaptation action implemented.	20,000	6,000	14,000	20,000
<b>Output 2.2. Sub total</b>		<b>75,000</b>	<b>26,500</b>	<b>48,500</b>	<b>75,000</b>
<b>Outcome Totals</b>		<b>1,668,205</b>	<b>813,673</b>	<b>854,532</b>	<b>1,668,205</b>
Project Staff Personnel		132,701	46,525	86,175	132,700
ESP and GP compliance		10,500	5,250	5,250	10,500
Operations Other Costs		20,303	10,402	9,902	20,304

Equipment, Vehicle, Material	2,600	2,600	0	2,600
Staff Travel	9,000	4,500	4,500	9,000
<b>Execution cost (9.5% of Project Cost)</b>	<b>175,104</b>	<b>69,277</b>	<b>105,827</b>	<b>175,104</b>

<b>Total Project Cost</b>	<b>1,843,309</b>	<b>882,950</b>	<b>960,359</b>	<b>1,843,309</b>
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PSC 7%	130,841	62,368	68,473	130,841
Evaluation Support HQ	0	0	0	0
Other Operation Support Costs Covered by Overheads	0	0	0	0
Implementing Entity Staff Salary	25,850	8,025	17,825	25,850
<b>Overheads (8.5% of Project Cost)</b>	<b>156,691</b>	<b>70,393</b>	<b>86,298</b>	<b>156,691</b>

<b>Total Requested</b>	<b>2,000,000</b>	<b>953,343</b>	<b>1,046,657</b>	<b>2,000,000</b>
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Activity	Cost (USD)	Year 1	Year 2	Annual Total
Output 1.1 (Activity 1.1.1 + 1.1.3)	600,000	Agreement of Cooperation (AoC)		
Output 1.1 (Activity 1.1.2 + 1.1.4)	600,000	Community Implementation Agreement (CIA)		
Output 1.2 (All activities)	65,000	CIA		
Output 1.3 (All activities)	203,205	CIA		
Output 2.1 (All activities)	125,000	AoC		
Output 2.2 (All activities)	75,000	AoC		
Project activity cost (A)	1,668,205			
Project execution cost (B)	175,104	9.5%		
<b>Total project cost (A+B)</b>	<b>1,843,309</b>			
Implementing entity fee (C)	156,691	8.5%		
Total amount of funding requirement	2,000,000			

Table 19: Budget notes

WBS	Activity	Cost (USD)	Year 1	Year 2	Annual Total	Indicative Calculation Details
<b>Component 1.</b>	Developing resilient and adaptive livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District	1,468,205	724,673	743,532	1,468,205	-
<b>Output 1.1.</b>	Reduce vulnerability of coastal communities to face risks of climate change by collaborating on measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land, rehabilitate minor tanks for water storage, drinking and irrigation, and evacuation routes.	1,200,000	563,750	636,250	1,200,000	The budgeted amount is allocated for implementing partners and the following main activities will be covered under the Agreement of Cooperation (AoC) and Community Implementation Agreements (CIAs).
	Engineering consultants outsourced through Implementing Partner(s) (IPs)	82,500	37,500	45,000	82,500	IP(s) will hire two (2) consultants (one for irrigation at USD 3,000/month for ten (10) months and another for infrastructure at USD 3,500/month for fifteen (15) months)  (10 months x USD 3,000) + (15 months x USD 3,500)
	Gender, and Environmental and Social Safeguards Specialist (1)	34,000	6,000	28,000	34,000	IP will hire a specialist on gender-responsive implementation USD 2,000/month for seventeen (17) months  17 months x USD 2,000
	Meetings and community consultations	12,000	6,000	6,000	12,000	Six (6) meetings/community consultations (2 meetings per DS Division, USD2,000/session). The cost includes venue, meals, IT support etc.  6 meetings x USD 2,000
	Procurement of material and equipment	550,000	300,000	250,000	550,000	The supply and installation or construction cost USD 1,028,000
	Construction (skilled and unskilled labours)	478,000	200,000	278,000	478,000	
	IP technical supervision, testing and travel	43,500	14,250	29,250	43,500	Travel USD 23,500; Material testing USD 10,000; and Personnel USD 10,000
<b>Output 1.2.</b>	Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in coastal lands.	65,000	39,000	26,000	65,000	The budgeted amount is allocated for Implementing Partner(s) (IPs) and the following main activities will be covered: (a) Twenty-five (25) training and workshops on land and water management; (b) Training and capacity building of 250 families on home gardening; and (c) Tools and equipment for above (a) and (b).
	Resource person(s)	16,000	10,000	6,000	16,000	One (1) resource person at USD 2,000/month to be hired for 8 months  8 months x USD 2,000

	Community training	14,000	10,000	4,000	14,000	The cost Includes venue, meals, IT support, training material etc., total 25 training at USD560 per training 25 training x USD 560
	Procurement of material and tools	26,000	15,000	11,000	26,000	Tools for 250 families with USD 104 per family 250 families x USD 104
	IP supervision, distribution, and travel	9,000	4,000	5,000	9,000	Travel USD 4,000; Personnel USD 5,000
<b>Output 1.3.</b>	Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating mangroves for improved lagoon fishery.	203,205	121,923	81,282	203,205	The budgeted amount is allocated for Implementing Partners (IPs) and the following main activities: (a) Training of 100 fisher families on value addition; (b) Training of 150 women on home-based industries; (c) Tools and equipment for the above (a) and (b); and (d) Establishment of five (5) community-based mangrove nurseries and replanting.
	Resource person(s)	32,000	18,000	14,000	32,000	Four (4) resource persons (Two (2) per each DS Division at USD 2,000 /month for 4 months) to be hired 4 resource persons x 4 months x USD 2,000
	Conducting workshops and training	25,000	15,000	10,000	25,000	10 workshops at USD 2,500 per session. The cost includes venue, meals, IT support, training materials etc. 10 workshops/training x USD 2,500
	Meetings and community consultations	12,000	6,000	6,000	12,000	Ten (10) community consultations and training on mangrove nurseries and replanting at USD 1,200 10 community consultations/training x USD 1,200
	Procurement of material, tools, mangrove saplings/seeds	60,000	35,000	25,000	60,000	Tools for 250 families (USD 240 per family) 250 families x USD 240
	Replanting mangroves and maintenance (labour)	45,000	30,000	15,000	45,000	Replanting mangroves for 1.5km and labourers (10 labourers x USD 25 x 180 days)
	IP supervision, distribution and travel	29,205	17,923	11,282	29,205	Travel USD 13,205; Personnel USD16,000
<b>Component 2.</b>	Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity.	200,000	89,000	111,000	200,000	-
<b>Output 2.1.</b>	Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.	125,000	62,500	62,500	125,000	The budgeted amount is allocated for Implementing Partner(s) (IPs) and the following main activities will be covered: (a) Assessing identified climate change risks and vulnerabilities in the three DS Divisions, and (b) Develop three (3) frameworks for implementation of adaptation action.

	Resource person(s)	72,000	36,000	36,000	72,000	Six (6) resource person(s) (Two (2) per each DS Division at USD 2,000/month) to be hired for 6 months 6 resources person(s) x 6 months x USD 2,000
	Gender and Environmental and Social Safeguards Specialist	12,000	6,000	6,000	12,000	IP will hire a specialist on Gender, and Environment and Social Safeguards and facilitate gender-responsive implementation at USD 2,000 per month for 6 months 6 months x USD 2,000
	Meetings and community consultations	8,400	4,500	3,900	8,400	Seven (7) meetings/community consultations USD 1,200 per meeting 7 meetings x USD 1,200
	Develop action plan and validation	9,000	4,000	5,000	9,000	Three (3) validation workshops, USD 3,000 per session 3 workshops x USD 3,000
	IP supervision and travel	8,600	5,000	3,600	8,600	Travel USD 2,600; Personnel USD 6,000
<b>Output 2.2.</b>	Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities.	75,000.00	26,500.00	48,500.00	75,000.00	The budgeted amount is allocated for implementing partners and the following main activities will be covered: (a) Ten (10) focused group discussions; (b) Six (6) workshops/seminars to communicate the framework for implementation of climate change adaptation actions to relevant stakeholders; (c) Video documentary of lessons learnt; and (d) Periodic media campaigns
	Resource person(s)	28,000	12,000	16,000	28,000	Two (2) resource persons (One (1) per each DS Division at USD 2,000/month) to be hired for 7 months (2 resource persons x 7 months x USD 2,000)
	Conducting workshops, meetings and seminars	15,000	7,500	7,500	15,000	6 workshops, USD 2,500 per session. The cost includes venue, meals, IT support, training material etc. (6 workshops x USD 2,500)
	Develop a video documentary	12,000	-	12,000	12,000	Develop one (1) video documentary at USD 12 000
	Conduct periodic media campaigns (print and electronic)	7,500	-	7,500	7,500	Media campaign USD 7,500
	IP supervision and travel	12,500	7,000	5,500	12,500	Travel USD 6,500; Personnel USD 6,000
<b>Outcome Totals</b>		<b>1,668,205</b>				

<b>Project execution cost (B)</b>	175,104	<b>695,777</b>	105,827	175,104
<b>Project activity cost (A)</b>	1,668,205	<b>813,673</b>	854,532	1,668,205
<b>Implementing entity fee (C)</b>	156,691	<b>70,393</b>	86,298	156,691
<b>Total amount of funding req.</b>	<b>2,000,000</b>	<b>953,343</b>	<b>1,046,657</b>	<b>2,000,000</b>

**H. Include a disbursement schedule with time-bound milestones.**

**Table 20: Project Timeline and Disbursement Schedule**

**Project Timeline**

Activity	Activity	Year 1				Year 2			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1.1.	Reduce vulnerability of coastal communities to face risks of climate change by collaborating on measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land, rehabilitate minor tanks for water storage, drinking and irrigation, and evacuation routes.	X	x	x	x	x	x	x	x
Output 1.2.	Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in coastal lands.		X	x	x	X	x	x	x
Output 1.3.	Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating mangroves for improved lagoon fishery.			X	x	x	x	x	x
Output 2.1.	Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.			X	x	x	x	x	
Output 2.2.	Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities.			X	x	x	x	x	x

**Disbursement Schedule**

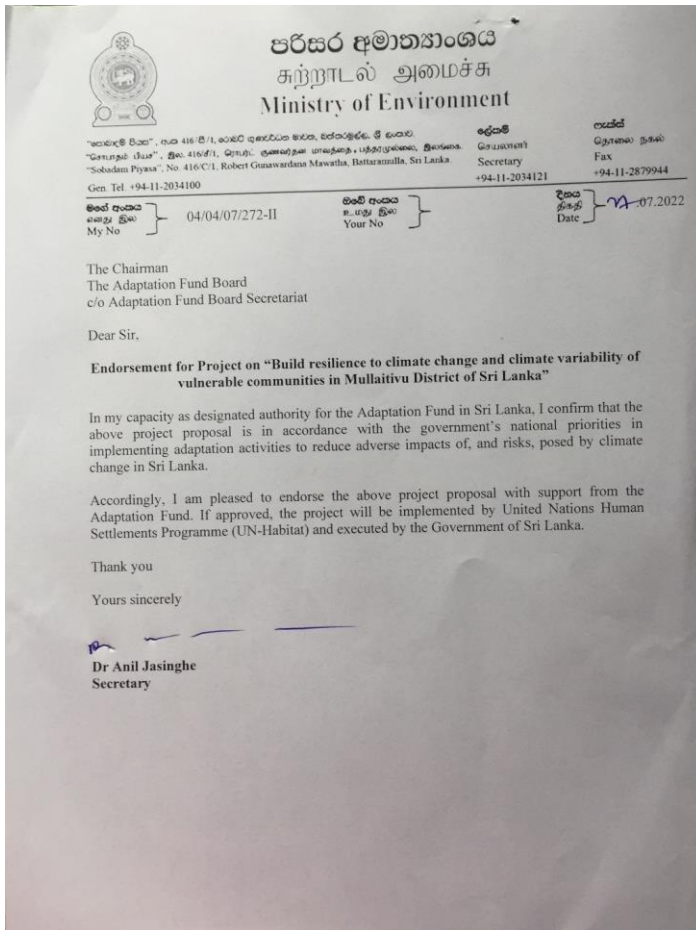
Description	Upon signature of Agreement	One Year after Project Start	Total
Scheduled date	Jan-23	Jan-24	
Project Funds	813,673.00	854,532.00	1,668,205.00
Project Execution Cost	131,978	43,126	175,104
Implementing Entity Fees	218,918.00	112,877.00	331,795.00
<b>Total</b>	<b>1,032,591.00</b>	<b>967,409.00</b>	<b>2,000,000.00</b>



## PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

### A. Record of endorsement on behalf of the government<sup>69</sup>

Dr. Anil Jasinghe Secretary Ministry of Environment	Date: July 27, 2022
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<sup>69</sup> Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

## B. Implementing Entity certification




ADAPTATION FUND

### Implementation Entity certification

I certify that this proposal has been prepared in accordance with guidelines by the Adaptation Fund, and prevailing National Development and Adaptation Plans of Sri Lanka, which include (but not limited to), National Climate Change Policy, National Adaptation Plan for Climate Change Impacts in Sri Lanka: 2016 – 2025, National Policy Framework Vistas of Prosperity and Splendour, Coastal Zone Management Plan 2018 – 2023, and subjected to the approval by the Adaptation Fund Board, commit to implementing the programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this programme.

**Rafael Tuts**  
Director, Global Solutions Division | Officer-in-Charge, Office of the Deputy Executive Director |  
United Nations Human Settlements Programme  
Tel +254 20 7623726 | Cell +254 713 601 278 | Email raf.tuts@un.org

Signature: 

Implementing Entity Coordinator

Date: 5 August 2022

Project Contact Person:

**Laxman Perera**, Human Settlements Officer, Regional Office for Asia and the Pacific, United Nations Human Settlements Programme (UN-Habitat)  
Email: [Laxman.Perera@un.org](mailto:Laxman.Perera@un.org)

#### **ANNEX 1: ENVIRONMENT AND SOCIAL MANAGEMENT PLAN (ESMP)**

As described in Part II, Sections C, E and K, systematic screening and assessment has been done based on broad consultations with local and national Government stakeholders, a wide range of other relevant stakeholders at the local level, including the target communities, and the Project design has benefited from this process. As mentioned in the aforesaid sections, the proposed Project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP), for which the environmental and social risks and impacts of the project and related activities need to be identified and addressed at the onset of the Project to ensure that the project does not unnecessarily harm the environment, public health or vulnerable communities. Therefore, the importance of Environmental and Social Safeguards (ESS) of UN-Habitat and ESP was highlighted in stakeholder consultations during the development of concept note and thereafter the proposal. Part III, Sections A and D further ensure that remaining risks are well managed in the Project management and governance, and monitoring and evaluation fully take the management of environmental and social risks into account. In addition, an Environmental and Social Management Plan (ESMP) has been developed to ensure full compliance with the Adaptation Fund's Environmental and Social and Gender Policies and will be further improved where relevant prior to the inception of the Project and the finalised ESMP will be shared with relevant stakeholders, especially the NSC, and the communities too will be briefed before the commencement of the Project. The content will be translated to local languages and messages will be simplified to enable beneficiary communities to understand them.

The ESMP identifies measures and actions that reduce potentially adverse environmental and social impacts to acceptable levels. The plan includes compensatory measures, if applicable. The ESMP specifically identifies and summarises all anticipated adverse environmental and social impacts in line with the Adaptation Fund's ESP principles, and describes mitigation measures, both from the perspective of mitigating risks at each activity and from the perspective of upholding all ESP principles. In addition, ESMP describes a process which supports the screening and assessment of all Project activities and the conditions under which screening, and mitigation action is required, while clearly assigning responsibilities for screening, assessment, mitigation actions and approval and monitoring, while taking into account and is consistent with, other technical standards required for the project in particular those that relate to national law. The Project investment sheets in Annex 5 has been presented to highlight the scope of the interventions.

#### **COMPLIANCE WITH ENVIRONMENTAL AND SOCIAL SAFEGUARDS**

UN-Habitat is committed to environmental and social safeguards to prevent and mitigate the potential for undue and unintended harm that could arise from the proposed Project activities. The ESMP is developed in line with the Adaptation Fund's ESP and GP and UN-Habitat's Environmental and Social Safeguard Policy (ESSP).

#### **SCREENING AND CATEGORISATION**

The screening and categorisation were based on data and information gathered from numerous Government sources at the District level, other secondary sources and where necessary primary data was gathered by the Project formulation team. All investments identified in the project have been developed in consultation with relevant authorities at the District level (District Secretariat, Disaster Management Centre, Department of Agrarian Development, Forest Department, Department of Wildlife Conservation etc.) and target beneficiaries.

As mentioned elsewhere, it should be noted that only activities under Component 1 involve physical works, namely, construction, renovation/rehabilitation and maintenance, and all the other activities in the other activities proposed are 'soft', including training, reports and publications. Some of the risk mitigation measures have been factored into 'soft' activities in order to support 'hard' interventions to reduce environmental and social risks, i.e., training on hygiene, emphasising on gender equality and women's empowerment. Therefore, Component 2 will not be discussed under ESMP henceforth.

**Table 21: Risk screening of the project at design stage using the 15 principles of the AF's ESP and the checklist of environmental and social principles**

Checklist of environmental and social safeguards	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance	Assessment of potential impacts and risks	Preventive and mitigation measures
<i>Compliance with the Law</i>	-	√	Alignment with laws and technical standards, can be considered insufficient by some agencies especially in instances of water provision and management	Continuous consultation with relevant national and local authorities. First round of consultations was at project planning stage to ensure compliance with relevant laws and technical standards. More specifically under Component 1 concrete activities namely construction of earth bund, rehabilitation of minor tanks, disaster-resilient toilets and evacuation routes, consultations held and further to be continued at detail design stage with respective mandatory law enforcement and regulatory bodies such as Coast Conservation Department <sup>70</sup> , Forest Department and Department of Wildlife Conservation. In terms of introduction of climate resilient agriculture crops, Department of Agriculture, Department Agrarian Development, Coconut Cultivation Board and local Government bodies are consulted. All persons associated with the Project will be made aware of relevant laws and compliance needs to technical standards, social and environment safeguards during implementation of project and will be continuously assessed throughout the project.
<i>Access and Equity</i>	√	-	Unequal distribution among target population/communities and households of Project benefits.	Baseline data collection and mapping exercises have already been conducted on needs of the target population/communities/households. The data lays the foundation to monitor equal access to all small-scale infrastructure built under the proposed Project. Furthermore, data generated through monitoring process will continue to contribute to updating the District level adaptation plan. Under Component 1, specifically on access to evacuation routes and minor water tanks will be ensured through community organisations and District administration system that access to those infrastructure is to all including vulnerable groups. Under Component 2, all trainings and capacity building activities will be inclusive, leaving no one behind and particularly ensure adequate gender and youth representation throughout. Special focus will be in place during design stage to ensure that access for disabled people is adequately addressed in infrastructure components and training locations. Management and monitoring of activity implementation will highlight irregularities to avoid discrimination and favoritism. Grievance Redressal Mechanism (GRM) will be established should there be any grievance related to the Project by beneficiaries or non-beneficiaries.
<i>Marginalised and Vulnerable Groups</i>	-	√	Risks of adverse effects impacting disproportionately on marginalised and vulnerable groups i.e., women and girls, youth, the elderly, the displaced, people with disabilities and others.	All project investments under Components 1 are targeted to address needs of the vulnerable groups. Target geographic coverage of Project interventions represents predominantly poor communities and more importantly significant number of disabled households. Consultations have and will continue to capture all issues and needs of marginalised and vulnerable groups, assessed through vulnerability assessments, mapping of needs. As mentioned above, the GRM will look into Project related grievances of the marginalised and vulnerable beneficiaries.
<i>Human Rights</i>	√	-	Inability to proactively protect the rights of stakeholders affected by the Project.	Human rights risks relate primarily to land rights related to Component 1 of the identified activities have been considered, and are discussed in involuntary resettlement, below. Consultations have and will continue to capture concerns related to human rights. However, thus far none had been identified. If required, United Nations Universal Declaration of Human Rights (UN UDHR) standards will be included in all further assessments during Project inception stage, During Project implementation awareness raising of international human rights standards to all stakeholders of the Project will be conducted. Inclusion of human rights markers in MoUs/AoC/Community Contracts will be strictly adhered to. The UN-Habitat Human Rights and Social Inclusion Unit will monitor compliance.

<sup>70</sup> Coast Conservation Department is the mandated government institution to execute the Coast Conservation Act No. 57 of 1981 which was amended in amended by the Act No. 49 of 2011.

<i>Gender Equity and Women's Empowerment</i>	-	√	Women and men do not have equal opportunities to participate in the Project and do not benefit equally from interventions. This can be caused by men taking over decision making positions and unequal inclusion of women in top positions.	The project has included and will actively pursue equal participation of women and men in Project activities under Component 1 and 2. Capacity development activities under Component 2 will specifically promote gender equality and empowerment. The concrete adaptation actions will also support the principle actively. Activities will be continuously screened for this risk during the Project. The Gender Assessment of the Project has also been conducted to ensure adherence to Gender Policy of the AF.
<i>Core Labour Rights</i>	√	-	Executing Entities for the Project may not adhere to the ILO labour standards and national labour laws.	The Project will use unskilled and semi-skilled labour sourced from the communities for the planting and construction works that will take place under Component 1. Without management and mitigation measures, there is a risk that these labourers could be mistreated. This includes low salaries below minimum wage or market rate, hiring school-age workers, discrimination against women, poor facilities, lack of safety equipment and informality. The project has and will ensure international and national labour laws and codes are respected, for any work that may be carried out in relation to the Project. This includes the eight (8) International Labour Organisation (ILO) Convention core labour standards related to fundamental principles and rights of workers. Contracts will be reviewed to ensure compliance with these laws.
<i>Indigenous Peoples</i>	√	-	Failure to engage indigenous people in planning and decision making.	Sri Lanka's indigenous peoples have no settlements in the target locations. However, the principle will be applied to all ethnic groups especially those that have been affected by the civil conflict for over 25 years. The Project has been and will be consistent with United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), particularly in regard to Free, Prior, Informed Consent (FPIC) during implementation, and in monitoring outcomes related to impacts affecting different communities.
<i>Involuntary Resettlement</i>	√	-	Project actions lead to unintended resettlement consequences. The project has not advocated for resettlements, however if government agencies declare necessity to do so due to exigent reasons e.g., saltwater intrusion the project will advocate that due process is applied in all aspects.	This risk has been identified for all physical components of the Project under Component 1. Small-scale Infrastructure investment under Component 1 (earth bund, minor tanks, disaster-resilient toilets and evacuation route) will be constructed/renovated entirely on public land, and all site access is possible by public roads. Consultation process indicated that there are no plans of resettlements or evictions by concerned agencies in the target areas. However, when implementing all activities, UN-Habitat will ensure that MOUs/AoCs/CIAs will include standard clauses regarding evictions of people involuntarily due to the Project activities and monitored throughout Project life. Sri Lanka adapted National Involuntary Resettlement Policy which ensures rights of the Project affected people.
<i>Protection of Natural Habitats</i>	-	√	Activities might have negative impacts on natural habitats and the environment. The initial screening process showed that the risk of negative environmental impacts on natural habitats is low because interventions will focus on enhancing ecosystems and developing infrastructure and services.	At the design stage priority of project regarding safeguarding the environment, eco-systems, natural resources were underscored and accepted. Natural habitat 'triggers' will be included in the planning, management and monitoring process for all components particularly under Component 1 activities. Investments under Component 1 will take place in or near critical habitats and inherently involve mangrove areas. With this there is potential for disruption of habitats through construction activities, transporting materials to and from the sites. However, investment on mangrove plantation is intended to benefit the natural habitat, there is a potential risk, without management or mitigation measures that the investment could be counterproductive and damage the mangrove it is designed to help. For example, without a mangrove planting and management plan, there is a risk that invasive or incompatible species could be introduced to the area, risking both Project failure and existing mangroves. Therefore, Project will ensure compliance with international conventions, national plans, and standards and will involve stakeholders at the District level, especially, Department of Forest, Department of Wildlife Conservation, Coast Conservation Department, Disaster Management Centre and the District Secretariat. Activities will be further screened for this risk during the Project inception, thus far no risks have been identified, except for aforesaid potential risks. In addition, none of the Project activities are implemented in officially designated biodiversity conservation areas
<i>Conservation of Biological Diversity</i>	-	√	Activities lead to reduction or loss of biological diversity. The initial screening and vulnerability assessment found that the risk of reduction or loss of biological diversity is low. Further assessments	See above 'Protection of Natural Habitats'. 'Hard' investments under Component 1 are in areas that are important for biodiversity. Nonetheless, as mentioned above, none of the Project activities are implemented in officially designated biodiversity conservation areas. Investments under Component 1 are implemented in or close to mangrove areas, and as such this ecosystem is critical to support marine biology as well as coastal human livelihoods, especially, crab and prawn harvesting, which is a common form of livelihood. Biological diversity 'triggers' will be included in the vulnerability assessments, the

			are needed for enhancing ecosystems and biodiversity	planning, management and monitoring process for implementing all components activities will be screened for this risk during Project inception.
<i>Climate Change</i>	-	√	Project activities cause mal adaptation, increasing greenhouse gas emissions.	The Project is an adaptation project and as such is designed to bring adaptation benefits. However, there is a potential risk that if any of the investments were to be unsuccessful, they could be maladaptive – either by failing to bring benefits or by shifting climate change related risks and vulnerabilities to other areas. Mitigation and management measures are required to minimise this risk. Therefore, climate change policies and guidelines will be explained and understood by Executing Entities and Project personnel prior to implementation and monitoring of activities throughout. In addition, environmentally friendly building material will be used.
<i>Pollution Prevention and Resource Efficiency</i>	-	√	Project activities may cause pollution and may not use resources efficiently. The initial assessment found that there is a low risk of using resources for project activities in an inefficient way.	There are some small risks arising from the construction under Component 1 activities. Except for mangrove cultivation under Component 1, all investments under Component 1 involves construction using common building material, such as concrete and building sand/fill material. Without management and mitigation measures, there is a risk of small-scale, localised pollution in and around the construction sites. However, no construction will involve hazardous materials such as chemicals. The Project will use local materials for construction where possible, including environmentally friendly building material. Activities will be screened for this risk during the Project inception and implementation and monitored throughout Project activity implementation.
<i>Public Health</i>	-	√	Project activities will lead to negative impacts on public health The initial screening and vulnerability assessment found that the risk of negative impacts on public health is low.	There are some localised risks to public health arising from the Project. In investments under Component 1 except mangrove and agri-crop cultivation involve creating a temporary construction site during implementation. This carries typical construction site risks, i.e., potential risks from vehicles entering and leaving the site, risk to children, etc.. At the inception of the Project, safety plan for construction sites will be developed in accordance with Government's and ILO safety requirements and health 'triggers' will be included in the vulnerability assessments and in the management and monitoring process for implementing components. Activities will be screened for this risk throughout the Project.
<i>Physical and Cultural Heritage</i>	√	-	Project activities might affect some unidentified cultural sites which exist in the targeted areas and are impacted by project activities	The initial screening and vulnerability assessment did not identify cultural heritage sites in selected Project locations. There are no United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage sites in any of the target areas. There are also no sites of national heritage interest in the target area.
<i>Lands and Soil Conservation</i>	-	√	Project activities leading to soil degradation or conversion of productive lands that provide valuable ecosystem services	There is some minimal risk to land and soil conservation. Investments under Component 1 involves mangroves, the planting of agri-crops, earth bunds, evacuation routes which involve disturbing soil. Thus, potential risks could be triggered. Further investigations will be conducted during Project inception and formulate mitigation plan to conserve soils and lands in all locations and sites of Project implementation. However, if monitoring of activities surfaces any contrary issues which will be corrected immediately. Further assessment will be done throughout the Project.

The Table below presents the environmental and social risks and impacts checklist of UN-Habitat which in-line with the ESP of the Adaptation Fund.

Table 22: UN-Habitat environmental and social risks and impacts checklist

Safeguard Standards	Potential risks and impacts	Is it a risk from the project/programme (yes/no)
<b>P 1: Labour and working conditions</b>	May adversely impact on worker rights, considering the (lack of) regulations in the country	No
	In the country child labour is regulated	No
	In the country forced labour is regulated	No
	In the country freedom of association is guaranteed	No
<b>P 2: Zero-carbon development, pollution prevention and resource efficiency</b>	During construction or operation, it generates pollutants or waste, which could affect human health or the environment	No
	During construction or operation, hazardous materials or pesticides, which could affect human health or the environment, may be used	No
	Requires a significant amount of water and/or energy, which implies competition with host communities (for instance, water for human consumption or economic activities)	No
<b>P 3: Climate change resilience, community health, safety and security</b>	Activities, machinery or infrastructure associated to the project/programme could have adverse impact on the community' health and safety	Yes (potential risk)
	In case of an accident or emergency situation, the effect on the surrounding community or in the ecosystem could be significant.	Yes (potential risk)
<b>P 4: Displacement and involuntary resettlement</b>	Involves displacement, physical or economic, and/or involuntary resettlement	No
<b>P 5: Biodiversity conservation, and sustainable management of living natural resources</b>	May adversely impact the marine ecosystem	Yes (potential risk)
	May adversely impact natural habitats	Yes (potential risk)
	May adversely impact critical habitats	Yes (potential risk)
	May adversely impact legally protected areas (by national or international regulations)	No
<b>P 6: Indigenous peoples</b>	May adversely impact the rights, lands, resources and territories of the indigenous peoples	No
<b>P 7: Cultural Heritage</b>	May adversely impact cultural heritage properties and sites of archaeological, historical, cultural, artistic, and religious significance. May adversely impact intangible heritage (uses and traditions...)	No
	In case the project/programme uses cultural heritage, access and use by stakeholder is secured.	No
<b>P 8: Compliance with the Law</b>	Application to environmental, building or other sectorial permits is a requirement by the local regulation	Yes (potential risk)
	Activities, machinery or infrastructure associated to the project/programme do not imply/involve any violation to local regulations	Yes (potential risk)
<b>P 9: Access and Spatial Justice</b>	The equal distribution of project/programme benefits is not guaranteed	No
	May adversely involve any form of discrimination in the access to the project/programme benefits	No
<b>SII 1: Human Rights</b>	May imply the violation of any human right	No
<b>SII 2: Gender</b>	May especially have negative impacts on girls and women	No
	May adversely involve any form of discrimination against girls and women	No
<b>SII 3: Children, Youth and Older persons</b>	May especially have negative impacts on children, youth and/or older persons	No
	May involve any form of discrimination against children, youth or older persons	No
<b>SII 4: Disability</b>	May especially have negative impacts on persons with disabilities	No
	May involve any form of discrimination against persons with disabilities	No
<b>CCTA 1: Resilience</b>	May affect the protective factors and/or the adaptive capacity of environmental and social systems	No
	May affect the safety to live, work and participate in cities and human settlements.	No
<b>CCTA 2: Safety</b>	May particularly affect the safety to live, work and participate in urban life for persons in vulnerable situations.	No

**Table 23: AF ESP against Project Outputs**

Component and Outcome	Output	AF ESP <sup>71</sup>	Expected Beneficiaries
<p>Component 1: Developing resilient, adaptive livelihoods in the selected locations in the three (3) DS Divisions in Mullaitivu District.</p> <p>Outcome 1: Resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District developed.</p>	<p>Output 1.1: Reduce vulnerability of coastal communities to face risks of climate change by collaborating on (a) measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land through 1km earth bund, (b) rehabilitate 15 minor tanks for water storage, drinking and irrigation, (c) construct 20 disaster-resilient toilets and (d) rehabilitate 3km existing evacuation routes.</p>	<p>1. Compliance with Law 3. Marginalised and Vulnerable Groups 5. Gender Equality and Women's Empowerment 9. Protection of Natural Habitats 10. Conservation of Biological Diversity 11. Climate Change 12. Pollution Prevention and Resource Efficiency 13. Public Health 16. Lands and Soil Conservation</p>	<p>1,408 families including 900 farmer families and 180 coastal fisher families (1,408 x 4 per household = 5,632 individuals)</p>
	<p>Output 1.2: Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in 18 acres of coastal land.</p>	<p>3. Marginalised and Vulnerable Groups 5. Gender Equality and Women's Empowerment 10. Conservation of Biological Diversity 11. Climate Change 16. Lands and Soil Conservation</p>	<p>500 coastal fisher and farming families (2,000 individuals)</p>
	<p>Output 1.3: Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating 1.5km mangroves for improved lagoon fishery.</p>	<p>5. Gender Equality and Women's Empowerment 9. Protection of Natural Habitats 10. Conservation of Biological Diversity 11. Climate Change</p>	<p>280 coastal fisher families (1,120 individuals)</p>

**PRINCIPLE 1: COMPLIANCE WITH LAW**

All relevant rules, regulations, standards and procedures under investments 1.1.1 to 1.1.4, 1.2.3, and 1.3.6 has been identified and listed in Table 24.

**Table 24: Compliance with national technical standards, rules, regulations and procedures, and ESP principles**

Output	AF ESP	Relevant Rules, Regulations, Standards and Procedures	Compliance procedure and authorising offices
<p>Output 1.1: Reduce vulnerability of coastal communities to face risks of climate change by collaborating on (a) measures to prevent and control saltwater intrusion into freshwater bodies and agricultural land through 1km earth bund, (b) rehabilitate 15 minor tanks for water storage, drinking and irrigation, (c) construct 22 disaster-resilient toilets and (d) rehabilitate 3km existing evacuation routes.</p>	<p>1. Compliance with Law 3. Marginalised and Vulnerable Groups 5. Gender Equality and Women's Empowerment 9. Protection of Natural Habitats 10. Conservation of Biological Diversity 11. Climate Change 12. Pollution Prevention and Resource Efficiency 13. Public Health 16. Lands and Soil Conservation</p>	<p>*Technical Guidelines for Irrigation Works, Irrigation Department Sri Lanka, Colombo. Ponrajah, AJP 1988. *Standard Specifications for Construction and Maintenance of Roads and Bridges [2<sup>nd</sup> Edition – June 2009]. *Specification for Site investigation for Building and Civil Engineering Works [3rd Edition – May 2013]. *Rehabilitation Guideline for Minor Irrigation headworks, Irrigation Department, Ministry of Irrigation, November 2020. *Technical Guidelines for Irrigation Works, Irrigation Department Sri Lanka, Colombo. Ponrajah, AJP 1988. *Designs of Irrigation Headworks for Small Catchments, Irrigation Department Sri Lanka, Colombo Ponrajah, AJP 1984. *Specifications for Irrigation &amp; Land Drainage – [1st Edition – January 2017]. The National Environmental (Ambient Water Quality) Regulations, No. 01 of 2019- <a href="http://www.cea.lk/web/images/pdf/epc/2148-20_E-1.pdf">http://www.cea.lk/web/images/pdf/epc/2148-20_E-1.pdf</a></p>	<p>*District Secretariat of Mullaitivu *Central Environment Authority *Department of Coast Conservation and Coastal Resource Management *Department of Irrigation *Department of Agriculture *Department of Agrarian Development *Disaster Management Centre *Climate Change Secretariat *Ministry of Environment *Ministry of Health *Department of Health Services</p>

<sup>71</sup> AF ESP - 1. Compliance with Law; 2. Access and Equity; 3. Marginalised and Vulnerable Groups; 4. Human Rights; 5. Gender Equality and Women's Empowerment; 6. Core Labour Rights; 7. Indigenous Peoples; 8. Involuntary Resettlement; 9. Protection of Natural Habitats; 10. Conservation of Biological Diversity; 11. Climate Change; 12. Pollution Prevention and Resource Efficiency; 13. Public Health; 15. Physical and Cultural Heritage; and 16. Lands and Soil Conservation



		<p>*Standard Specifications for Construction and Maintenance of Roads and Bridges [2<sup>nd</sup> Edition – June 2009].</p> <p>*Specification for Site investigation for Building and Civil Engineering Works [3<sup>rd</sup> Edition – May 2013]</p> <p>*Specifications and Guidelines for Domestic Septic Tanks and Soakage Pits from National water Supply &amp; Drainage Board</p> <p>*Design Considerations on Accessibility for Person with Disabilities by Ministry of Health</p> <p>*General Regulation by Urban Development Authority</p> <p>*All relevant acts will be taken into consideration.</p>	
Output 1.2: Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in 18 acres of coastal lands.	<p>3. Marginalised and Vulnerable Groups</p> <p>5. Gender Equality and Women's Empowerment</p> <p>10. Conservation of Biological Diversity</p> <p>11. Climate Change</p> <p>16. Lands and Soil Conservation</p>	<p>*Agrarian Development Act, No. 46 of 2000</p> <p>*Soil Conservation Act, No. 24 of 1996</p> <p>*Control of Pesticides (Amendment) Act No. 6 of 1994</p> <p>*Seed Act No. 22 of 2003 &amp; Draft of New Seed &amp; Planting Material Act</p> <p>*Plant Protection Act, No.35 of 1999</p> <p>*Coconut Development Act No. 46 of 1971</p> <p>*National Climate Change Policy</p>	<p>*District Secretariat of Mullaitivu</p> <p>*Central Environment Authority</p> <p>*Department of Agriculture</p> <p>*Department of Agrarian Development</p> <p>*Coconut Cultivation Board</p>
Output 1.3: Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating 1.5km mangroves for improved lagoon fishery.	<p>5. Gender Equality and Women's Empowerment</p> <p>9. Protection of Natural Habitats</p> <p>10. Conservation of Biological Diversity</p> <p>11. Climate Change</p>	<p>*Fisheries and Aquatic Resources Act 1996, No. 2 of 1996.</p> <p>*National Policy Framework for Small and Medium Enterprises (SMEs) Development.</p> <p>*Coast Conservation Acts 57/1981 and 49/2011.</p> <p>*National Policy on Conservation and Sustainable Utilisation of Mangrove Ecosystems in Sri Lanka</p> <p>*National Environmental (Amendment) Act, No. 56 of 1988</p> <p>* Fauna and Flora Protection (Amendment) Act No. 22 of 2009</p> <p>*Forest (AMENDMENT) Act, No. 65 OF 2009</p> <p>*National Climate Change Policy</p>	<p>*District Secretariat of Mullaitivu</p> <p>*Department of Coast Conservation</p> <p>*Forest Department</p> <p>*Department of Wildlife Conservation</p> <p>*Department of Agrarian Development</p> <p>*Department of Fisheries and Aquatic Resources</p> <p>*Ministry of Environment</p> <p>*Central Environment Authority</p>

**PRINCIPLE 3: MARGINALISED AND VULNERABLE GROUPS AND PRINCIPLE 5. GENDER EQUALITY AND WOMEN'S EMPOWERMENT**

The potential risk arising from investments 1.1.4 and 1.2.3 (and related 'soft' interventions) is marginalised and vulnerable groups being excluded and not given an equal opportunity or priority. Marginalised and vulnerable groups include, single-parent households, especially FHH, families under the poverty line, elderly, people with disability. Poverty in Mullaitivu District is at 28.8%<sup>72</sup>. Therefore, the Project will have selection criteria, developed in discussion with all relevant stakeholders at the local and national level. The selection process will be transparent. As mentioned above, a GRM will be established for the beneficiaries and non-beneficiaries to raise their concerns.

Please refer 'ANNEX 6 – BASELINE ANALYSIS AND ASSESSMENT OF THE SITUATION OF WOMEN IN THE TARGET AREAS AND GENDER ACTION PLAN' for further details on 'Principle 5: Gender Equity and Women's Empowerment'. Investment 1.3.3 and (and related 'soft' components 1.3.2 and 1.3.2) are exclusively targeted towards women.

**PRINCIPLE 4: HUMAN RIGHTS AND PRINCIPLE 6: CORE LABOUR RIGHTS**

Some of the international human rights and labour rights treaties Sri Lanka has ratified and relevant to the proposed Project are listed in Table 23.

<sup>72</sup><https://borqenproject.org/tag/poverty-in-sri-lanka/#:~:text=Mullaitivu%2C%20Mannar%20and%20Kilinochchi%20districts.a%20rate%20of%2020.8%20percent.>

**Table 25: Ratification of International Human Rights Treaties and Labour Rights**

Treaty	Ratification Date, Accession(a), Succession(d) Date
International Covenant on Economic, Social and Cultural Rights	11 Jun 1980
International Convention on the Elimination of All Forms of Racial Discrimination	18 Feb 1982
Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour	1 Mar 2001
Convention concerning Forced or Compulsory Labour	5 Apr 1950
Equal Remuneration Convention	1 Apr 1993
Abolition of Forced Labour Convention	7 Jan 2003
Discrimination (Employment and Occupation) Convention	27 Nov 1998
Minimum Age Convention, 1973 (No. 138)	11 Feb 2000
Minimum age specified: 14 years	
Minimum Wage Fixing Convention, 1970 (No. 131)	17 Mar 1975

**PRINCIPLE 9: PROTECTION OF NATURAL HABITATS AND PRINCIPLE 10: CONSERVATION OF BIODIVERSITY**

Protected areas of Sri Lanka play a crucial role in biodiversity conservation. The rapid urbanisation and unplanned development, including growth of human population has led to shrinking and disappearance of natural habitats and some species are being pushed into the threatened status. Human intervention is prohibited or limited inside the protected areas in Sri Lanka, therefore these areas act as refuges for species by providing ideal habitat to ensure their survival, and these areas protect ecosystem services and cultural and historical significance. Protected areas are administered by Department of Wildlife Conservation and Forest Department in Sri Lanka.<sup>73</sup> Classification of Protected Areas according to Fauna and Flora Protection Ordinance is given below,

1. Strict Natural Reserve (3 sites)
2. National Park (25 sites)
3. Nature Reserve (9 sites)
4. Jungle Corridor (2 sites)
5. Marine National Park (1 site)
6. Marine Reserves (0 sites)
7. Buffer zone (0 sites)
8. Sanctuary or a Managed Elephant Reserve (68 +1 sites)

Investments 1.1.1 to 1.1.4 and 1.3.6 are not in Protected Areas. However, Investment 1.1.1 will take place close to critical habitats. In order to avoid negative impacts, UN-Habitat will draw lessons from previous GoSL implemented and the sites were proposed by the District Secretariat based on pre-feasibility studies done. Please refer 'Activity 1.1.1: Construction of 1km earth bund with sluice gate with spill arrangement in Irrattai Vaikal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion.' for details. Similarly, under investment 1.1.3, pre-feasibility study has been conducted by the DMC. Please refer, 'Activity 1.1.3: Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division as well as provision of the early warning system and rescue facilities with the improvement of the causeway in Nayarun GN Division in Maritimpeattu DS Division,' for details. Moreover, investment 1.3.6 was proposed by the Department of Wildlife Conservation and Forest Department and the maps were provided by the Department of Wildlife Conservation and will work closely with UN-Habitat throughout the implementation of the Project. Please refer, 'Activity 1.3.6: Replant/rehabilitation of 1.5km of mangrove forests in Irrattai Vaikal in Puthukkudiyiruppu DS Division and Nayarun GN Division in Maritimpeattu DS Division to buffer and protect coastal areas from storm surges and sea level rise.' for details.

**PRINCIPLE 11: CLIMATE CHANGE AND PRINCIPLE 12: POLLUTION PREVENTION AND RESOURCE EFFICIENCY**

The proposed Project investments and related 'soft' components, from 1.1.1 to 1.3.6 will be monitored throughout the Project to ensure the fullest benefits. Therefore, special emphasis will be given to National Adaptation Plan for Climate Change Impacts in Sri Lanka: 2016 - 2025, National Climate Change Policy, Third National Communication to the UNFCCC, National/Local Development Plans etc. As mentioned elsewhere, the Executing Entity of the proposed Project will be the Ministry of Environment and the Climate Change Secretariat, therefore, it assures the adherence to all climate change related policies and guidelines.

Investments 1.1.1 to 1.1.4 involves construction using common building material, such as concrete and building sand and fill material. The material will be utilised efficiently and much as possible environmentally friendly building material will be used. All construction activities will be monitored to prevent pollution. Without management and mitigation measures, there is a risk of small-scale, localised pollution in and around the construction sites. Activities will be screened for this risk during the Project inception and implementation and monitored throughout Project activity implementation. Table 24 presents the pollution and resource inefficiency risks that might arise.

<sup>73</sup> [https://www.dwc.gov.lk/?page\\_id=72](https://www.dwc.gov.lk/?page_id=72)

**Table 26: Pollution and potential resource inefficacy risks**

Activity	Possible inefficiencies in energy and material resource use and waste and pollution due to project activity	Possible risk
1.1.1 Construction of 1km earth bund	<p><b>Waste:</b> Improper disposal of stripping the topsoil and vegetative waste/surplus construction material.</p> <p><b>Procurement:</b> Without guidance, materials, particularly earth, could be sourced from unapproved barrow areas, necessitating unnecessary transportation and the use of more machineries.</p> <p><b>Design:</b> All designs are based on the use of locally available material and a barrow area for soil extraction identified within a short radius of the proposed site to avoid additional transport and minimise environmental impacts.</p>	<p>Due to improper construction methods, there is a risk that the activities will generate waste and siltation in water bodies. There is also the possibility of inefficient sourcing, which would result in unnecessary emissions. Such waste would be small in scale due to the small-scale nature of the construction works and the approval, monitoring, and controlling mechanisms in place. The operations of investment 1.1.1 does not produce waste products.</p>
1.1.2 Renovation of minor irrigation tanks	<p><b>Waste:</b> Improper disposal of stripping the topsoil, vegetative waste or construction debris /surplus construction materials.</p> <p><b>Procurement:</b> Without guidance, materials, particularly earth, could be sourced from unapproved barrow areas, necessitating unnecessary transportation and engaging of more machinery.</p> <p><b>Design:</b> All designs are based on the use of locally available materials including nature-based solutions and a barrow area for soil extraction identified within a short radius of the proposed site to avoid additional transport and minimise environmental impacts.</p>	<p>Due to improper construction methods, there is a risk that the activities will generate waste and siltation in water bodies. There is also the possibility of inefficient sourcing, which would result in unnecessary emissions. All waste arising from the project is to be disposed in a manner that is acceptable to the Engineer and as per the guidelines and instructions issued by the CEA. The operations of investment 1.1.2 does not produce waste products.</p>
1.1.3 Improvement of existing evacuation route	<p><b>Waste:</b> Improper disposal of stripping the topsoil, vegetative waste or construction debris /surplus construction material.</p> <p><b>Procurement:</b> Without guidance, materials, particularly earth, could be sourced from unapproved barrow areas, necessitating unnecessary transportation and engaging of more machinery.</p> <p><b>Design:</b> All designs are based on the use of locally available materials and a barrow area for soil extraction identified within a short radius of the proposed site to avoid additional transport and minimise environmental impacts:</p>	<p>Due to improper construction methods, there is a risk that the activities will generate waste and siltation in water bodies. There is also the possibility of inefficient sourcing, which would result in unnecessary emissions. All waste arising from the investment 1.1.3 is to be disposed in a manner that is acceptable to the Engineer and as per the guidelines and instructions issued by the CEA. Based on the lessons learned from previous projects implemented by GoSL, best practices in design and implementation have been included. The operations of investment 1.1.3 does not produce waste products.</p>
1.1.4 Construction of sanitation facilities	<p><b>Waste:</b> Improper disposal of construction debris and surplus construction materials.</p> <p><b>Procurement:</b> Without guidance, materials could be sourced engaging of more machinery.</p> <p><b>Design:</b> All designs are based on locally available materials and aim to reduce groundwater pollution.</p>	<p>Due to improper construction methods, there is a risk that the activities will generate waste. There is also the possibility of inefficient sourcing, which would result in unnecessary emissions. All waste arising from the investment 1.1.4 is to be disposed in a manner that is acceptable to the Engineer and as per the guidelines and instructions issued by the CEA.</p>

**PRINCIPLE 13: PUBLIC HEALTH**

As mentioned above, investments 1.1.1 to 1.1.4 involves construction, the table below provides a detailed, investment-by investment description of where potential public health risks might occur.

**Table 27: Potential public health risks**

Activity	Potential health risk	Description
1.1.1 Construction of 1km earth bund	<p>Construction site risks Accidents Misuse of building material that poses health risks Vector borne diseases</p>	<p>There will be a short construction period of around 15 months (depending on the availability of construction material due to the current economic crisis Sri Lanka is undergoing) with a typical construction site which might pose public health risks to people frequenting the area. There will be heavy vehicles entering and leaving the construction site, a team of workers (local artisans from and around the vicinity) and construction equipment. However, the location is not residential, therefore, the expect health risk is minimal.</p> <p>The Engineer and the Project team will ensure that contractor(s) comply with the provisions of Health and Safety regulations under the Factories Ordinance (No. 45 of 1942), and that the contractor(s) will ensure that suitable Personal Protective Equipment (PPE) available sufficiently for each and every worker and wear at work premises. In addition, the Project team will ensure that the contractor(s) take necessary actions to prevent breeding of mosquitoes at places of work, labour camps, including site office, store buildings, making certain that stagnation of water in all areas are prevented. These will be included in the contract.</p> <p>Factory Ordinance <a href="https://www.ilo.org/dyn/travail/docs/1684/1_factories_ordinance_i.pdf">https://www.ilo.org/dyn/travail/docs/1684/1_factories_ordinance_i.pdf</a></p>
1.1.2 Renovation of minor irrigation tanks	<p>Construction site risks Accidents Misuse of building material that poses health risks</p>	<p>There will be a short construction period of around 12 months (depending on the availability of construction material due to the current economic crisis Sri Lanka is undergoing), as mentioned above heavy vehicles entering and leaving the construction site, a team of workers (beneficiaries from and around the vicinity) and construction equipment, including compacting equipment. Although not densely populated, the area is residential with farmers working in paddy fields. Without risk management and mitigation measures, there are public health risks to local people, particularly famers working the fields. Children living in houses in and around the vicinity may not understand the risk arising from construction activities. There will also be a risk if the construction sites pose a risk to the general public if they are improperly signposted.</p> <p>The Engineer and the Project team will ensure that contractor(s) takes all necessary measures for the safety of traffic during construction and provide, erect and maintain such barricades including signs, markings, flags, lights, flagmen as those will be required by the Engineer for the information and protection of traffic approaching or passing through the tank bunds and access roads.</p> <p>The Engineer and the Project team will ensure that contractor(s) comply with the provisions of Health and Safety regulations under the Factories Ordinance (No. 45 of 1942), and that the contractor(s) will ensure that suitable Personal Protective Equipment (PPE) available sufficiently for each and every worker and wear at work premises. In addition, the Project team will ensure that the contractor(s) take necessary actions to prevent breeding of mosquitoes at places of work, labour camps, including site office, store buildings, making certain that stagnation of water in all areas are prevented. These will be included in the contract.</p>
1.1.3 Improvement of existing evacuation route	<p>Construction site risks Accidents Misuse of building material that poses health risks</p>	<p>There will be a short construction period of around 3 months. Risks are similar to that of investment 1.1.2.</p>
1.1.4 Construction of sanitation facilities	<p>Construction site risks Accidents Misuse of building material that poses health risks</p>	<p>There will be a short construction period of about 2 months (depending on the availability of construction material due to the current economic crisis Sri Lanka is undergoing). Local artisans will be work in the sites, with in-kind contribution from the families. Risks are similar to that of 1.1.2 particularly in common places where the sanitation facilities will be constructed.</p>

**PRINCIPLE 15: LAND AND SOIL CONSERVATION**

Potential risks might arise under investment 1.1.1, other investments under Component 1 (1.1.2 and 1.1.3) are either renovations or improvements to existing infrastructure that will not change the siting of the infrastructure, and will not have heavy digging, dredging or other activities that would disturb the soil. Without risk management or mitigation measures, there is a risk that this material will be unsustainably sourced and thus create land and soil conservation issues at source under investment 1.1.1. Investment 1.1.4 will not require digging or disturbance of the soil beyond the installation of foundation for toilets. Considering that the land is not currently used for any agricultural purpose this is not considered a risk. Investment 1.3.6 as well involve replanting or rehabilitation of 1.5km of strip of mangroves, although digging is involved, there had been mangrove ecosystems earlier.

**GENERAL MEASURES ON RISK AVOIDANCE**

The Project team will work closely with all relevant GoSL entities at the local, provincial and the national level to ensure risk avoidance through adherence to rules, regulations and laws. The lengthy consultations undertaken in preparation of the proposal had already created certain amount of awareness among the stakeholders of the strict compliance to ESP and Gender Policy. UN-Habitat will draw experience and best practices learnt from post-disaster and post-conflict recovery and reconstruction programmes since 2005 up to now. In addition, UN-Habitat will reflect good practices from other agencies it had worked with, especially Asian Development Bank that implements projects in accordance with strict and internationally recognised Environmental and Social Safeguard Standards. Please refer <https://unhabitat.lk/projects/> for details.

**General project implementation:** The direct responsibility for this implementation of the Project in accordance with proposed plan lies with the Project Manager, who has oversight and compliance responsibility. Any deviations/changes or additional activities that arise during the project implementation that add value to or complement proposed sub-projects (within allowable limits set by the Adaptation Fund) will need to be cleared by the Project Manager and approved by the Project Team and the NSC.

**Management and implementation of risk mitigation measures:** Mitigation measures, including awareness raising and capacity building related to compliance with the Environmental and Social and Gender Policies are part of the Project activities and are budgeted under each investment.

**Gender:** Gender Assessment is presented in Annex 6.

Intervention	Description
General measures to be put in place to reduce environmental and social risks	<b>Agreements:</b> All MoU(s), AoC(s), CIA(s) etc. with Executing Entities will include reference to and compliance with the 15 principles of the AF ESP and the Gender Policy.
	<b>Compliance:</b> UN-Habitat will check for compliance with the ESP during the project implementation in collaboration with the relevant GoSL stakeholders. The Gender and Environment Advisor will also check for compliance against Principle 5: Gender Equity and Women’s Empowerment and the Gender Policy during implementation. The Project has passed through the UN-Habitat Project Review Committee (PRC) with requirements for human rights, gender, youth and climate change, i.e., the cross-cutting themes.
	<b>Coordination:</b> Continued coordination with focal points at the local, provincial and national Government, and all relevant stakeholders responsible for compliance with both national, provincial and local standards will take place throughout the Project.
	<b>Capacity building and awareness raising:</b> The Project Manager and the Project team will provide capacity building and awareness raising on compliance with the environmental and social and gender policies to Executing Entities and target communities so that they are aware of potential risks. This will ensure avoidance or mitigation or recognising the potential of risks and highlighting these through the appropriate channels, including the GRM. The capacity building and awareness raising will be conducted during the inception phase of the Project, prior to the commencement of construction. In addition, Project staff, including those from the Executing Entity will also be trained to recognise grievances from community members and how to deal with grievance reports. The local facilitators in each community will also be trained to recognise dissatisfaction and on how to report grievances. Moreover, continuous monitoring of activities will also provide an opportunity for beneficiary communities to voice their opinions as they wish. Complainants will have the liberty to be anonymous and discreet should they wish to remain so. The options for reporting, what constitutes a grievance and their right in anonymity etc. will also be highlighted during the awareness raising programmes. Further, all stakeholders and beneficiary communities will be reminded of the GRM periodically throughout the Project. UN-habitat will draw from past experiences working in the Northern and Eastern Provinces in Sri Lanka. In addition, the address and email address of the Adaptation Fund will be made public, i.e., project website(s), social media and ‘feedback/complaint box’ etc. for anyone to raise concerns regarding the Project.
Grievance Redressal Mechanism (GRM)	<b>Objective:</b> The GRM will apply to all Project activities and Project sites, and as mentioned elsewhere, will be accessible to both to beneficiaries and non-beneficiaries alike. It will allow them accessible, transparent, unbiased and effective means to communicate with the Project Team and the Project Support Unit regarding any concerns arising during Project design and implementation. All staff, Executing Entity, contractor(s), people in the target areas etc. will be made aware of the GRM to lodge any concern, complaint, criticism or query regarding the Project and its implementation.
	<b>Composition:</b> The composition of the GRM will be decided at the inception of the Project and in discussion with the Project Team, Project Support Unit. The NSC will also be made aware, should the NSC wishes to have representation in the GRM. Project Support Unit will also act as local facilitators.
	<b>Mechanism:</b> GRM will always be sensitive to different groups in the target communities. GRM will combine anonymous ‘feedback/complaint boxes’ at community level. As mentioned above, local facilitator(s) in each community will be selected. These individuals should be able to listen to grievances while assuring anonymity. A telephone number will also be provided and would enable people to call anonymously. The complaints could be made in languages they prefer (Sinhala, Tamil or English). Special consideration will be given to illiterate people or people with low levels of literacy, people with disability (visual, hearing impairment), in addition to the understanding that internet and smart phone penetration is not universal in the target area. Moreover, any stakeholder involved with the Project can use any training, workshop or any other event/platform organised by the Project, either in public, i.e., open floor discussions or in private, i.e., discreetly with UN-Habitat or Executing Entity staff involved with the workshop, can raise a grievance verbally. Moreover, all grievances will be anonymised and presented to the Project Team. All grievances will be treated will equal and urgent importance, regardless of who raised them, or the mode by which they did so.
Monitoring and Evaluation Arrangements	<b>Responsibility:</b> Direct monitoring responsibilities will be under the Project Manager and the team (including the Monitoring and Reporting Manager), who will also have oversight and compliance responsibility. If changes or additional activities are required, monitoring indicators will be modified or added as well, as required.
	<b>Monitoring and reporting:</b> As mentioned above, period monitoring visits throughout the Project will ensure any deviations in compliance is identified and rectified in a timely manner and to determine if actions are appropriately mitigating the risks/impacts or if they need to be modified in order to achieve the intended outcome. In addition, it will also measure the effectiveness of actions. The reports shall also include, if necessary and required, a description of any corrective actions that are deemed necessary. The collated results which will be reported to the Adaptation Fund in annual, mid-term and final reports. Annual reporting will include information about the status of adherence to compliance.
	<b>Gender:</b> Gender specific and/or disaggregated indicators and targets in the Gender Assessment will be monitored and reported.

**Table 28: Monitoring Arrangement and Roles/Responsibilities**

Activity ( <i>Hard Investments</i> )	AF ESP	Measures to avoid or mitigate risks/impacts	M&E Arrangement	
			Indicator(s) and Method(s)	Responsibility and Frequency
<p><b>Activity 1.1.1:</b> Construction of 1km earth bund with sluice gate with spill arrangement in Irrattai Vaikal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion.</p> <p><b>Activity 1.1.2:</b> Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, weeding out the bushes, renovation of auxiliary structures and strengthening the tank bund in Maritimpeattu and Puthukkudiyiruppu DS Divisions.</p> <p><b>Activity 1.1.3:</b> Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division as well as provision of the early warning system and rescue facilities with the improvement of the causeway in Nayar GN Division in Maritimpeattu DS Division.</p> <p><b>Activity 1.1.4:</b> Construction of eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at household level and two (2) in common places (evacuation/safe centres used by people during flooding season) for flood-prone/waterlogged/inundated areas and conduct five (5) training sessions on sanitation and hygiene.</p>	1. Compliance with Law	1. Acquisition of all required approvals.	<p><b>Indicator:</b> Checklist of all approvals required.  <b>Method:</b> Verification of approvals obtained.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>
	3. Marginalised and Vulnerable Groups	3. Verified selection criteria.	<p><b>Only for Activity 1.1.4</b>  <b>Indicator:</b> Adherence to the selection criteria and targeting the most vulnerable.  <b>Method:</b> Verification of selected beneficiaries and implementation of GRM.                      See No. 13.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Prior to construction.</p>
	5. Gender Equality and Women's Empowerment	5. Equal opportunity, with equal pay be given to women labourers.	<p><b>Only for Activity 1.1.4</b>  <b>Indicator:</b> 50% of females participate in sanitation and hygiene.  <b>Method:</b> Awareness programme reports.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>
	9. Protection of Natural Habitats	9. Ensure zero disruption of the local environment.	<p><b>Indicator:</b> Adherence to environmental compliance.  <b>Method:</b> Certification of compliance.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>
	11. Climate Change	11. Seek District/Regional suppliers for equipment.	<p><b>Indicator:</b> Supplier mapping and procurement plan.  <b>Method:</b> Verification of procurement plan.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>
	12. Pollution Prevention and Resource Efficiency	12. Effective disposal of waste.	<p><b>Indicator:</b> Verification of identified waste disposal sites.  <b>Method:</b> Weekly report by the Site Manager.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>
	13. Public Health	13. Following the National Occupational Safety & Health Policy of Sri Lanka and guidance on construction site safety of the National Institute of Occupational Safety and Health.	<p><b>Indicator:</b> Training for all workers on occupational health and safety and adherence to health and safety standards.  <b>Indicator:</b> Minimum 40% female labourers and equal pay as male labourers.  <b>Method:</b> Worker testimony gained through informal discussions and monthly report by Site Manager.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>
16. Lands and Soil Conservation	16. Design in compliance with minimal impact to land and soil.	<p><b>Indicator:</b> Adherence to usage of proper construction methods.  <b>Method:</b> Weekly report by the Site Manager.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during construction.</p>	
<p><b>Activity 1.3.6:</b> Replant/rehabilitation of 1.5km of mangrove forests in Irrattai Vaikal in Puthukkudiyiruppu DS Division and Nayar GN Division in Maritimpeattu DS Division to buffer and protect coastal areas from storm surges and sea level rise.</p>	1. Compliance with Law	1. Acquisition of all required approvals.	<p><b>Indicator:</b> Checklist of all approvals required.  <b>Method:</b> Verification of approvals obtained.</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during planting and maintenance.</p>
	5. Gender Equality and Women's Empowerment	5. Equal opportunity, with equal pay be given to women labourers.	See No. 13.	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during planting and maintenance.</p>
	9. Protection of Natural Habitats 16. Lands and Soil Conservation	9. Mangrove planting and management plan.	<p><b>Indicator:</b> Adherence to mangrove planting and management plan.  <b>Method:</b> Bi-weekly reports by the IP(s).</p>	<p><b>Responsibility:</b> IP(s), Project Manager, Gender and Environment Advisor and M&amp;E Manager.  <b>Frequency:</b> Bi-annual and during planting and maintenance.</p>

The overall oversight of the above will be done by the NSC.

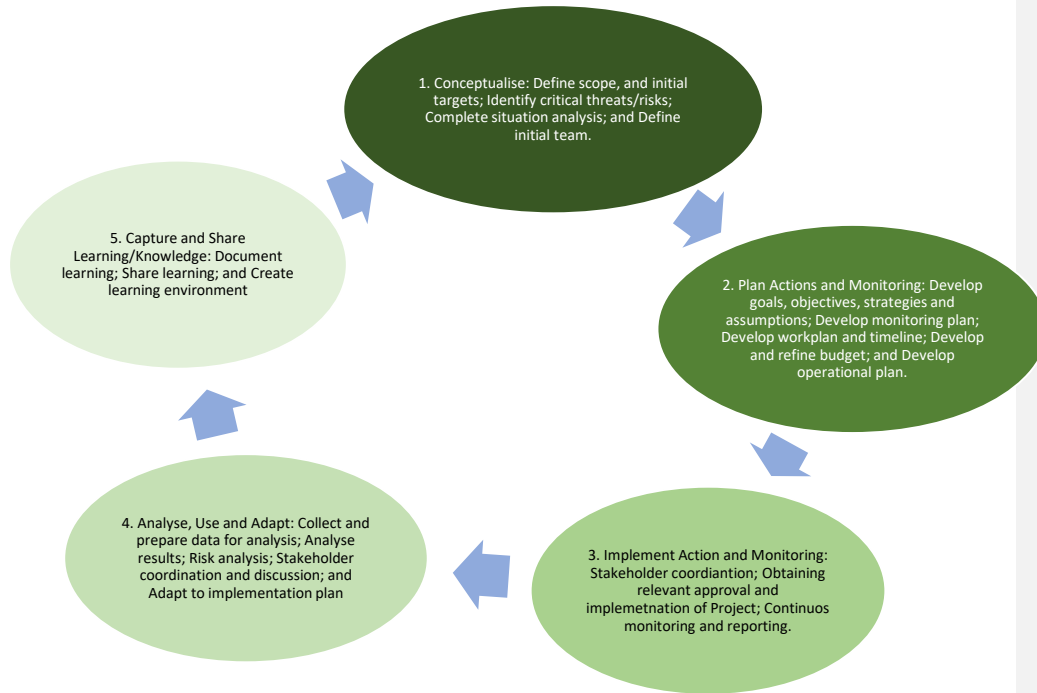
**Budget**

The amount of USD 10,500 has been allocated over two (2) years for ESP and GP compliance, which is 6% of the execution cost. This is part of the contribution of the Gender and Environmental Advisor and M&E Manager, and it includes travel specifically related to ESS. Please refer 'Table 18: Detailed budget' for details.

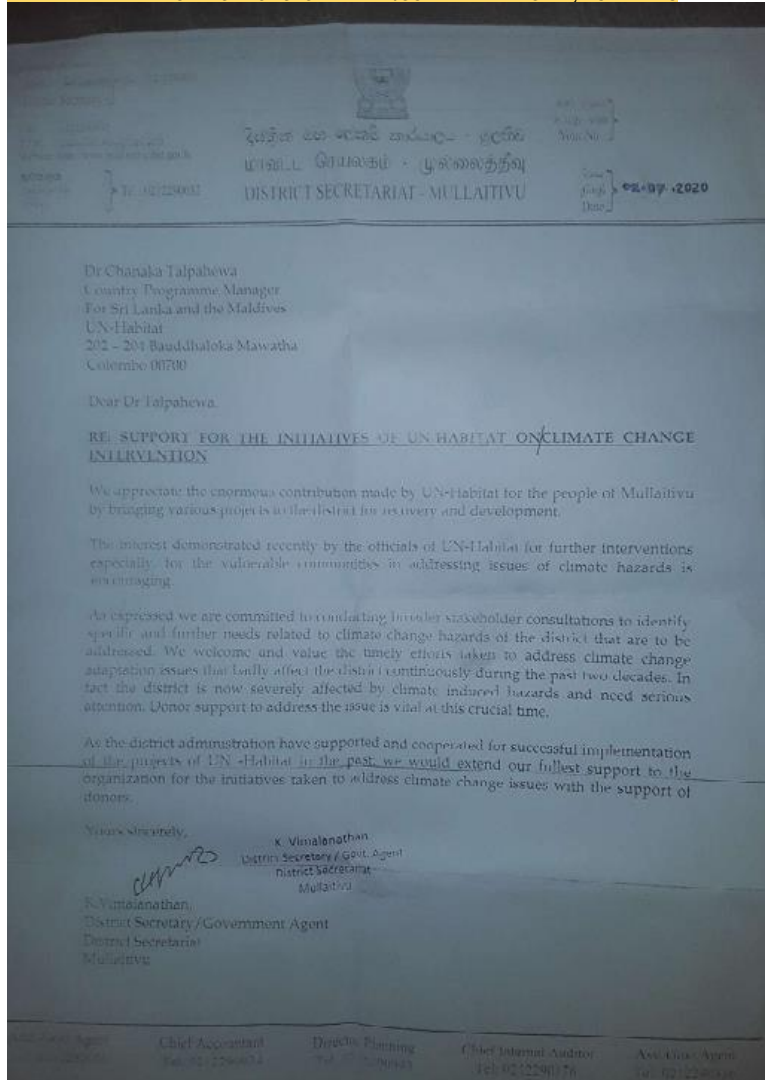
**Adaptive Management**

As mentioned elsewhere, drawing from lessons learnt from over the years, especially the post-disaster and post-conflict recovery and reconstruction programme in Sri Lanka, UN-Habitat will facilitate adaptive management by understanding the operating context understood in-depth, with continuing monitoring of risks and planning, scanning the environment regularly and real-time monitoring of data to facilitate informed decision making and change courses of action. All stakeholders will be allowed to actively engage in the proposed Project allowing trust and transparency which is critical to working adaptively. In addition, this provides stakeholders with the space, autonomy and authority they need to make decisions and facilitate feedback loops at the frontline of implementation of the Project. Therefore, as during the proposal development stage, decisions will continue to be based on evidence and learning to improve effectiveness.

**Adaptive management process adopted by the proposed Project and ESMP**

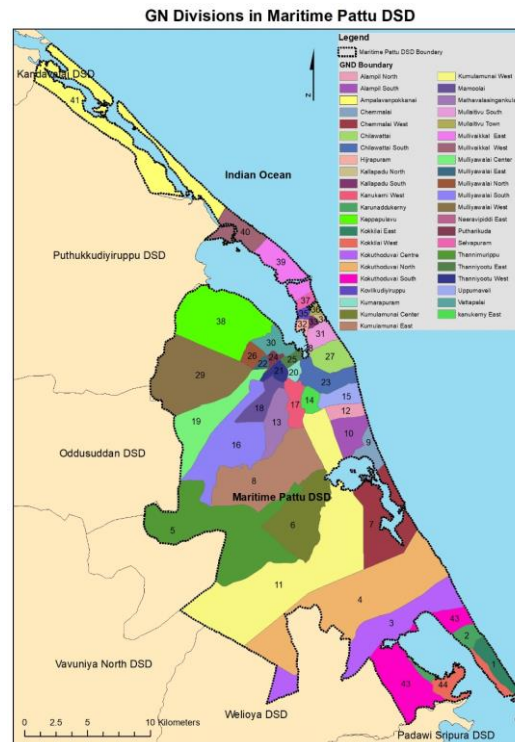


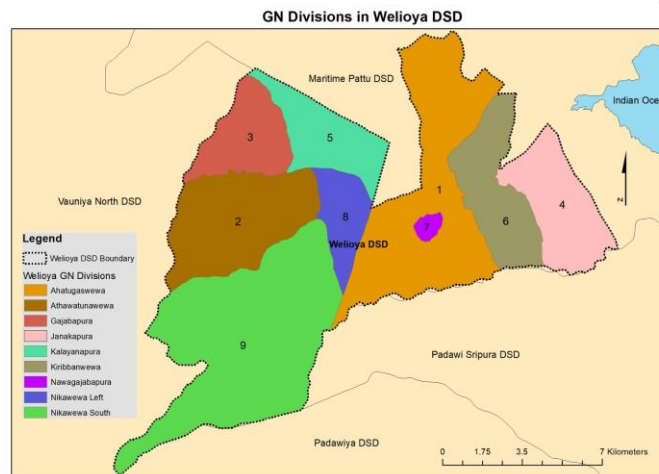
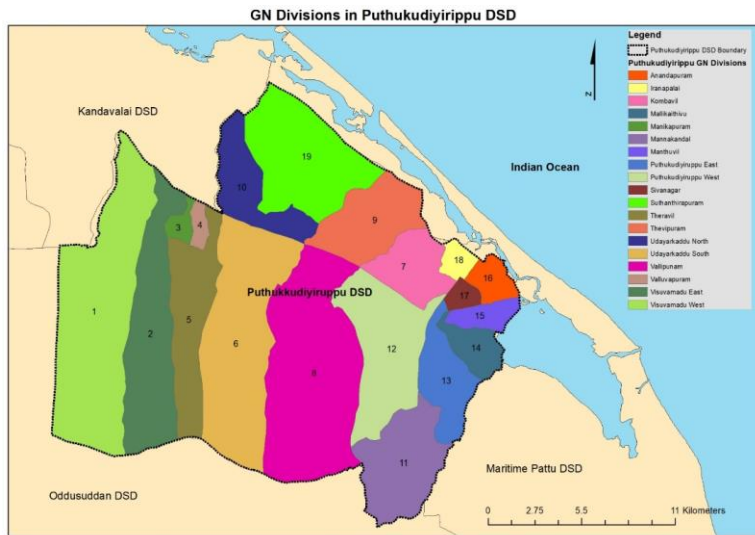
**ANNEX 2: LETTER FROM DISTRICT SECRETARIAT/GOVERNMENT AGENT, MULLAITIVU**





ANNEX 3: MAPS OF THE LOCATIONS





## ANNEX 4: STAKEHOLDER AND COMMUNITY CONSULTATIONS

### STAKEHOLDER MEETING 1

The initial Key Informant Interviews (KIIs) and Focus Group Discussion (FDGs) held in August 2020 (10<sup>th</sup> to 13<sup>th</sup> August 2020).

#### Climate change issues highlighted, and adaptation interventions suggested by stakeholders

##### Maritimepattu and Pudukudiyiruppu Divisions in Mullaitivu District

Points highlighted: (1) Provision of clean drinking water to communities who are challenged by saltwater intrusion; (2) Increase water use efficiency through, for example, drip irrigation for cultivations; (3) Fishing and coastal habitat conservation; (4) Water harvesting, such as water tanks. Water storage facilities; (5) Income generation through sale of home-grown products at road fairs; (6) Training in food processing techniques; (7) Design mobile stalls with facilities to protect products, sellers and customers from the direct sun and the heat. Provision of proper storage facilities for perishable foods; (8) Advise growers on crop cultivations and value addition; (9) Plant pastures for supplementary feeding for livestock. Shift towards an increased use of hybrid breeds, a resilient breed of cattle. Construction of more drinking troughs and houses for livestock; (10) Encourage owners to keep livestock at minimal numbers to ensure sufficient grazing; (11) Sanitation facilities for those affected by saltwater intrusion; and (12) Damage to infrastructure: designing of climate resilient roads and bridges. Construction of structures on the side of the road to prevent landslides across the roads.

**Table 1: List of stakeholders interviewed**

District/DS Division	Designation	Administration level
Mullaitivu	Government Agent	District
	Additional Government Agent	
	Assistant Commissioner Department Agrarian Development	
	Assistant Director (Acting) Department of Fisheries and Aquatic Resources	
	Director Planning	
	Disaster Management Officer	
	Senior Environment Officer	
	Environment Officer	
	District Agriculture Director	
	Women Development Officer	
	Social Service Officer	
NGO Coordinator		
Puthukkudiyiruppu	Divisional Secretary	Divisional
	Head of Grama Niladari	
	Assistant Director - Planning	
	Land Use Planning Officer	
	Development Officer	
Ananthapuram	Grama Niladhari	Grama Niladhari
Mannakandal	Community (15 females and 14 males)	Grama Niladhari
	Grama Niladhari	
Maritimepattu	Community (13 females and 12 males)	Divisional
	Divisional Secretary	
	Head of Grama Niladari	
	Assistant Director - Planning	
	Land Use Planning Officer	
Chemmalai (Nayaru)	Development Officer	Grama Niladhari
	Grama Niladhari	
	Community (15 females and 13 males)	

### STAKEHOLDER MEETING 2

KII held on 15<sup>th</sup> June 2021 – District Secretariat, Mullaitivu

#### Climate change issues highlighted, and adaptation interventions suggested by stakeholders

Points highlighted: (1) Most vulnerable GN Divisions suggested are Semmalai, Kalapadu South and North, Kokulai West in Maritimepattu DS Division, Manankandali in Puthukkudiyiruppu DS Division and Janakapura in Weli Oya DS Division; (2) Agriculture and fisheries sectors are affected due to flood; therefore, adaptation interventions should focus on these aspects; (3) Severe scarcity of water is observed; therefore, rainwater harvesting is required, especially renovation of small and medium sized tanks. Rainfed cultivation is there; (4) Saltwater intrusion to paddy fields is a major issue and the saltwater intrusion bunds are currently damaged, therefore, during the Maha season there is heavy saltwater intrusion. Post-season cultivation is not practiced after the Maha season; (5) Nandikadal DS Division the lands are quite saline, hence supporting the fisheries sector in this area is encouraged; (6) Renovating damaged sluice gates would be helpful during the flood seasons, including reducing salinity of water in town areas (high salinity in wells); (7) As a temporarily measure, drinking water could be provided through bowsers; (8) Lagoon area to be cultivated with mangroves to support the fisheries sector; (9) Apart from paddy, groundnut and vegetables are grown in the Maha season. Micro-irrigation (sprinkler system) could be done during the Yala season (suggested for Nayaru and Kokkuthuduai). During dry season the Ralkulam tank dries that affect cultivation; (10) An escape route is required for Kepapulavu GN Division in Maritimepattu DS Division, as these communities have no access roads once the roads get inundated during the rainy season; (11) Mango, banana, cashew and pomegranate are fruits that could be cultivated in these areas; (12) Inundation of toilet pits is an issue, therefore, raised toilets are recommended.

**Table 2: List of stakeholders interviewed**

District/DS Division	Designation	Administration level
Mullaitivu	Government Agent	DS Division/District
	Assistance District Secretary	
	Director Planning	
	District Agriculture Director	
	Assistant Director, Disaster Management Centre	

### STAKEHOLDER MEETING 3

KII held on 2<sup>nd</sup> July 2021 – Department of Fisheries and Aquatic Resources, Mullaitivu

#### Climate change issues highlighted, and adaptation interventions suggested by stakeholders

Points highlighted: (1) Small-scale fisher families should be supported as they are the most vulnerable to effects of climate change and economic shocks; (2) Climate change has affected the habitats of fish, especially due to changes in salinity, including, brackish/freshwater aquaculture. Both fisheries, especially post-harvest and value addition (fish processing) and aquaculture (brackish water) should be included in for adaptation measures; (3) Mangroves play a significant role in aquaculture, apart from preventing saltwater intrusion and storm surges. Planting mangroves will support the fishery sector, mainly shrimp/prawn cultivation which would be a supplementary income for fisher families; and (4) Post-harvest losses are high in fishery sector, which around 40 – 50%. Some of the fish caught are not even suitable for drying. Therefore, attention should be given to minimising the post-harvest losses and value addition of fish, e.g., drying, smoking, pickling etc. This could be done as a cottage industry with the involvement of women/youth of fisher families. However, clear market linkages should be established to ensure sustainability.

**Table 3: List of stakeholders interviewed**

District/DS Division	Designation	Administration level
Mullaitivu	Assistant Director	District

### STAKEHOLDER MEETING 4

KII held on 9<sup>th</sup> July 2021 – Coconut Cultivation Board, Mullaitivu

#### Climate change issues highlighted, and adaptation interventions suggested by stakeholders

Points highlighted: (1) Promote coconut cultivation as an adaptive measure, including support to fisher families to cultivate coconut; (2) Climate resilient varieties to be grown, drought and heat tolerant varieties. Farmers might be unaware of adaptation/coping strategies to effects of climate change. Soil moisture retention is important; (3) The micro-climate for coconut should be improved especially water scares and climate vulnerable areas; (4) Coconut-based mixed cropping systems to be promoted to ensure maximum utilisation of resources, especially land; (5) Coconut Cultivation Board can provide seedlings from existing nurseries; (6) Emphasis should be given to extension services to ensure productivity and obtaining a high yield; and (7) Value addition of coconut-based products to be given priority as well to ensure increase in income, i.e., value chain.

**Table 4: List of stakeholders interviewed**

Region/District	Designation	Administration level
Northern Region/Mullaitivu District	Regional Manager, Coconut Cultivation Board, Northern Region	Province

### STAKEHOLDER MEETING 5

KII held on 16<sup>th</sup> September 2021.

#### Climate change issues highlighted, and adaptation interventions suggested by stakeholders

Points highlighted: (1) The District Secretariat and the other stakeholders will provide the fullest support for the implementation of the proposed project; (2) Flooding, drought and saltwater intrusion are major issues observed that is affecting the main livelihood sources of the communities, namely, agriculture and fisheries; (3) Welioya faces serious issues in terms of water quality, as well as quantity; (4) Emphasis should equally be given to agriculture and fisheries sector, and on vulnerable families of the three DS Divisions; (5) Climate change adaptation related infrastructure needs are also there in the District, especially, evaluation paths, irrigation tanks, bridges, toilets etc., some estimations and designs are already done and can be used as reference; (6) Further discussions could be held if required; and (7) Socioeconomic data required are available.

#### Photographs of the Zoom meeting held



### STAKEHOLDER MEETING 6

#### Meeting minutes of stakeholder meeting

#### Mullaitivu District – 2<sup>nd</sup> December 2021

A meeting organised with the support of Disaster Management Centre, Mullaitivu to gather the information to finalise the proposal for the adaptation fund. The meeting held on 2<sup>nd</sup> of Dec 2021 at the District Secretariat chaired by the District Secretary/Government Agent. The internal conflict in the North and East of the Country lasted for 30 years has created particularly considerable impact on socio economic, political and environmental aspects. The trends of the hasty development and resettlement of the displaced people in the district have created flooding in most of the places which lead unusual situation and affect the environment very drastically. The bottlenecks are as follows, (1) There is not master plan available for the development work such as building roads, building houses, playground, and so on; (2) The natural water path or water run off places have been blocked due to the absent of the proper master plan and building approval; (3) The people paid less interest in getting the approval from the respective government entities such as local authorities; and (4) The places occupied by military or the establishment of the military camps. The proposed DS Divisions in Mullaitivu District for the adaptation project are as follow which were

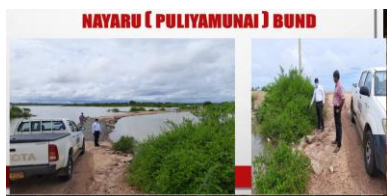
agreed by the stakeholders on the day of the meeting held in the District Secretariat: (1) Maritempattu DS Division; (2) Puthukkudiruppu DS Division; and (3) Welioya DS Division

**The flood situation in the District:** The Mullaitivu District is situated in the Northern part of Sri Lanka and climatically it receives Northeast seasonal monsoon rainfall from November to January in every year. Rest of the months are warm climate and receive few rainfalls during 1st and 2nd inter monsoonal periods. Apart from that, the District is closer to the Bay of Bengal and if any depression in the Bay of Bengal, the District gets more rainfall due to the cyclonic movement. There was a worst flood disaster reported on 2018 affected families 12,003.

#### The activities proposed

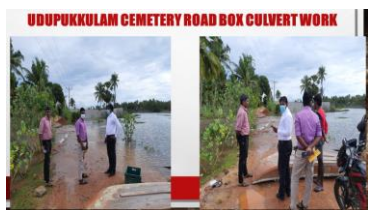
**Maritempattu DS Division: The construction of Raalkulam evacuation path:** The proposed Raalkulam evacuation path deems to be very important activity in the District in general and DS Division in particular. There are five GN Divisions namely Kallapadu North, Kallapadu South, Manatkerni, Vannankulam and Theerthakarai affected due to the absent of the proposed evacuation path. Due to the Tsunami calamity, around 1500 people dead due to unavailability of this evacuation path and more than 300 students are using the unsafe path. Due to the seasonal flooding during the northeast monsoon between December and February, the people stranded in the areas had to be relocated to safer locations each year. If they want to come to the school avoiding this path, they have to travel 10 KM daily. When this path is done, the student would travel within 10 minutes to the school and five GN divisions get benefitted and their cultivation particularly paddy and home gardening could be done easily. Estimated cost -14mn and the design and estimation for the proposed activities has been prepared by the Department of Agrarian and the District Secretary.

**Construction of Nayaru – (Puliyamunai) bund – 1.8 km:** The construction of the Nayaru bund deems essential to ease from the flooding. There are 350 families using the road, during the rainy season, the areas got flooded and the families are their cultivation get affected. The livelihood of the people from Chemmalai, Selavathai, Uduppukulam Kurumalai and Alampil get affected and their cultivation get washed off. The requirement is to construct the 3-box culvert for 1.8 km road. During the period of rainy season, the said areas seem like island. Estimated cost -12mn and the design and estimation for the proposed activities has been prepared by the Department of Agrarian and the District Secretary.



**Uduppukulam School Canal work:** Due to the construction of the playground without the proper approval and without constructing the drainage, the areas surrounded by the school get flooded, because the natural water path was blocked. In the area, there is a natural pond, the water during the rainy season goes to that pond but now the water does not go there because of the construction of the playground. There is a need to send the water to the pond nearby by constructing the proper canal which will save 400 students and the villages around the school. The construction of the playground has created natural disaster (flooding). The people and students find very difficulties due to the flooding.

**Uduppukulam Cemetery Road:** Due to the construction of the road, the natural water path has been blocked. The water normally goes to Nanthikadal has been blocked by which there is an unexpected flooding which requires 2 box culverts. The flooding goes up to 100m, due to this flooding the paddy field also gets affected, and the paddy gets withered every year.



**Main access road to Maritempattu DS Office:** The access road to Maritempattu DS office gets flooded during the rainy season by which the people go to the DS office have to travel around 6 KM avoiding this access road. The height of the road is very low. Due to the stagnant of the water, the threat of dengue breeding observed around the places. The government staff using the quarters have affected due to the fear of dengue and the people using the road to get the services from the DS office find difficulties.

**Proper drainage system for Angayatkanni Food Centre:** The construction of the road without the proper plan or master plan, certain areas in the town get flooded, only the roads were constructed by the drainage to send off the water have not been done properly. This is one of the potential cases highlighted.

#### Puthukkudiruppu DS Division

**Mannakandal bund work:** In Mannakandal GN Division, there are 250 families living. There is natural pond, the water during the rainy season goes to that pond. In 2014, DMC constructed bund spending 12 million but not completed fully due to the unavailability of the fund. At the end of the bund, there was a sand bund which was damaged by which the areas experience flooding. The runoff water goes directly to the village due to damage of the sand bund. 75 families directly affected. Have to do the formation work for the natural water path.

**Ananthapuram small bridge work:** In Ananthapuram village, there are 19 families living where the villagers and farmers have to cross the natural water path, during the rainy season, the farmers crossing the water path and villagers find difficulties in using the path. Last year with the help of SL ARMY, the people evacuated from the village. Around 25 acres of paddy field got affected.

**Samurdhi Bank – in front of PTK DS Office:** Around 600 families go to the Samurdhi bank daily which is located in front of the DS Office. The people have to cross the seasonal river to go to the Samurdhi bank, during the rainy season the people cannot cross the drainage. There is an immediate requirement of constructing a bridge over there.

**Saltwater intrusion:** According to the Director, Land use planning, there are 3 GN Divisions Pachchaipulmoddai, Iranapalai, and Puthumathalan and around 750 acres of lands use for the vegetable cultivation affected due to the saltwater intrusion. The bund with slice gate system needs to be constructed to protect the land from saltwater intrusion for about 1 km long. Similar measures have been successfully implemented to protect against saltwater intrusion and best practices can be replicated in the proposed location.

**Welioya DS Division**

(1) There are two bridges damaged due to the flooding which have to be built or repaired which would save the people and save the paddy fields from flooding and washing off the cultivations; and (2) The upper lands and lower lands are potential for the vegetable cultivations.

**Sustainable development programme for the youth:** Assistance requires to the youth to promote the youth to engage in the agricultural activities together with making the organic fertilizer. The potential resources are available in the proposed DS Divisions.

**Post harvesting lost – Livelihood:** The paddy cultivation in Mullaivai in general and the proposed DS Divisions in particular have lack of paddy storage facilities. The paddy harvested from 1500 acres dried on the road due to the unavailable facilities for drying place and those farmers suffer to keep the paddy due to the lack of storage facilities in the areas. Udayakaddu is the best example where the farmers sell their harvest at the cheapest prices due to lack of storage. 2 paddy storage facilities can be provided with mechanical dryers. The existing storage of 3nos should be upgraded with dryer facilities. Paddy husk can be used as fuel for dryer and the facility will be run by the farmer organisation in collaboration with the Department of Agricultural Development.

**Agriculture sector:** The proposed DS Divisions are very potential for the vegetable cultivation and crops like green, beans, ground nuts, maize and black grain. The challenges the farmers face are proper marketing facilities and marketing linkage and value addition, for which capacity building and proper machineries. The exposure visits, study tours would build the capacity of the farmers.

**Engagement of women – Female headed households and others:** The villages named Udayarkaddu North, Kokkuthoduwai and Karunaddukery are ideal for the modal agriculture village under this project where there are lower land and upper land available. Further, the fishing communities, farming communities live in those villages. The female headed household can engage in the cultivation like ground nuts, beans, green and can do the available activities like drying the fishes, fish processing, packing and grading. Cashew nut cutting machine will be useful for women in Kokkuthoduwai GN Division.

**Construction of the agro well:** The construction of the agro well is the other intervention, through which farmers can ensure the water availability throughout the years for their cultivation in proposed DS Divisions.

**Renovation of the minor tanks:** In the proposed DS Divisions, there are numbers of minor tanks which have been abundant need to be revived and there are minor tanks which have been in operation need to be renovated. The list of tanks will be shared. Ten (10) abandoned tanks and 10 operational tanks can be upgraded.

**Planting mangroves:** There are places where require the mangrove plantings along the coastal areas in Nayar.

**Capacity building to the land use planning:** The Land use planning functions with dearth of facilities, which needs to be addressed. The provision of the equipment will ensure the proper functioning which will give fully pledged services to the people.

District Secretariat, Mullaivai.

Climate change (Adaptation Fund) Meeting  
Date: 02.12.2021  
Time: 11.30am  
Venue: District Secretariat, Main hall

S.No	Name	Designation	Department	Phone No.	Email address	Signature
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**STAKEHOLDER MEETING 7**

**31<sup>st</sup> May 2022 (Tuesday)**

**Meeting with Government Agent and other stakeholders**

The proposed activities were discussed in-depth, and the District Secretary instructed the respective stakeholders and staff to provide required support and data required for UN-Habitat at the earliest and to work closely with UN-Habitat. Fifteen (15) farmers' organisations will be evaluated for the renovation of minor irrigation tanks (15 CIAs to be done); two (2) fisheries' societies will be evaluated for value addition of fish (2 CIAs).

" Discussion on Adaptation Fund "

Place - District Secretariat, Mullaitivu ( Board Room)

Date - 2022.05.31

Time - 09:00 AM

S.No	Name	Department	Designation	Contact No	Signature
01	Yanaka Jayaraman	DM - Mullaitivu	General & Executive Officer	9776 04 744	[Signature]
02	B. Manojan	-	Mr. District	9773 56 113	[Signature]
03	S. L. Anuradha	DM - Mullaitivu	DM	9773 56 221	[Signature]
04	M. S. S. Arany	-	Project Officer	9773 56 228	[Signature]
05	Mr. S. Lingeswaran	DM	AD	977 3519 686	[Signature]
06	Mr. S. Rajaratne	DM - Mullaitivu	DM	9773 56 221	[Signature]
07	Mr. S. L. Anuradha	DM - Mullaitivu	DM	9773 56 221	[Signature]
08	Mr. S. L. Anuradha	DM - Mullaitivu	DM	9773 56 221	[Signature]
09	Mr. S. L. Anuradha	DM - Mullaitivu	DM	9773 56 221	[Signature]
10	Mr. S. L. Anuradha	DM - Mullaitivu	DM	9773 56 221	[Signature]

" Discussion on Adaptation Fund "

Place - District Secretariat, Mullaitivu ( Board Room)

Date - 2022.05.31

Time - 09:00 AM

S.No	Name	Department	Designation	Contact No	Signature
11	K. Chandana	Department of Rural Services	Deputy Director	9777 91 110	[Signature]
12	K. Chandana	Department of Rural Services	Deputy Director	9777 91 110	[Signature]
13	P. S. S. Arany	DM - Mullaitivu	DM	9773 56 221	[Signature]
14	P. S. S. Arany	DM - Mullaitivu	DM	9773 56 221	[Signature]
15	P. S. S. Arany	DM - Mullaitivu	DM	9773 56 221	[Signature]
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**Site visit - DMC Assistant Director (Mr. Lingeswaran) to Nayar DS Division**

(1) Formation of Nayar bund to prevent saltwater intrusion, Chermalai GN Division, Maritimpeattu DS Division; (2) The site details: 900 acres of land and 700 acres are being used for agriculture with 280 families are residing in that area. Farmers mostly cultivate ulundu, groundnut, beans and paddy; (3) The problems faced by people during the rainy season (October to December) are the access roads are inundated, therefore, travelling is blocked. During this period, people have access to potable water but not electricity; (4) Livestock rearing, milk, freshwater fishing, harvesting honey (accessing wild products) – are the main occupations of the village. Rainfed agriculture is the other source of income; (5) During the rainy season, almost all the people are stranded, in case of emergency, the boat services are provided by the Army to evaluate them; (6) Other problems highlighted are, elephants crossing, electricity and shelter; (7) It is proposed to construct 2km of evaluation path (elevated) without damaging the existing ecosystem (safe access and evaluation); (8) Mangrove to be planted; (9) For the implementation of activities two (2) Women Rural Development Societies and one (1) Rural Development Society and Nayar Fishermen Cooperative Societies were identified/suggested.



**Site visit – Raalkulam in Kallappadu South GN Division, Maritimpeattu DS Division -- evaluation path with DMC Assistant Director (Mr. Lingeswaran)**

(1) Around 500 – 600m of lagoon area and total of 1km of access road proposed to be constructed as a measure of evaluation in disaster periods; (2) Elevated access road recommended in keeping the ecosystem undisturbed; and (3) Designs and clearance/approval through expertise and relevant authorities could be obtained.



**Site visit** – Bund to prevent saltwater intrusion – existing bund in Irattimullivahikal West GN Division, Maritimpeattu DS Division. Mr. Jevatheewaran, Development Officer, Land Use Planning Division.

(1) Highlighted the importance of retaining the rainwater and protecting infiltration of saltwater; (2) Suggested constructing an earth bund with sluice gate with spills without disturbing the natural mangrove environment/ecosystem; (3) Soil to be taken from identified natural ponds from the closest radius (with limited transport). Quality of the soil will be checked in laboratory; and (4) Renovation of existing bund for prevention of saltwater intrusion and structure at Chalai area in Pudumathalan GN Division in Pudukuduiruppu Divisional Secretariat Division was also suggested. There is still a leak in the bund. This will contribute to revitalising the land, facilitate infiltration and rainwater retention will be increased.



**STAKEHOLDER MEETINGS**

**1<sup>st</sup> June 2022 (Wednesday)**

**Meeting 1** - Department of Wildlife Conservation, Oddusudan, Mr. Thushara Abeykoon (Wildlife Ranger)

(1) Map of the proposed site in Nandikadal site was obtained; (2) The approval process was explained; and (3) Agreed to support the Project through technical support and other required inputs.

**Meeting 2** - Forest Department, Mr. M. M. Warunapriya

(1) The approval process was further explained and agreed to support the interventions proposed; (2) Agreed to support the project through technical support and other required inputs; and (3) Details of nurseries, technical support in planting and maintenance, awareness creation etc. could be conducted. Previously the Forest Department has conducted training in Janakapura in Welioya, these experiences could be useful for the current Project as knowledge sharing with the two (2) communities.



**Meeting with Mr. M. M. Warunpriya (Additional Divisional Forest Officer)**

**Meeting 3** – Mr. Vishwa Kalistan (Assistant Commissioner, Department of Fisheries and Aquatic Resources)

(1) Emphasised that fish value addition is important; (2) Current situation of fisheries sector and lives of fishing communities in the District could be improved; (3) Suggested of value addition of products could even be done in traditional ways, Jadi fish, dry fish, prawn chutney etc.; (4) Inland fishing could also be promoted. Suggested smoked fish is famous and profitable and could be introduced; (5) Requested to conduct awareness programmes, training and exposure visit; (6) The support of the University in Jaffna could be acquired; and (7) Once the fisherwomen are trained, fisher societies could be formed and also suggested to form fisheries cooperative society as a federation.



**Meeting with Mr. Vishwa Kalistan (Assistant Commissioner)**



**Meeting 4 – Farmers’ Organisations at the Agrarian Development Centre, Mulliyalwai GN Division, Maritimpeattu DS Division with the participation of six (6) representatives from farmers’ organisations.**

(1) Emphasised on the importance of renovation of minor tanks; (2) Assistant Commissioner of Agrarian Development (ADAC) highlighted the challenges, the farmers face on a daily basis (Water scarcity; Water storage; Abandoned irrigation channels; and Demarcation of land to reduce encroachment being the major few); (3) ADAC will support in -- Soil sample test and hydrological analysis (tank augmentation – increase the capacity), including inventory of tanks—Water tank capacity, watershed area/catchment etc.; (4) There is also the need for an additional requirement for minor irrigation tanks, additional 10 tanks; and (5) Suggested to establish cascade system by linking 3 to 4 tanks.



Meeting with famers’ organisations

No	Name	F.O Name	Signature
1	S. Jayaraman	Maritimpeattu	[Signature]
2	G. Rajagopal	Maritimpeattu	[Signature]
3	T. Srinivasan	Maritimpeattu	[Signature]
4	R. S. Chelvan	Maritimpeattu	[Signature]
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26	R. S. Chelvan	Maritimpeattu	[Signature]

**Site visit – Kunchchukulam, Mulliyalwai GN Division, Maritimpeattu DS Division**  
 (1) One hundred and forty (140) acres of paddy land are fed through Kunchchukulam; (2) Overgrown bushes inside the tank—to be weeded out and the irrigation structure has to be renovated as there are leakages with the irrigation channels having to be extended.; (3) It was decided that the farmer organisations will be given the responsibility of maintenance; (4) Fifteen (15) tanks to be renovated and out of which 5 tanks to be cultivated with fingerlings; and (5) Technical support to be National Aquaculture Development Authority of Sri Lanka (NAQDA).



**2nd June 2022 (Thursday)**

**Meeting 5 - Meeting with community at Pudukuduiruppu, Office of the Divisional Secretary**

(1) The Divisional Secretary introduced UN-Habitat; (2) Potential beneficiaries highlighted the current challenges/obstacles they face in home gardening, namely, (a) Scarcity of water and water conservation methods; (b) Lack of equipment like water pipes, sprinkler systems etc.; (c) Lack of quality seeds; (d) Damages caused by wildlife; (e) Salinity of water etc.; (3) Deepening the wells linking with existing water channels could be better option for them to get water to extend the seasons of cultivation; (4) Requested for support in additional knowledge on adapting to water salinity and relevant techniques and support with suitable varieties with salinity resistance; (5) Requested for support to expand cultivation by providing assistance/support with tools/inputs; (6) District Director Agriculture explained the cultivation of green gram, cowpea etc. as a solution for current food crisis faced by Sri Lanka. It was requested to consider cultivating turmeric/ginger as well (items that are being exported); (7) Director Agriculture, Assistant Director Planning – named two villages, Vallipunam (Pudukuduiruppu) and Pudukuduiruppu West GN Division as model home garden villages. These two (2) GN Divisions are the most vulnerable to drought and water salinity.



Sl. No.	Name	Address	Mobile No.	Remarks
1	Dr. J. S. Srinivasan	Dr. J. S. Srinivasan	9842111111	Chairman
2	Dr. D. Srinivasan	Dr. D. Srinivasan	9842111111	Member
3	Dr. K. Srinivasan	Dr. K. Srinivasan	9842111111	Member
4	Dr. M. Srinivasan	Dr. M. Srinivasan	9842111111	Member
5	Dr. N. Srinivasan	Dr. N. Srinivasan	9842111111	Member
6	Dr. P. Srinivasan	Dr. P. Srinivasan	9842111111	Member
7	Dr. Q. Srinivasan	Dr. Q. Srinivasan	9842111111	Member
8	Dr. R. Srinivasan	Dr. R. Srinivasan	9842111111	Member
9	Dr. S. Srinivasan	Dr. S. Srinivasan	9842111111	Member
10	Dr. T. Srinivasan	Dr. T. Srinivasan	9842111111	Member
11	Dr. U. Srinivasan	Dr. U. Srinivasan	9842111111	Member
12	Dr. V. Srinivasan	Dr. V. Srinivasan	9842111111	Member
13	Dr. W. Srinivasan	Dr. W. Srinivasan	9842111111	Member
14	Dr. X. Srinivasan	Dr. X. Srinivasan	9842111111	Member
15	Dr. Y. Srinivasan	Dr. Y. Srinivasan	9842111111	Member
16	Dr. Z. Srinivasan	Dr. Z. Srinivasan	9842111111	Member
17	Dr. AA. Srinivasan	Dr. AA. Srinivasan	9842111111	Member
18	Dr. AB. Srinivasan	Dr. AB. Srinivasan	9842111111	Member
19	Dr. AC. Srinivasan	Dr. AC. Srinivasan	9842111111	Member
20	Dr. AD. Srinivasan	Dr. AD. Srinivasan	9842111111	Member

Sl. No.	Name	Address	Mobile No.	Remarks
1	Dr. T. Srinivasan	Dr. T. Srinivasan	9842111111	Member
2	Dr. P. Srinivasan	Dr. P. Srinivasan	9842111111	Member
3	Dr. M. Srinivasan	Dr. M. Srinivasan	9842111111	Member
4	Dr. N. Srinivasan	Dr. N. Srinivasan	9842111111	Member
5	Dr. K. Srinivasan	Dr. K. Srinivasan	9842111111	Member
6	Dr. J. Srinivasan	Dr. J. Srinivasan	9842111111	Member
7	Dr. I. Srinivasan	Dr. I. Srinivasan	9842111111	Member
8	Dr. H. Srinivasan	Dr. H. Srinivasan	9842111111	Member
9	Dr. G. Srinivasan	Dr. G. Srinivasan	9842111111	Member
10	Dr. F. Srinivasan	Dr. F. Srinivasan	9842111111	Member
11	Dr. E. Srinivasan	Dr. E. Srinivasan	9842111111	Member
12	Dr. D. Srinivasan	Dr. D. Srinivasan	9842111111	Member
13	Dr. C. Srinivasan	Dr. C. Srinivasan	9842111111	Member
14	Dr. B. Srinivasan	Dr. B. Srinivasan	9842111111	Member
15	Dr. A. Srinivasan	Dr. A. Srinivasan	9842111111	Member
16	Dr. Z. Srinivasan	Dr. Z. Srinivasan	9842111111	Member
17	Dr. Y. Srinivasan	Dr. Y. Srinivasan	9842111111	Member
18	Dr. X. Srinivasan	Dr. X. Srinivasan	9842111111	Member
19	Dr. W. Srinivasan	Dr. W. Srinivasan	9842111111	Member
20	Dr. V. Srinivasan	Dr. V. Srinivasan	9842111111	Member

**Meeting 6 – Discussion with Government Agent/District Secretary**

(1) A suitable implementing partner to be identified, suggested Sri Lanka's Sarvodaya Shramadana Movement for infrastructure and training and CBOs for construction; and (2) Suggested discussions with Women Development Officer, NGO Coordinator and District Environment Officer to be met online.

**Meeting 7 – Meeting with farmers in Chemmalai East and Chemmalai GN Divisions, in Maritimpeattu DS Division**

(1) 900 acres of land, 700 acres are being used for agriculture with 280 families are residing in that area; (2) Farmers mostly cultivate ulundu, groundnut, beans and paddy; (3) The problems faced by people are, during the rainy season (October to December) the access roads are inundated, therefore, travelling is blocked; People have access to potable water but not electricity etc.; (4) Livestock rearing, milk, freshwater fishing, harvesting honey (accessing wild products) – are the main occupations of the village; (5) During the rainy season, almost all the people are stranded, in case of emergency, the boat services are provided by the Army to evaluate them; (6) Main problems highlighted during the discussion were, elephant crossing, electricity and shelter; (7) It is proposed to construct 2km of evaluation path (elevated) without damaging the existing ecosystem (safe access and evaluation); (8) Rainfed agriculture is other source of income; (9) Mangrove to be planted, varieties to be checked; and (10) For implementation of activities two (2) Women Rural Development Societies and one (1) Rural Development Society and Nayaru Fishermen Cooperative Societies were identified/suggested.



**Meeting 8 – Meeting with farmers in Welioya Divisional Secretariat Division**

(1) Problems faced by farmers were highlighted, (a) Water scarcity; (b) Free ranging cattle that destroy farmland; (c) Lack of quality seeds; (d) The current fuel/power crisis is affecting farming; (e) Wildlife attacks. Currently there are active/functioning farmers' societies, including women's societies. Farmers requested to introduce solar panels as a measure for the power crisis, that would facilitate the smooth functioning/production of/in farmland, in addition to provision of tools/equipment for home gardening as a solution for the food crisis experienced in Sri Lanka; (2) Micro-irrigation and tube wells to be promoted in water scares areas. Irrigation/water is paramount; (3) Organic home gardening could be supported through the project with emphasis being given the production of good quality seeds (high tolerant local seeds/varieties); (4) Home-based industries could also be promoted; (5) Women were quite active and were keen to promote organic home gardening; (6) Suggested creating market linkages and selling goods at a reasonable price; (7) Product value addition was also highlighted, especially during seasons of excess production; (8) The services of Agriculture Extension Officers to be equally distributed among the community members without any favouritisms to individuals; (9) Measures to be taken for wildlife attacking crops; (10) Training on new/efficient technologies/techniques to be shared with communities, indigenous knowledge could be coupled with it; and (11) New tolerant paddy varieties too could be introduced.



**ANNEX 5: PROJECT INVESTMENTS SHEETS**

**ANNEX 5A: MINOR IRRIGATION TANKS**

**Details Of Minor Irrigation Tanks to be Renovated  
Mullaitivu District**

S.N	Name Of ASC	Name of Tank	DS Division	GN Division	GPS Coordinates		Command Area in Acres
					N	E	
1	Mulliyawalai	Palakkadduvankulam	Maritimepattu	Silawaththai	204560	445340	120
2	Mulliyawalai	Kanchooramottaikulam	Maritimepattu	Mulliyawalai South	195920	437130	90
3	Mulliyawalai	Neeravikulam	Maritimepattu	Mulliyawalai South	195420	437650	100
4	Mulliyawalai	Keechchukulam	Maritimepattu	Mulliyawalai West	193450	442800	106
5	Mulliyawalai	Vaveddikulam	Maritimepattu	Keppapilavu	194480	451020	175
6	Mulliyawalai	Ralkulam	Maritimepattu	Kallappadu South	205102	449481	60
7	Mulliyawalai	Aarachchiamurippukulam	Maritimepattu	Mulliyawalai Center	195041	439420	194
8	Mulliyawalai	Kunchukulam	Maritimepattu	Mulliyawalai North	199805	446580	20
9	Mulliyawalai	Thalavaykukulam	Maritimepattu	Mullaitivu south	91507	804902	100
10	Puithukkudiyiruppu	idaikkaddukkulaqm	Puithukkudiyiruppu	Vallipunam	0919556	08037137	150
11	Puithukkudiyiruppu	Achchilakulam	Puithukkudiyiruppu	Puithukkudiyiruppu East	0916390	08042323	85
12	Puithukkudiyiruppu	Sangaththarkulam	Puithukkudiyiruppu	Thevipuram	0923242	08040608	70
13	Udayarkaddu	Siradaiparichankulam	Puithukkudiyiruppu	Suthanthirapuram	182660	463100	120
14	Udayarkaddu	Kuravil Kulam	Puithukkudiyiruppu	Udayarkaddu South	185810	456840	100
15	Udayarkaddu	Vellapallam	Puithukkudiyiruppu	Udayarkaddu North	182030	452120	120



ශ්‍රී ලංකා සමාජ සංවර්ධන දෙපාර්තමේන්තුව - මුලතිව්  
கமநல அபிவிருத்தித் திணைக்களம் - முல்லைத்தீவு  
DEPARTMENT OF AGRARIAN DEVELOPMENT - MULLAITIVU

Telephone (General) : 021-2290049 Email: acadmullaitivu@gmail.com Telephone (CDMA) : 024-3248217  
Assistant Commissioner : 021-2290048 Fax : 021-2290049

281/13/2/10/106

07.12.2021

Co-ordinator,  
UN Habitat,  
Srilanka

**Development initiatives related to Climate Change.**

According to the discussion conducted on the above on 2021.12.02 in the District Secretariat Mullaitivu,

The following details are attached here with for seeking your financial contribution for the next year on priority bases please

01. List of Tanks that to be surveyed
02. List of functional as well as abandoned tanks that to be renovated,
03. Paddy Store expansion of in Kokkuthoduvai ASC
04. Paddy Drying Machinery
05. Agro well
06. Fertilizer store

  
S.R. Paraneeharan  
Assistant Commissioner,  
Department of Agrarian Development,  
Mullaitivu.  
Assistant Commissioner,  
Dept. Of Agrarian Development,  
Mullaitivu.

Copy

01. Commissioner General,  
Dept. of Agrarian Development,  
Colombi-07. -For information Please
02. District Secretary  
District Secretariat  
Mullaitivu. -For information Please

33	Kokkuthoduwa	Kaayadikkulam	Maritimepattu	Kokkuyyhoduwai North	9°03.477	080°54.889	25
34	Puithukkudiyirup	idaikkaddukkulaqm	Puithukkudiyiruppu	Vallipunam	0919556	08037137	150
35	Puithukkudiyirup	Pookkulam	Puithukkudiyiruppu	Thevipuram	0921982	08038745	65
36	Puithukkudiyirup	Murukkuvedduwankulam	Puithukkudiyiruppu	Puithukkudiyiruppu East	0916146	08041716	18
37	Puithukkudiyirup	Achchilakulam	Puithukkudiyiruppu	Puithukkudiyiruppu East	0916390	08042323	85
38	Puithukkudiyirup	Thippilikulam	Puithukkudiyiruppu	Koompavil	192000	459550	ABT
39	Puithukkudiyirup	Uvarpulavukulam	Puithukkudiyiruppu	Sivanagar	0919403	08043077	ABT
40	Puithukkudiyirup	Valanchiyankulam	Puithukkudiyiruppu	Theavipuram	0923042	08039804	ABT
41	Puithukkudiyirup	Kariyalkulam	Puithukkudiyiruppu	Ampalvanpokkanai	0921414	0804342	ABT
42	Puithukkudiyirup	Kurangiruppankulam	Puithukkudiyiruppu	Koompavil	0189519	0460521	ABT
43	Puithukkudiyirup	Sangaththarkulam	Puithukkudiyiruppu	Thevipuram	0923242	08040608	70
44	Puithukkudiyirup	Unavilkulam	Puithukkudiyiruppu	Ampalvanpokkanai	0920582	08044579	ABT
45	Puithukkudiyirup	Nadanamiddankulam	Puithukkudiyiruppu	Vallipunam	0920520	08038812	ABT
46	Puithukkudiyirup	Mantkulam	Puithukkudiyiruppu	Manthuvil	9°03.100	80°54.219	ABT
47	Puithukkudiyirup	Veanaavilkulam	Puithukkudiyiruppu	Puithukkudiyiruppu west	0918253	08041032	ABT
48	Puithukkudiyirup	Maavadikkulam	Puithukkudiyiruppu	Puithukkudiyiruppu West	0918804	08041334	ABT
49	Udayarkaddu	Siradaiparichankulam	Puithukkudiyiruppu	Suthanthirapuram	182660	463100	120
50	Udayarkaddu	Kuravil Kulam	Puithukkudiyiruppu	Udayarkaddu South	185810	456840	100
51	Udayarkaddu	Addaai kulam	Puithukkudiyiruppu	Visvamadu East	179860	456640	ABT
52	Udayarkaddu	Theravil Kulam	Puithukkudiyiruppu	Theravil	179510	461270	ABT
53	Udayarkaddu	Vellapallam	Puithukkudiyiruppu	Udayarkaddu North	182030	452120	120
54	Udayarkaddu	Kupilan kulam	Puithukkudiyiruppu	Udayarkaddu North	182460	460760	ABT

Note:- ABT (Abandoned Tank)

Prepared:-



  
**S.R. Paraneeharan**, Assistant Commissioner,  
 Assistant Commissioner of Agrarian Development,  
 Dept. Agrarian Development,  
 Mullaitivu.

Details Of Tanks to be Renovated

No	Agrarian Service center	Tanks Name	DS Division	GN Division	Beneficiaries	Command Area	GPS Coordinates		TEC Amount (Mn)	Work Details
1	Mulliyawalai	Vaaveddikulam	Maritimepettu	Keppapilavu	68	214.5	194480	451020	10M	Bund work, Sluice Work, Desilting
2		Aarachchiyamurippu	Maritimepettu	Mulliyawalai Center	83	232	195041	439420	10M	Bund work,
3		Ralkulam	Maritimepettu	Kallappadu South	5	16	205102	449481	25M	Additional couseway, bund
4		Kunchukkulam	Maritimepettu	Mulliyawalai north	10	21	199805	446580	6M	Concrete rough, Channelling, & access road
5		Elankanarayanankulam	Maritimepettu	Mulliyawalai Center	50	15	196340	440880	15M	Abandoned, Full work
6	Kumulamunai	Marichchukkaddy	maritimepatru	kumulamunai west	8	26	203257	437414	8M	Full work, access work
7	Udayarkaddu	Siradaipparichankulam	Puthukudijiruppu	Suthanthirapuram	90	90	182660	463100	25M	Full work
8	Puthukudiyiruppu	Idaikkaddu Kulam	Puthukudijiruppu	Vallipunam	80	150	0919556	08037137	25M	Bund, Channel

Details of Construction Works

No	Agrarian Service Center	Paddy Store		Fertilizer Store		Agrowell Renovatiuon		Agrowell Construction		Drying Floor		Drying Machinery & Building	
		No	TEC Amount (PER -01)	No	TEC Amount (PER -01)	No	TEC Amount (PER -01)	No	TEC Amount (PER -01)	No	TEC Amount (PER -01)	No	TEC Amount (PER -01)
1	Puthukudiyiruppu	1	6M	-	-	75	0.2M	15	0.8M	-	-	5	6M
2	Udayarkaddu	-	-	-	-	50	0.2M	-	-	-	-	4	6M
3	Mulliyawalai	1	6M	-	-	60	0.2M	100	0.8M	-	-	5	6M
4	Kokkuthoduvai	-	-	1	6M	-	-	-	-	8	2M	1	6M
5	Alampil	1	6M	-	-	-	-	10	0.8M	-	-	1	6M
6	Kumulamunai	2	6M	1	6M	50	0.2M	50	0.8M	8	2M	2	6M
Total		5		2		235		175		16		18	

Prepared by  
R.Suthakaran  
Development Officer

  
S.R.Paraneeharan  
Assistant Commissioner,  
Department of Agrarian Development,  
Dept. of Agrarian Development, Mullaitivu.  
Mullaitivu

ANNEX 5C: REQUEST LETTER FROM DIVISIONAL SECRETARIAT – PUTHUKKUDIYIRUPPU

112



**பிரதேச செயலகம் - புதுக்குடியிருப்பு**  
**Divisional Secretariat - Puthukkudiyiruppu**

பிரதேச செயலகம்  
 Divisional Secretariat } 021 206 1623

அலுவலகம்  
 Office } 021 206 1626

உதவி அலுவலர் (புதிர்) /  
 Asst. Director (Planning) } 021 206 1625

அலுவலர் /  
 Assistant } 021 206 1624

தொலைபேசி /  
 Phone } 021 206 1628

புகள் /  
 Fax } 021 206 1628

தொலைக்கேள்விகள் /  
 Website } www.puthukkudiyiruppu.sri.lanka.gov.lk

மின்னஞ்சல் முகவரி /  
 E-mail } ds@pksri.lanka.gov.lk

"Forward to Excelent Public Service Through Production Processes"

மேலுள்ள  
 My No } DS/PKI/PL /FD/2021

உள்ள  
 Your No. }

01.12.2021

மாண்புமிகு பிரதேச செயலாளர்,  
 மாண்புமிகு பிரதேச செயலகம்,  
 புதுக்குடியிருப்பு.

District Secretariat  
 07 DEC 2021  
 Mullaitivu

**காலநிலை மாற்றம் தொடர்பான அபிவிருத்தி வேலைத்திட்டம் - 2022**  
 மேற்படி விடயம் தொடர்பாக, மறு புதுக்குடியிருப்பு பிரதேச செயலகத்தில்  
 நடைமுறைப்படுத்தப்படவேண்டிய வேலைத்திட்டங்களின் விபரங்களை தங்களுக்கு தயவுடன்  
 அறியத்தருகின்றேன். இதன் விபரங்கள் இத்தடவன் இணைக்கப்பட்டுள்ளது.

*T. Jeyanthan*  
 உதவித்திட்டமிடல் பணிப்பாளர்,  
 பிரதேச செயலகம்,  
 புதுக்குடியிருப்பு.

**T.Jeyanthan**  
 Asst. Director (Planning)  
 Divisional Secretariat



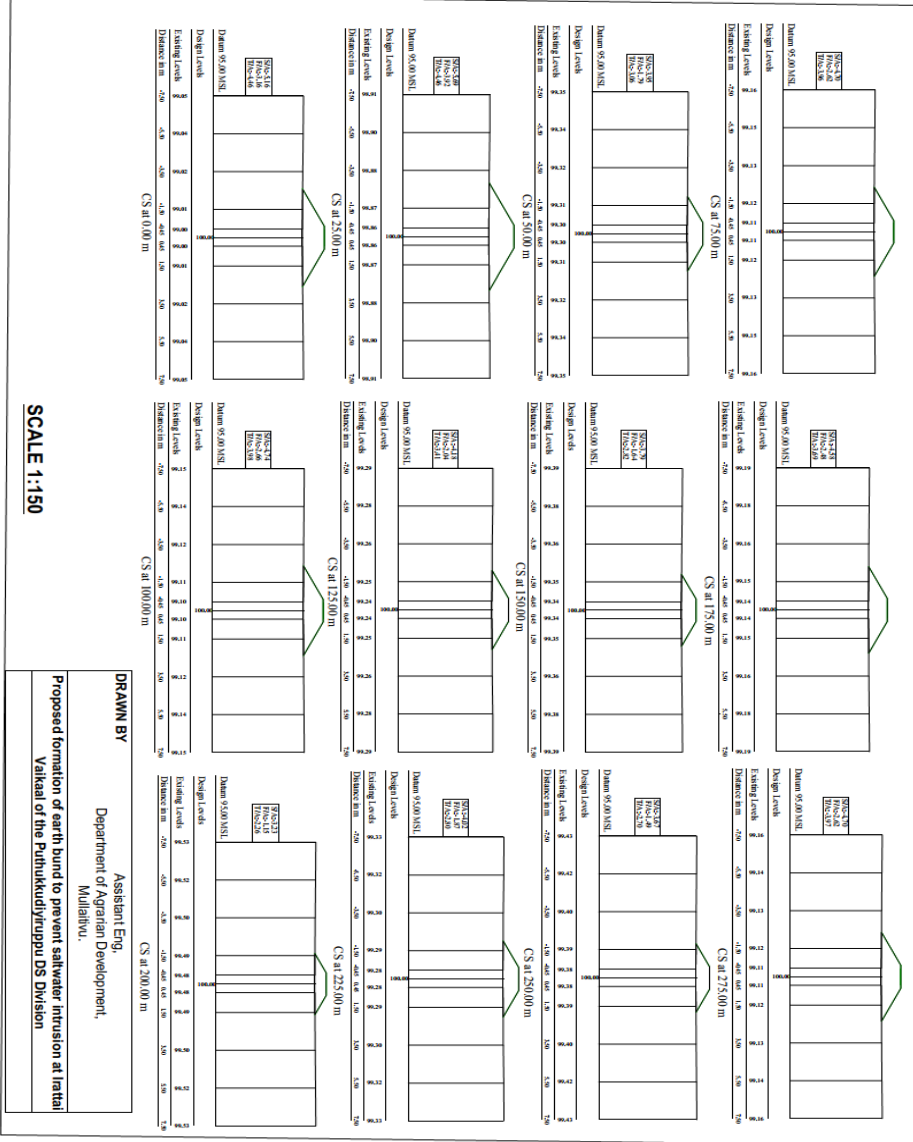
**Construction on Flood damaged**

No	GN Division	Description	Tentative Estimate (M)
1		Construction of Bridge at School Road	3
2	Ananthapuram	Construction of deepening at Pasurusolai Tank	40
3		Construction of Canal at 9th housing	4
4		Construction of Box Culvert at Vasanthapuram Main Road	3
5	Mannakondal	Construction of Box Culvert at Vasanthapuram Internal Road	2
6		Construction of bridge at Peruru Tank Road	20
7	Thevapuram	Construction of Bridge at Kanesh Road	1
8	Irranippalai	Construction of Box Culvert at Pandiyar Road	1
9		Construction of Box Culvert at Pandiyar Road to Kompavil Junction	2
10		Construction of Box Culvert at Thoddiyadi D3 Road	1
11	Visuvamadu West	Construction of Box Culvert at Sanasamuga Centre Road	1
12		Construction of box Culvert at Neththalayaru D2 Road	1
13		Construction of Box Culvert at Neththalayaru School Road	1
14	PTK West	Construction of Canal 1 Km at Maruthamadu	3
15	PTK East	Construction of Culvert at Looththumatha Road	1
16		Construction of Box Culvert at Jon Pre School Road	1
17	Suthanthirapuram	Construction of Box Culvert at 40 Acres Road	2
18		Construction of Box Culvert at 1 1/2 Acres Road	3
19		Construction of Box Culvert at Kuravil Edaikkadu Road	1
20	Udaiyarkaddu South	Construction of Box Culvert at Udaiyarkaddu East Pakalavan Road	1
21		Construction of Box Culvert at Udaiyarkaddu South Mahanakudiyirappu Road	1
<b>Grand Total</b>			<b>93</b>

*Fig 14*

**T. Jayanthan**  
Astt. Director (Planning)

**ANNEX 5D: UNDER ACTIVITY 1.1.1, NEW CS**

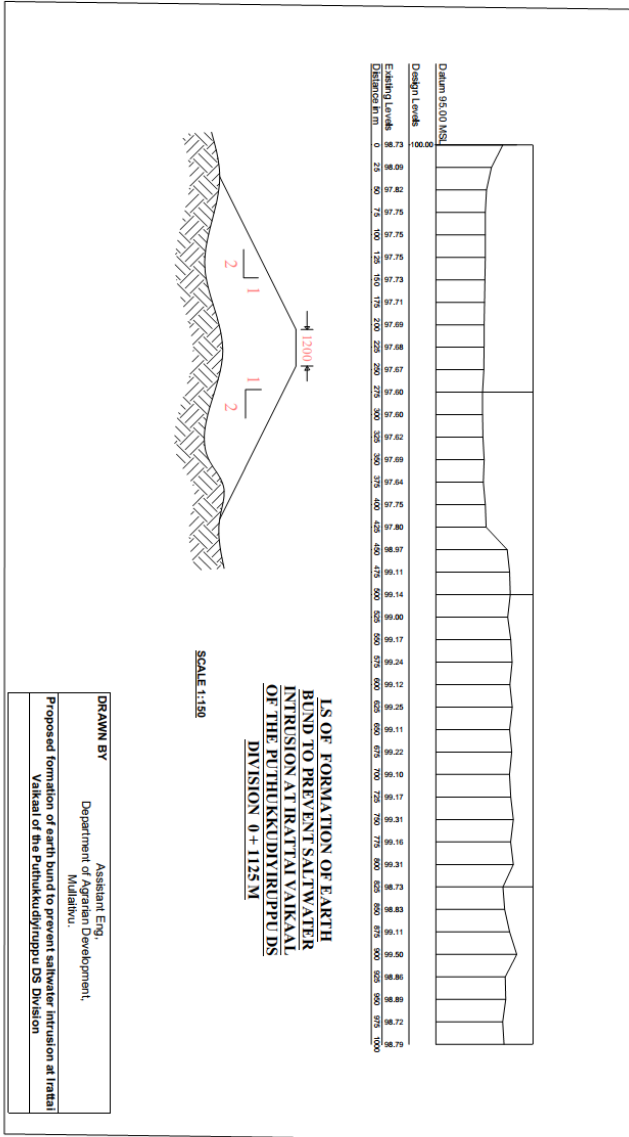


**SCALE 1:150**

**DRAWN BY**

Assistant Eng,  
Department of Agrarian Development,  
Mullalivui.

Proposed formation of earth bund to prevent saltwater intrusion at Iratral  
Vaikal of the Puttukkudiyiruppu DS Division



**ANNEX 5G: UNDER ACTIVITY 1.1.1, THE EARTHWORK CALCULATION IRATTAI VAIKAAL OF THE PUTHUKKUDIYIRUPPU DS DIVISION**

EARTH WORK CALCULATION SHEET FOR IRATTAI VAIKAAL OF THE PUTHUKKUDIYIRUPPU DS DIVISION.				
Chainage	Distance	Filling		
		Area(m <sup>2</sup> )	Mean Area	Volume(m <sup>3</sup> )
0	0.00	5.18	2.59	0.00
25	25.00	8.80	6.99	174.75
50	25.00	12.65	10.73	288.13
75	25.00	13.34	13.00	324.88
100	25.00	13.48	13.41	335.25
125	25.00	13.47	13.48	336.88
150	25.00	13.61	13.54	338.50
175	25.00	13.65	13.83	340.75
200	25.00	14.01	13.83	345.75
225	25.00	14.20	14.11	352.63
250	25.00	14.30	14.25	356.25
275	25.00	15.04	14.87	366.75
300	25.00	15.06	15.05	378.25
325	25.00	14.79	14.93	373.13
350	25.00	14.09	14.44	361.00
375	25.00	14.43	14.26	356.50
400	25.00	13.34	13.89	347.13
425	25.00	13.01	13.18	329.38
450	25.00	3.73	8.37	209.25
475	25.00	2.93	3.33	83.25
500	25.00	2.83	2.88	72.00
525	25.00	3.55	3.19	79.75
550	25.00	2.68	3.12	77.88
575	25.00	2.33	2.51	62.63
600	25.00	2.87	2.80	85.00
625	25.00	2.25	2.56	64.00
650	25.00	2.99	2.62	85.50
675	25.00	2.38	2.69	67.13
700	25.00	2.94	2.66	86.50
725	25.00	2.63	2.79	69.63
750	25.00	2.02	2.33	58.13
775	25.00	2.66	2.34	58.50
800	25.00	2.06	2.36	59.00
825	25.00	4.98	3.52	88.00
850	25.00	4.48	4.73	118.25
875	25.00	2.89	3.69	92.13
900	25.00	0.99	1.94	48.50
925	25.00	4.03	2.51	62.75
950	25.00	3.76	3.90	97.38
975	25.00	4.15	3.96	98.88
1000	25.00	4.35	4.25	108.25
1025	25.00	4.56	4.46	111.38
1050	25.00	4.50	4.53	113.25
1075	25.00	5.75	5.13	128.13
1100	25.00	5.22	5.49	137.13
1125	25.00	5.41	5.32	132.88
<b>TOTAL</b>				<b>8176.88</b>

Filling:-

8,176.88

M<sup>3</sup>

Prepared By :  
Assistant Eng.  
Department of Agrarian Development  
Mullattivu

**ANNEX 5H: UNDER ACTIVITY 1.1.2 FIFTEEN (15) MINOR IRRIGATION TANKS SELECTED**

**Details of Minor Irrigation Tanks to be Renovated  
Mullaitivu District**

S.No	Name of ABC	Name of Tank	DB Division	GR Division	SPS Coordinates		Command Area in Acres	Hydrology		Tank based (meter)					Sub		Water details	# of persons benefited	Yield/ha (kg to last 5 yrs) tank	The scheme's current status and the extent of work to be completed	Details of Farmer's Organization		
					N	E		Catchment Area (hect)	Tank Capacity (cuft)	Length	FBL	WFL	RTL	Length (ft)	Class	Material					Year of formation	Head in feet	Bank Volume (cuft)
1	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	104880	493340	120	28	78								42		Construction: Inadequate concrete, other gaps, and earth should be improved				
2	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	105020	497120	80	32	68								32		Check the canal, including the structure, and strengthening the tank bed				
3	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	104420	497040	100	38	68	805.00	101.00	102.00	103.10	30.00	101.00	U.S. - Inlet pipe 300 D, 100m length P.S. - Inlet pipe 300 D, 100m length	33	68.00	U.S. inlet, Conch damaged	Mullaitivu South Farmer's Org	108	1,411,968.00	
4	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	103480	492800	100	32	78								32		Construction: Inadequate concrete, other gaps, and earth should be improved				
5	M.Ajappadi	Puduchchikulam	Mullaitivu	Pappalawa	104480	497020	170	48	110								38		Construction: Inadequate concrete, other gaps, and earth should be improved				
6	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	105180	498810	80	47	60								28	68.00	Tank to be used as a water storage tank to be improved including concrete structure for tank	Mullaitivu South Farmer's Org	28	222,788.00	
7	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	104010	496420	140	72	120					33.00	6.00	U.S. 200 + 100 Inlet 300 D, 100m length P.S. - Inlet pipe 300 D, 100m length Conch - Inlet pipe 300 D, 100m length	68	72.00	Conch to join with channel damaged	Mullaitivu Center Farmer's Org	100		
8	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	103880	496880	100	78	212	800.00	101.00	102.00	103.10	6.30	101.00		82	68.78	Tank built, inlet and earth should be improved	Mullaitivu North Farmer's Org	28	1,411,968.00	
9	M.Ajappadi	Thudayyikulam	Mullaitivu	Mullaitivu	91881	494881	100	38	82								28	68.00	Check the canal, including the structure, and strengthening the tank bed	Mullaitivu Farmer's Org	28		
10	Puduchchikulam	Mullaitivu	Mullaitivu	Mullaitivu	911880	4937127	100	30	100								30		Check the canal, including the structure, and strengthening the tank bed				
11	Puduchchikulam	Mullaitivu	Mullaitivu	Mullaitivu	911880	4944225	80	28	88								22		Construction: inadequate concrete and earth should be improved				
12	Puduchchikulam	Mullaitivu	Mullaitivu	Mullaitivu	912142	4948888	100	28	42								28		Construction: inadequate concrete and earth should be improved				
13	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	103880	493100	100	38	78								28		Construction: Inadequate concrete, other gaps, and earth should be improved				
14	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	103810	493810	100	28	82								22		Check the canal, including the structure, and strengthening the tank bed				
15	M.Ajappadi	Puduchchikulam	Mullaitivu	Mullaitivu	103810	493120	100	38	72								28		Check the canal, including the structure, and strengthening the tank bed				

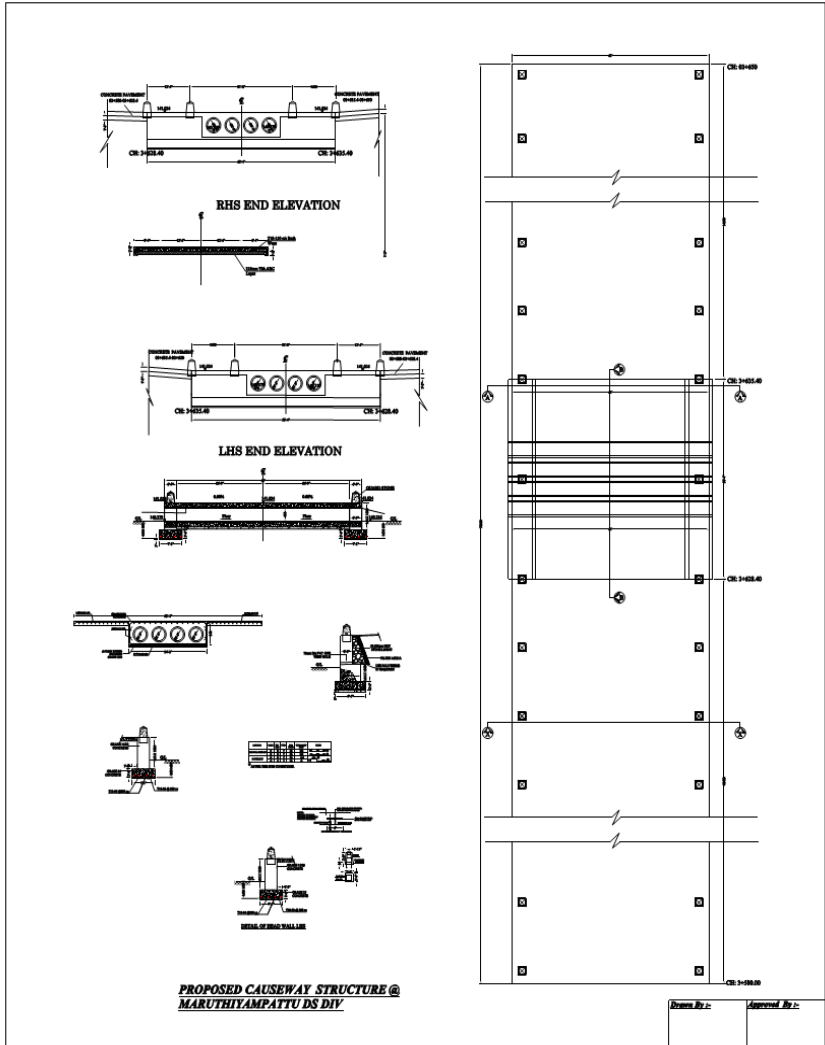
Prepared:- S.R.Pasaramban,  
Assistant Commissioner,  
Dept. Agrarian Development,  
Mullaitivu.

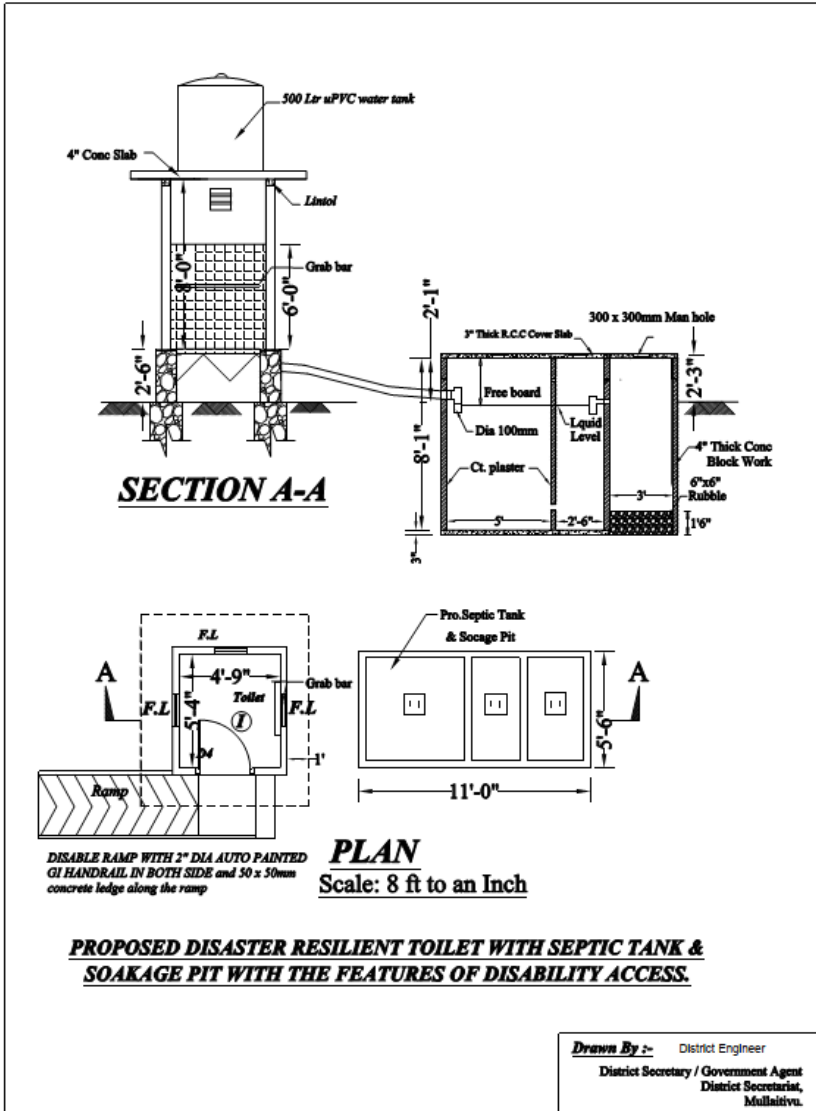
**ANNEX 5I: UNDER ACTIVITY 1.1.3 LEVELING DATA FOR IMPROVEMENT OF EXISTING EVACUATION ROUTE**

Leveling data for Improvement of existing evacuation route at Ralkulam

Back sight	Intermediate sight	Fore sight		Reduced Level	Length	Remarks
			100.000			
1.022	1.022		101.022	100.000		TBM on Boundry
	0.000		101.022	101.022		Road tar
	0.320		101.022	100.702	0	
	1.050		101.022	99.972	25	
	2.500		101.022	98.522	50	
1.976	1.976	3.360	99.638	97.662		CP
	0.000		99.638	99.638		Bund
	2.390		99.638	97.248	75	
	2.440		99.638	97.198	100	
	2.650		99.638	96.988	125	
	2.660		99.638	96.978	150	
	2.620		99.638	97.018	175	
	2.100		99.638	97.538	200	
	1.620		99.638	98.018	225	
	1.000		99.638	98.638	250	
	0.480		99.638	99.158	275	

**ANNEX 5J: UNDER ACTIVITY 1.1.3, PROPOSED CAUSEWAY FOR EVACUATION ROUTE**











கனெரிகன கனெரிகன கனெரிகன - மூலகிவி  
கமநல அபிவிருத்தித் திணைக்களம் - முல்லைத்தீவு  
DEPARTMENT OF AGRARIAN DEVELOPMENT - MULLAITIVU

Telephone (General) : 021-2290049 e-mail: acadmullaitivu@gmail.com Telephone (CDMA) : 024-3248217  
Assistant Commissioner : 021-2290048 Fax : 021-2290049

18<sup>th</sup> July 2022

Mr. Laxman Perera  
Human Settlements Officer (ROAP)  
Acting Officer-in-Charge (Sri Lanka)  
UN-Habitat  
202 - 204 Baudhaloka Mawatha  
Colombo 00700

Dear Mr. Perera,

**RE: AF PROPOSAL 'BUILD RESILIENCE TO CLIMATE CHANGE AND CLIMATE VARIABILITY OF VULNERABLE COMMUNITIES IN MULLAITIVU DISTRICT OF SRI LANKA'**

Reference to the stakeholder consultations and site visits in May/June 2022 by UN-Habitat, the Department of Agrarian Development of Mullaitivu fully endorses the activities under the purview of the Department, namely,

- Bund for prevention of saltwater intrusion in Irattai Vaikaal;
- Renovation of fifteen (15) minor irrigation tanks; and
- Enhancement of evacuation route in Raalkulam.

I also wish to note that in discussion with UN-Habitat, the feasibility study and preliminary designs have been completed and potential farmer organisations have been identified for the implementation of renovation activities in the minor irrigation systems.

Agrarian Development of Mullaitivu extends its fullest support in implementation/execution of the Project and assist in coordination with all relevant stakeholders, obtaining approvals, technical review, monitoring etc.

We look forward to working with UN-Habitat.

Thank you for your cooperation.

  
Mr. S. R. Paraneelaran  
Assistant Commissioner  
Department of Agrarian Development  
Mullaitivu

S.R. Paraneelaran  
Assistant Commissioner,  
Department of Agrarian Development,  
Mullaitivu.

**ANNEX 5N: LETTER FROM GOVERNMENT AGENT/DISTRICT SECRETARY**

දිස්ත්‍රික් ලේකම් }  
 மாவட்ட செயலகம் }  
 District Secretary }  
 Tel : 0212290035  
 Fax : 0212290045  
 Email : gsmullaitivu@gmail.com  
 Website : http://www.mullaitivu.dist.gov.lk  
 කොටුපොළ }  
 කාර්යාලය }  
 Office }  
 Tel : 0212290032



දිස්ත්‍රික් මහ ලේකම් කාර්යාලය - මුලතිව්  
 மாவட்ட செயலகம் - முல்லைத்தீவு  
 DISTRICT SECRETARIAT - MULLAITIVU

මගේ අංකය }  
 My No. } MUDPS/NGO-UN/2022  
 ඔබේ අංකය }  
 உமது அண் }  
 Your No. }  
 දිනය }  
 திகதி }  
 Date } 2022.07.19

Mr. Laxman Perera  
 Human Settlements Officer (ROAP)  
 Acting Officer-in-Charge (Sri Lanka)  
 UN-Habitat  
 202 – 204 Bauddhaloka Mawatha  
 Colombo 00700

Dear Mr. Perera,

**RE: AF PROPOSAL 'BUILD RESILIENCE TO CLIMATE CHANGE AND CLIMATE VARIABILITY OF VULNERABLE COMMUNITIES IN MULLAITIVU DISTRICT OF SRI LANKA'**

Reference to the letter dated 2nd July 2020 and the subsequent discussion on the concept note/proposal titled 'Build resilience to climate change and climate variability of vulnerable communities in Mullaitivu District of Sri Lanka, I wish to reaffirm that District Secretariat of Mullaitivu is fully committed to support the execution/implementation of the aforementioned Project to the Adaptation Fund.

The contribution made by UN-Habitat in recovery, reconstruction and development in Mullaitivu District in the past and the interest demonstrated with in assisting, especially, the vulnerable communities in addressing issues of climate hazards is greatly appreciated. The value efforts proposed under the this project to address climate change adaptation issues that badly affects the District continuously during the past two decades is immeasurable and donor support to address the issue is vital at this critical situation.

Therefore I would extend our fullest support to UN-Habitat for the initiatives taken to address climate change issues with the support of Adaptation Fund. As expressed previously, I will commit to support for the implementation/execution, coordination with all relevant stakeholders, obtaining approvals, technical review, monitoring etc.

We look forward to working with UN-Habitat.

Thank you.  
 Yours sincerely,  
  
 K. Vimalanathan,  
 District Secretary / Government Agent,  
 Mullaitivu.

**K.VIMALANATHAN**  
 District Secretary/Govt.Agent  
 District Secretariat  
 Mullaitivu

Addl.Govt.Agent Tel: 0212290036	Chief Accountant Tel: 0212290034	Director Planning Tel: 0212290043	Chief Internal Auditor Tel: 0212290176	Asst.Govt.Agent Tel:0212290336
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අනු අංක :  
Serial No :

**A No 809650**



අනු අංක/Serial **A No 809650**  
**ඉ දියා සම්පාදන හා පාරේ කාඩ්පානු**  
**Geological Survey Mines Bureau**  
 ශ්‍රී ලංකා  
 Original

ලාභදායී වෙළෙඳ නමින් ඉදි, ගොඩ හා පඳු කැණීම සහ ප්‍රවාහන සඳහා කිසිදු කඩු පිහිටි බලපත්‍රය  
 Licence Issued by Divisional Secretariat for Mining and Transportation of Sand, Gravel and Soil

ලිපිනය  
 Name of the Licensee }  
 අධිකාරී ආයතන අංකය  
 Divisional Identity Card No. }  
 ලිපිනය }  
 Address }  
 විද්‍යාලය }  
 School }  
 විද්‍යාලය }  
 School }

ඉදි/ගොඩ/පඳු සඳහා භාවිත කළ  
 Name of the Land from where Sand/Gravel/Soil is }  
 ඉදිකරනු ලබන ප්‍රදේශය }  
 From Sand Division }  
 ඉදිකරනු ලබන ප්‍රදේශය }  
 From Sand Division }  
 විද්‍යාලය }  
 Divisional Secretariat }  
 විද්‍යාලය }  
 Divisional Secretariat }

වෙළෙඳ නම/Type of Mineral

අවස්ථා මාරු/Reason

වෙහෙර අංකය Vehicle No	වෙහෙර ප්‍රමාණය Quantity (Cubes)	වෙහෙර ප්‍රදේශය Destination	අනුමත කළ Permitted of mine		ප්‍රවාහන සඳහා අනුමත කළ Permitted to transport	
			දිනය/Date	විටින විට From To	දිනය/Date	විටින විට From To
අවසර ලබාදුන් අයෙහි අත්සන සහ මුද්‍රාව Signature and Seal of Authorized Officer						

ANGL2019/01218



පරිසර අමාත්‍යාංශය  
 சுற்றுநூல் அமைச்சு  
 Ministry of Environment

"සොඳරා පියාස", අංක 416/ජ/1, රොබට් ගුරුආර්දානා මාවත, හත්තරාමුල්ල, ශ්‍රී ලංකාව.  
 "Sobadara Piyasa", No. 416/C/1, Robert Gururardana Mawatha, Battaramulla, Sri Lanka.  
 ලේකම්  
 செயலாளர்  
 Secretary  
 Gen. Tel. +94-11-2034100 +94-11-2034121  
 ලැයිස්  
 தொலைநகல்  
 Fax  
 +94-11-2879944

මගේ අංකය  
 எனது இல  
 My No } 04/04/07/272-II  
 ඔබේ අංකය  
 உமது இல  
 Your No }  
 දිනය  
 திகதி  
 Date } 16 .01.2022

The Chairman  
 The Adaptation Fund Board  
 c/o Adaptation Fund Board Secretariat

Dear Sir,


**Endorsement for the Project Proposal on "Build Resilience to Climate Change and Climate Variability of Vulnerable Communities in Mullaitivu District of Sri Lanka"**

In my capacity as designated authority for the Adaptation Fund in Sri Lanka, I confirm that the project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Sri Lanka.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by **United Nations Human Settlements Programme (UN-Habitat)** and executed by the Government of Sri Lanka.

Thank you

Yours sincerely

  
**Dr Anil Jasinghe**  
 Secretary

"මේ සත්‍යයන්ට සහ ආවේණික ජීවීන්ට සමානව අයිතිවන්නේ මෙහෙයවන සියලුම දේ මිනිසා සහ විදුලානුන්ට ද, සියලු සතුන්ට ද එකම අයිතිය"  
 "This great earth and the flora on it equally belong to the man and the birds flying in the sky, the quadrupeds and all creatures living on earth"

**ANNEX 5Q: LETTER FROM GOVERNMENT AGENT/DISTRICT SECRETARY ON SELECTION CRITERIA FOR PROVISION OF TOILETS**

දිස්ත්‍රික් ලේකම් மாவட்ட செயலாளர் District Secretary Tel: 0212290033		මුද්‍රණ අංකය My No. } MUDPS/UN Habitat/011
Fx: 0212290045 Email: pmc@mla.gov.lk Website: http://www.mullaivu.district.gov.lk	දිස්ත්‍රික් ජන සේවක නිවැසියාලය - මුලෑතිවි மாவட்ட செயலகம் - (முல்லைத்தீவு) DISTRICT SECRETARIAT - MULLAITIVU	අවුරුදු අංකය Year No. }
දුරකථන අංකය Office } Tel: 0212290022		දිනය Date } 2022.08.31

Mr. Laxman Perera,  
 Human Settlements Officer (ROAP),  
 Officer-in-Charge, a.i. (Sri Lanka),  
 UN-Habitat,  
 202 - 204 Bauddhaloka Mawatha,  
 Colombo 00700.

Dear Mr. Perera,


**Selection Criteria for Provision of Toilets**

Reference to the provision of eighteen (18) toilets in Welioya DS Division in **two (2)** selected GN Divisions prone to excessive inundation/flooding, namely, Janakapura and Kiribbanwewa GN Divisions. The following criteria were utilised in the selection of beneficiaries.

- The frequency and the time duration of inundation of household toilets per year. These aspects vary depending on the terrain.
- Availability of land tenure documents to guarantee ownership to the land.
- Current sanitary and hygienic situation. For an example, use of a dilapidated toilet with no security for women and children.
- Economic status of the family, i.e., whether they are under the poverty line, i.e., income level which is a situation of extreme vulnerability and the number of income earners.
- Family size and situation, e.g., female headed households, families with children under the age of 5 and school going children, elderly, disabled family member etc. were given priority.

Apart from the initial verification, UN-Habitat can further validate the eligibility of the list of beneficiaries, and also enable the grievance redressal mechanism should it be required.

The District Secretariat, Mullaitivu District wishes to extend its appreciation to UN-Habitat for all the assistance provided throughout the years.

  
 K. Vimalanathan,  
 Government Agent /District Secretary,  
 District Secretariat,  
 Mullaitivu

**K.VIMALANATHAN**  
 District Secretary/Govt. Agent  
 District Secretariat  
 Mullaitivu

Addl. Govt. Agent Tel: 0212290036	Chief Accountant Tel: 0212290034	Director Planning Tel: 0212290043	Chief Internal Auditor Tel: 0212290176	Asst. Govt. Agent Tel: 0212290336
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## ANNEX 6: BASELINE ANALYSIS AND ASSESSMENT OF THE SITUATION OF WOMEN IN THE TARGET AREAS AND GENDER ACTION PLAN

Annex 6 is split into two components, the first provides background analysis and information on the situation of women in Sri Lanka and the target District, based on the consultations and secondary research, and the second half provides the Gender Action Plan, which demonstrates how gender mainstreaming is done throughout the project, particularly in the project's results framework. As mentioned above, the analysis presented provides the baseline situation of women in Sri Lanka and the target District, and in doing so, intends to bring the project into compliance with the Gender Policy of the Adaptation Fund. In addition, Annex 23 describes the project's plan to comply with the Environmental and Social and Gender Policies of the Adaptation Fund.

### SITUATION ANALYSIS: INTERNATIONAL AND NATIONAL CONTEXT

The table below details the international treaties Sri Lanka has ratified. For further information on 'Acceptance of individual complaints procedures for Sri Lanka', 'Acceptance of the inquiry procedure for Sri Lanka', and 'Acceptance of the Interstate communication procedure for Sri Lanka' access [https://tbinternet.ohchr.org/\\_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=164&Lang=EN](https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=164&Lang=EN)

Treaty	Signature Date	Ratification Date, Accession(a), Succession(d) Date
CAT - Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment		03 Jan 1994 (a)
CAT-OP - Optional Protocol of the Convention against Torture		05 Dec 2017 (a)
CCPR - International Covenant on Civil and Political Rights		11 Jun 1980 (a)
CCPR-OP2-DP - Second Optional Protocol to the International Covenant on Civil and Political Rights aiming to the abolition of the death penalty		
CED - Convention for the Protection of All Persons from Enforced Disappearance	10 Dec 2015	25 May 2016
CED, Art.32 - Interstate communication procedure under the International Convention for the Protection of All Persons from Enforced Disappearance		
CEDAW - Convention on the Elimination of All Forms of Discrimination against Women	17 Jul 1980	05 Oct 1981
CERD - International Convention on the Elimination of All Forms of Racial Discrimination		18 Feb 1982 (a)
CESCR - International Covenant on Economic, Social and Cultural Rights		11 Jun 1980 (a)
CMW - International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families		11 Mar 1996 (a)
CRC - Convention on the Rights of the Child	26 Jan 1990	12 Jul 1991
CRC-OP-AC - Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict	21 Aug 2000	08 Sep 2000
CRC-OP-SC - Optional Protocol to the Convention on the Rights of the Child on the sale of children child prostitution and child pornography	08 May 2002	22 Sep 2006
CRPD - Convention on the Rights of Persons with Disabilities	30 Mar 2007	08 Feb 2016

### SUSTAINABLE DEVELOPMENT GOALS

Sri Lanka is committed to achieving the Sustainable Development Goals (SDGs) including SDG 6: Gender equality. The Voluntary National Review on the Status of Implementing the Sustainable Development Goals of 2018 (accessible on [https://sustainabledevelopment.un.org/content/documents/19677FINAL\\_SriLankaVNR\\_Report\\_30Jun2018.pdf](https://sustainabledevelopment.un.org/content/documents/19677FINAL_SriLankaVNR_Report_30Jun2018.pdf))

The VNR also reports the current status of achieving SDG 5 in Sri Lanka. In the most relevant SDG indicators, for example indicator 5.5. Sri Lanka was ranked 73<sup>rd</sup> out of 188 countries in the UNDP's gender inequality index (GII), which measures gender inequality using three dimensions: reproductive health, empowerment, and labour market participation. In Sri Lanka, girls have higher enrolment and retention rates in upper secondary and tertiary education and higher performance levels at public examinations.<sup>74</sup>

### LEGAL AND POLICY FRAMEWORK AND NATIONAL MACHINERY FOR WOMEN

Chapter III of the Constitution of the Democratic Socialist Republic of Sri Lanka provides for the protection of fundamental rights. Article 12 of Chapter III of the Constitution recognises that gender equality and freedom from discrimination on the ground of sex is a fundamental right and provides for its enforcement in the Courts of Law; and provides for affirmative legislative and administrative intervention to eliminate gender inequalities, i.e., Any person, whose right to equality is violated, under this Article, by either executive or administrative action, can file a Fundamental Rights Application in the Supreme Court. Article 12(3) also recognises that a special provision to promote substantive equality can be made by law, regulations, or administrative action for the advancement of women. However, women are not provided the provision independently; instead, it is inclusive of women, children, and people with disability.

Whereas the Universal Declaration of Human Rights affirms the principle of nondiscrimination and proclaims that all human beings are born free and equal in dignity and rights, and that everyone is entitled to all rights and freedoms without distinction of any kind, including distinction based on sex. In addition, Sri Lanka has endorsed these international standards and has accepted by ratification, international obligations under the Convention on the Elimination of all Forms of Discrimination against Women. The Women's Charter of the Government of Sri Lanka (GoSL) highlights, 'Concerned that discrimination against women continues to exist, recognising that gender-based violence is a violation of human rights and fundamental freedoms in that it impairs or negates women's enjoyment of these recognized rights and freedoms; Desiring to restate laws, policies and measures on gender equality that have been realised, and set down new commitments and standards; Desiring that the rights, principles and policies specified in the Charter shall, be respected by and shall guide the actions of all persons, institutions, organisations and enterprises; and Determined to ensure justice and equity and the recognition of gender equality in all areas of life in Sri Lanka.'<sup>75</sup> For further details access the Women's Charter on <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/50168/110633/F1379312050/LKA50168.pdf>

<sup>74</sup> Ministry of Sustainable Development, Wildlife and Regional Development (2018). The Voluntary National Review on the Status of Implementing the Sustainable Development Goals. The Voluntary National Review on the Status of Implementing the Sustainable Development Goals, Colombo, Sri Lanka.

<sup>75</sup> Ministry of Women's Empowerment and Social Welfare (1993). Women's Charter (Sri Lanka). National Committee on Women. Ministry of Women's Empowerment and Social Welfare, Colombo, Sri Lanka.

The Women's Charter purports to be broader and more detailed than the Convention on the Elimination of All Forms of Discrimination Against Women and seeks to ensure justice, equity and gender equality in all spheres of life, including equal access to land and appropriate technology. The Charter also aims to eliminate "all forms of exploitation, trafficking in and prostitution of women and children," acknowledges the work of NGOs and other community-based organisations in helping women who are victims of violence, and demands that the government support such organisations in their work. The subsection 12(1) of the Sri Lankan constitution guarantees equality before the law and equal protection of the law to all citizens. Subsection 12(2) further states that "no citizen shall be discriminated against on the grounds of race, religion, language, caste, sex, political opinion [or] place of birth ..." The Constitution of the Democratic Socialist Republic of Sri Lanka is accessible on <https://www.parliament.lk/files/pdf/constitution.pdf>

The areas covered under the Women's Charter include, POLITICAL AND CIVIL RIGHTS; RIGHTS WITHIN THE FAMILY; RIGHT TO EDUCATION AND TRAINING; RIGHT TO ECONOMIC ACTIVITY AND BENEFITS; RIGHT TO HEALTH CARE & NUTRITION; RIGHT TO PROTECTION FROM SOCIAL DISCRIMINATION; and RIGHT TO PROTECTION FROM GENDER-BASED VIOLENCE.

The Ministry of Women's Affairs, the Women's Bureau, and The National Committee for Women comprise the national machinery for women in Sri Lanka. However, the roles and responsibilities of these entities vary. Ministry of Women's Affairs, a cabinet portfolio was created in 1983 due to lobbying by women's groups and activists. Responsibilities of the Ministry are primarily centered around the implementation of policies, plans and programmes with a focus on women's empowerment. This includes the advancement of the quality of life for women, increased participation in national development policies, and promotion of gender equity and gender justice. The Ministry is also responsible for the implementation of the Women's Charter, while the Women's Bureau of Sri Lanka and the National Committee for Women are statutory institutions under the Ministry.<sup>76-77</sup> At present it functions within the Ministry of Women & Child Affairs and Social Security."

The Women's Bureau created in 1978, was originally housed under the Ministry of Plan Implementation, though it now functions under the Ministry of Women's Affairs. The Women's Bureau is more project-based than the Ministry and focuses mainly on issues of income generation and raising awareness.<sup>78-79</sup>

As mentioned above, Sri Lanka is a signatory to CEDAW, without reservations, and adopted a Women's Charter in 1993. The Women's Charter was created as a means of translating the CEDAW commitments into a Sri Lankan context. The Charter spells out more detailed steps the State should take in ensuring the equal rights of women. Seven (7) areas of concern specific to women in Sri Lanka are highlighted, they include: civil and political rights; the right to education and training; the right to economic activity and benefits; the right to healthcare and nutrition; rights within the family; the right to protection from social discrimination; and the right to protection from gender-based violence. The Charter also provided for the establishment of a National Committee for Women whose formulation was a collaborative effort of the national machinery and women's NGOs. Despite its importance, the Charter remains a document with no legal force.<sup>80-81</sup>

National Committee for Women (NCW) is comprised of a Chairperson and experts from fourteen (14) sectors, all appointed by the President for a period of four (4) years; ten (10) staff members; a legal officer with eight (8) support staff; an Executive Director, also appointed by the President; and the Secretary of the Ministry of Women's Affairs, who serves as an ex-officio member of the Committee. Together, their mandate is to monitor and ensure the implementation of provisions as stated in the Women's Charter. The NCW accomplishes this through their powers of policy formulation, awareness raising and advocacy. A Gender Complaints Unit has also been established to receive complaints on gender-based discrimination.<sup>82</sup>

National Plan of Action to address Sexual and Gender-based Violence (SGBV) in Sri Lanka was officially launched by the Ministry of Women and Child Affairs and the United Nations Development Programme (UNDP) in Colombo. The National Action Plan, developed on the vision of creating "a violence free life for women and children" with Zero Tolerance for Sexual and Gender-based Violence in Sri Lanka, is significant as it was formulated using a multi-sectoral approach with engagement from key ministries representing nine sectors. Some of the lead Ministries include the Ministry of Disaster Management, the Ministry of National Policy and Economic Affairs, the Ministry of Education, the Ministry of Skills Development and Vocational Training, University Grants Commission, Ministry of Labour and Trade Union Relations, Ministry of Plantation Industries, Department of Divinguma, the Ministry of Foreign Employment, the Ministry of Health, Nutrition and Indigenous Medicine, the Ministry of Justice, the Ministry of Parliamentary Affairs and Mass Media, Ministry of Law and Order, Sri Lanka Police and the Ministry of Women and Child Affairs.<sup>83</sup>

#### **POLITICAL, ECONOMIC AND SOCIAL DEVELOPMENT OF WOMEN**

##### **Land and inheritance<sup>84</sup>**

Sri Lanka's constitution is nondiscriminatory on ownership of land, property and/or business ventures. Therefore, both men and women can legally own, transfer, inherit and dispose of land and property and may enter into any economic activity/business or employment as long as it is not illegal or against public policy. However, there may be inequalities with regards to ownership of land and property under 'personal laws' operating in the country. Sri Lanka's Land Development Ordinance has also been accused of gender bias on ownership of land.

Sri Lanka's legal system comprises the Roman Dutch law introduced by the Dutch during Dutch occupation of the Island, the British law, introduced during British occupation and also a set of laws known as 'personal laws.'

Sri Lanka's personal laws are, (1) The Kandyan law: Applies to all Sinhalese families and their descendents, that were living in the provinces that came under the Kandyan Kingdom at the time the British took over the Kandyan Kingdom. (These families may now be living outside the Kandyan Provinces but may still opt to use the Kandyan law); (2) Thesawalamai Law: The personal laws of the Thesawalamai law applies to Tamils of the Jaffna Province (also called the Malabar inhabitants of the Jaffna Province). The territorial aspect of the Thesawalamai laws apply to all immovable property (land and buildings) in the Jaffna province - regardless of the ethnicity and religion of the owners. Under the territorial laws, any land and property in the Jaffna Province owned by Buddhists, Sinhalese or Muslims, would also come under the Thesawalamai laws although the owners are not Jaffna Tamils; and (3) Muslim Law: Applies to followers of Islam/Muslims living anywhere in the country.

<sup>76</sup> <http://www.childwomenmin.gov.lk/about/overview>

<sup>77</sup> [https://www.ilo.org/dyn/travail/docs/1676/National\\_Machinery\\_Sri\\_Lanka\\_-\\_Chulani\\_Kodikara.pdf](https://www.ilo.org/dyn/travail/docs/1676/National_Machinery_Sri_Lanka_-_Chulani_Kodikara.pdf)

<sup>78</sup> <http://www.childwomenmin.gov.lk/institutes/womens-bureau>

<sup>79</sup> [https://www.ilo.org/dyn/travail/docs/1676/National\\_Machinery\\_Sri\\_Lanka\\_-\\_Chulani\\_Kodikara.pdf](https://www.ilo.org/dyn/travail/docs/1676/National_Machinery_Sri_Lanka_-_Chulani_Kodikara.pdf)

<sup>80</sup> [https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/LKA/INT\\_CEDAW\\_NGO\\_LKA\\_26306\\_E.pdf](https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/LKA/INT_CEDAW_NGO_LKA_26306_E.pdf)

<sup>81</sup> [https://www.ilo.org/dyn/travail/docs/1676/National\\_Machinery\\_Sri\\_Lanka\\_-\\_Chulani\\_Kodikara.pdf](https://www.ilo.org/dyn/travail/docs/1676/National_Machinery_Sri_Lanka_-_Chulani_Kodikara.pdf)

<sup>82</sup> Ibid

<sup>83</sup> <https://www.undp.org/srilanka/publications/policy-framework-and-national-plan-action-address-sexual-and-gender-based-violence-sgbv-sri-lanka>

<sup>84</sup> <https://salary.lk/labour-law/fair-treatment/property-rights-in-sri-lanka>



If a person lives by a particular personal law, ownership, inheritance, transfer and disposal of land and property would depend on the specific personal law. For instance, women's activists say, Jaffna Tamil women married under the Thesawalamai law, are not able to gain full control of their property without the husband's consent. As a result, many war widows, or women whose husbands are missing, have not been able to dispose of, or use their lands to raise loans from banks, because they are not able to get the husband's consent. In such cases the consent of another male relative is required for the woman to dispose of the property.

Another exception to the general non-discrimination principle of Sri Lankan law, is the section on inheritance, in the Land Development Ordinance of 1935. The Ordinance which is a British law and is applicable to State lands, gives preference to male inheritance where the original owner (traditionally a man), dies intestate. The bias has been reinforced through the custom/practice followed by government officials, of accepting only the male as the head of the household, even in cases where the man is disabled or dead and the woman is the family breadwinner.

The bias in the Land Development ordinance has resulted in women in the family maintaining and cultivating the land only to be ousted by a male relative at the death of the original (male) owner. Remarriage of a man would also leave his first wife with no claim to the land although the land was jointly cultivated by them.

However, the GoSL has said the entire Ordinance will be amended as it is now outdated and the section on inheritance is expected to be amended, where both a man and woman can hold joint ownership of land and any child, regardless of sex, may inherit the land.

#### **Education**

The education of girls in Sri Lanka has significantly improved over the last two decades. Boys and girls have equal enrollment in primary schools, and girls outnumber boys in secondary schools. Additionally, in 2011 girls consistently scored higher than boys in key subjects in the National Assessments of Learning Outcomes.<sup>85</sup> In 2018, the school enrollment, primary (% net) was reported at 99.11%<sup>86</sup>, secondary (% net) was reported at 91.04 %<sup>87</sup> and in 2020, the school enrollment, tertiary (% net) was reported at 21.61%<sup>88</sup>.

Sri Lanka is the only South Asian country that has already achieved the United Nations' Millennium Development Goal for gender equality at all levels of education. This is a great achievement for the small island nation, and it can be used as a model for other countries. These achievements have been possible because the GoSL has been committed to ensuring gender equality and improving girls' education in Sri Lanka. In 1945, the GoSL introduced free primary, secondary and university education for all children, regardless of gender. Additionally, the Constitution provides for equal rights irrespective of sex and forms of affirmative action to ensure equality for women.<sup>89</sup>

#### **Political representation<sup>90</sup>**

Sri Lanka has taken some positive steps to address significant gaps in women's electoral representation and achieve greater gender equality. One such step is the introduction of a quota at the local government level, and a new electoral system with a quota at the provincial level. However, women in Sri Lanka continue to face serious barriers to political representation, and the country ranks among the lowest in the world for the percentage of women in national legislatures. For example, the most recent parliamentary elections in 2020 resulted in just over 5.3% of elected women representatives in Parliament. This persistent underrepresentation of women combined with other recent trends — such as negative impacts of the global COVID-19 pandemic that further exacerbated gender inequalities — underscore the need for targeted action. To help inform stakeholders' efforts to sustainably promote women's political leadership and participation in Sri Lanka, the International Foundation for Electoral Systems (IFES) published a research paper, Women's Political Representation in Sri Lanka: Electoral System Analysis and Recommendations, which analyses the current standing of women's representation and the main reasons behind the underrepresentation of women in politics, and offers recommendations for how to address the underlying and persistent barriers. Evidence in Sri Lankan women's advancement through increased university graduation rates, economic opportunities or the attainment of leadership positions in civil society organisations do not mirror an increase in their representation as political leaders. Key barriers faced by women when contesting for political office in Sri Lanka include: Electoral system structure; Political party frameworks; Weak political finance regulations; Discrimination in the media; and Violence Against Women in Elections (VAWE).

#### **Economic status**

Out of the 8.6 million economically active population, 64% are males and only 35% are females. Women constitute 52% of Sri Lanka's population, but as mentioned above, female representation in parliament is only 5.3%. The Labour Force Participation (LFP) of women as of 2017 is 36.6% of the total population<sup>91</sup>, this is just below the Asia-Pacific average of 37%, and they contribute about 29% to the national economy, one of the lowest participation rates in the region.<sup>92</sup> The trend stands in contrast to the country's achievements in human capital development that favor women, such as high levels of female education and low total fertility rates, as well as its status as a lower-middle-income country.<sup>93</sup> To help address this, the GoSL introduced a quota in 2016 setting aside 25% of the positions in local public institutions for women, enhancing their representation in the public sector. Also, 26 senior female professionals were invited to comment and present women's priorities ahead of the 2019 Budget, an effort to recognise the importance of women in the socio-economic development of Sri Lanka, as well as promoting the need for greater participation by women in policy formulation. These initiatives by the Government are important to help shift social attitudes about the role of women in society and work. Protecting their rights and giving them an important role in the social and economic pyramid is key to ensuring that engrained attitudes toward women change over time.<sup>94</sup>

<sup>85</sup><https://borgenproject.org/girls-education-in-sri-lanka/#:~:text=Girls%20Education%20in%20Sri%20Lanka%20has%20significantly%20improved%20over%20the,National%20Assessments%20of%20Learning%20Outcomes.>

<sup>86</sup> <https://tradingeconomics.com/sri-lanka/school-enrollment-primary-percent-net-wb-data.html>

<sup>87</sup> <https://tradingeconomics.com/sri-lanka/school-enrollment-secondary-percent-net-wb-data.html>

<sup>88</sup>[https://tradingeconomics.com/sri-lanka/school-enrollment-tertiary-percent-gross-wb-data.html#:~:text=School%20enrollment%20C%20tertiary%20\(%25%20gross\)%20in%20Sri%20Lanka%20was%20reported,compiled%20from%20officially%20recognized%20sources.](https://tradingeconomics.com/sri-lanka/school-enrollment-tertiary-percent-gross-wb-data.html#:~:text=School%20enrollment%20C%20tertiary%20(%25%20gross)%20in%20Sri%20Lanka%20was%20reported,compiled%20from%20officially%20recognized%20sources.)

<sup>89</sup><https://borgenproject.org/girls-education-in-sri-lanka/#:~:text=Girls%20Education%20in%20Sri%20Lanka%20has%20significantly%20improved%20over%20the,National%20Assessments%20of%20Learning%20Outcomes.>

<sup>90</sup> <https://www.ifes.org/publications/womens-political-representation-sri-lanka-electoral-system-analysis-and-recommendations>

<sup>91</sup><https://www.undp.org/srilanka/gender-equality#:~:text=Out%20of%20the%208.6%20million,36.6%25%20of%20the%20total%20population.>

<sup>92</sup> <https://www.mckinsey.com/uk/our-insights/advancing-gender-equality-in-sri-lanka-a-crucial-balancing-act>

<sup>93</sup> <https://openknowledge.worldbank.org/handle/10986/28660>

<sup>94</sup> <https://www.mckinsey.com/uk/our-insights/advancing-gender-equality-in-sri-lanka-a-crucial-balancing-act>

### Female-headed households in Sri Lanka by Sector and District (2016)

Sector/ province/district	Heads (in thousands)	Female Heads (in thousands)	% of Female Heads
<b>Sri Lanka</b>	<b>5,437</b>	<b>1,404</b>	<b>25.8</b>
<b>Sector</b>			
Urban	905	233	25.7
Rural	4,303	1,109	25.8
Estate	229	62	27.1
<b>Province</b>			
Western	1,504	354	23.5
Central	679	197	29.1
Southern	669	175	26.2
Northern	268	64	23.9
Eastern	421	112	26.6
North-western	667	183	27.4
North-central	351	93	26.5
Uva	348	85	24.5
Sabaragamuwa	529	141	26.6
<b>District</b>			
Mannar	25	4	14.9
Jaffna	144	32	22.6
Hambantota	165	37	22.2
Gampaha	612	140	22.9
Colombo	576	134	23.2
Kilinochchi	30	7	24.0
Ampara	174	41	23.7
Trincomalee	100	24	23.4
Monaragala	127	31	24.4
Badulla	221	54	24.5
Polonnaruwa	112	28	25.1
Ratnapura	304	77	25.5
Kalutara	315	80	25.3
Matara	217	57	26.1
Matale	133	35	26.4
Kurunegala	455	122	26.7
Nuwara Eliya	181	49	26.8
Anuradhapura	239	65	27.2
Mullativu	25	7	28.0
Kegalle	225	63	28.2
Galle	287	82	28.5
Puttalam	212	61	28.8
Vavuniya	45	14	30.8
Kandy	364	114	31.2
Batticaloa	147	47	32.3

Source: Household Income and Expenditure Survey (2016)

With the country ranked as having the 14<sup>th</sup> largest gender gap in LFP in the world, Sri Lankan women are paid less than men in both the public and private sectors according to the latest findings from a World Bank report. The average monthly wages between men and women, according to the World Bank report, has a gap of 14.9%. According to the report, young Sri Lankan women have the highest unemployment rate in the country, which is 29% for the 15 - 24 age group in 2016 and the gender gap in youth unemployment has widened since the end of the conflict<sup>95</sup>. "Getting to Work: Unlocking Women's Potential in Sri Lanka's Labor Force" finds young and poorer women in Sri Lanka are particularly vulnerable, experiencing significantly higher rates of unemployment; but it is the country's 1.2 million female headed households who experience some of the poorest labor force outcomes. Some of these trends have only become even more entrenched since the end of the conflict<sup>96</sup>.

#### Gender issues in resilience to climate change and disasters

As mentioned elsewhere, Sri Lanka as a developing island nation is highly vulnerable to the impacts of climate change, and it affects differently on women and men. In rural and estate communities in Sri Lanka women's role in the household economy and household care make them more vulnerable to climate change and disasters due to impacts on household, especially, health of the family dependent and non-dependent family members, and the safety of the households, availability of water and energy, securing domestic assets such as housing unit and livestock. Prolonged dry periods result in water scarcity exacerbating the vulnerabilities of women in the country, further adversely impacting both environmental the socio-economic activities<sup>97</sup> directly affecting food security and livelihoods as productivity and crop yields decline with low water availability and unseasonal rains. Vulnerable communities fall deeper into poverty and basic needs (particularly food for consumption and medicine) have to be met by borrowed funds, increasing the level of indebtedness.

Traditionally, women manage household chores, including, water, energy for cooking, maintenance of home gardens and livestock (and home-based industries). Therefore, women are in the frontline of managing disaster impacts and related impacts of reduced food, water and energy availability. Moreover, this affects intra-household food and economic security, which can be exacerbated during extreme climate events and in the aftermath of a disaster.<sup>98</sup> Women take full responsibility for the care of children, the elderly and people living with a disability. In the Dry Zone districts (including Mullaitivu District) of Sri Lanka the impact of conflict and disease has left a number of women widowed resulting in a significant number of FHH (refer 'Female-headed households in Sri Lanka by Sector and District (2016)' for district-wise percentages). The conflict has further increased women's responsibilities as a caregiver to family members living with a disability. It has also resulted in pushed women into precarious work, in Sri Lanka and overseas, as domestic migrant labour<sup>99</sup>.

<sup>95</sup> <https://www.ft.lk/Front-Page/Public-and-private-sectors-pay-women-less-World-Bank/44-643689#:~:text=%E2%80%9CThe%20LFP%20in%20Sri%20Lanka,has%20a%20gap%20of%2014.9%25>

<sup>96</sup> <https://www.worldbank.org/en/news/feature/2017/11/22/Getting-More-Sri-Lankan-Women-to-Work-It-Can-Be-Done>

<sup>97</sup> The National Climate Change Policy of Sri Lanka [http://www.climatechange.lk/CCS%20Policy/Climite\\_Change\\_Policy\\_English.pdf](http://www.climatechange.lk/CCS%20Policy/Climite_Change_Policy_English.pdf)

<sup>98</sup> Country Gender Assessment Sri Lanka, An Update <http://www.adb.org/sites/default/files/institutional-document/172710/srilanka-country-gender-assessment-update.pdf>

<sup>99</sup> <https://journals.sagepub.com/doi/abs/10.1177/011719681001900203?journalCode=amja>

The Climate Change Policy of GoSL under section on ADAPTATION reiterates the importance of Food production and Food security; Conservation of water resources and biodiversity; Human settlement and Land use planning; Infrastructure design and development; and Coastal resources management<sup>100</sup>. Therefore, increasing opportunity for women, specifically, action to address the adverse impacts on crop and animal production and fisheries sectors due to climate change will minimise the impacts on food production and ensure food security. In addition, it will promote opportunities for entrepreneurship of women and transformational change. In order to create transformational change, women should be given an active role in climate change adaptation efforts, rather than merely being victims of climate change or beneficiaries. As promoted by the Climate Change Policy traditional knowledge and practices that are utilised by women in agriculture, as well as the fisheries sector could be employed with climate resilient-environmentally friendly and appropriate innovative technologies. Encouraging an active role of women in project design and implementation, especially in the capacity of leadership and decision-making, and by providing an environment to empower women will create positive influences both at the household and community level.

Children, girls, boys, elderly, and people with disability are part of the vulnerable groups. Nearly 85% of Sri Lanka's working children reside in rural areas. Many of these working children work as contributing family members (59%). In terms of family dynamics of working children, the majority reside with their parents, and children who are engaged in hazardous forms of child labour, either live with their mothers or live without parents<sup>101</sup>, i.e., child-headed households. While boys engaged in labour are more likely to not attend schools than girls, girls' education is also affected as they are mostly burdened with increased household chores, including collection of firewood and water from distance, cooking and cleaning, looking after younger siblings, taking care of elderly, sick and disabled etc. In addition, reduced water availability also poses challenges for children, particularly the girls. A third of school children in Sri Lanka do not have safe sanitation, despite the Sri Lanka's overall sanitation coverage reaching about 89% of the population<sup>102</sup>. Low or lack of water availability and sanitation facilities (especially disaster-resilient sanitation facilities) lead to increase in absenteeism among children. Girls are particularly affected during menstrual cycles.

Refer <https://www.adb.org/sites/default/files/institutional-document/189841/sri-gender-quality-diagnostic.pdf> for GENDER EQUALITY DIAGNOSTIC OF SELECTED SECTORS.

#### CONSULTATIONS

As sensitive issues were not discussed; community meetings were held with both women and men with equal opportunity being given to both women and men. Women were vocal and articulate in expressing the issues faced by them, their vulnerabilities, preferences and priorities. Broadly, both women and men expressed similar perspectives. In some cases, women, particularly FHHs and households with elderly people (empty nests) of greater difficulties in accessing water, worse flood/inundation impacts, access to extension services etc. Moreover, the consultations with the GoSL stakeholders also comprised of both women and men. UN-Habitat has previously worked with communities in Mullaitivu District and in particular in Maritimappattu, Pudukuduiruppu and Welioya DS Divisions, therefore is fully aware of the sensitivities of the ethnic groups, i.e., Sinhala, Tamil and Muslim.

**The Project:** The main objectives of the proposed project are 'To improve climate related socio-economic outcomes in the targeted fishing and agricultural communities through the implementation of community-based adaptation solutions' and 'To support climate resilient development and increase institutional and community capacity to adapt to the changing and variable climate'. This will be achieved through,

**Community level:** (1) Reduce vulnerability of a coastal community through capacity enhancement to face the risks of climate change; (2) Home food production, with women in leadership to build resilience and adaptive capacity in rural settlements of the Mullaitivu District; (3) Increase income of vulnerable households (especially women) through alternate sources to improve climate resilience; and (4) Empowerment of communities, in particular women, for decision making, management of adaptation options and to organise, represent and voice concerns on climate issues.

**Divisional/District Secretariat level:** (1) Adopt the concept of "resilient cities" for coastal settlements with actions promoting the greening of their physical makeup and improve resilient infrastructure/services; and (2) Adopt participatory approaches to secure institution collaboration, sustainable financing for climate smart adaptive strategies.

**Community and Divisional/District Secretariat level:** Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.

**Community, Divisional/District Secretariat and National level:** Share knowledge and lessons through documentation of climate resilient actions for increased adaptive capacities.

The gender-specific objectives for the project are: (1) To enable women to benefit from provision of physical assets strengthened and constructed, and natural resource assets improved; (2) To strengthen the awareness and capacity of women in home-based industries, home gardening and fish value addition; (3) To enable women to increase their income and improve economic resilience to withstand climate impacts; and (4) To strengthen district-level capacity to guide development considering climate change and adaptation, disaster risks and differentiated needs of women and girls.

#### PROJECT MANAGEMENT

The proposed Project activities were designed to benefit both women and men, with special emphasis being given to the benefits of women and other vulnerable groups. The Project mainstreams gender considerations through its implementation and execution structure. Selected Women Rural Development Societies will support Project implementation at the District and Divisional as well as community level. Emphasis will be given to highlighting and overseeing gender-related considerations throughout the Project. Meanwhile, the Executing Entities will be held accountable for ensuring the gender targets described in the Results Framework (Section E) and all Executing Entities will also be verbally briefed by UN-Habitat and in-turn all Executing Entities will brief stakeholders, including communities of the Project on the expectations and requirements, as they pertain to gender considerations, including the grievance mechanism to raise any problems. The Project will seek the support of gender focal points, both at the District and Divisional levels (Women Development Officers and Social Development Officers) to ensure that the Project is implemented in accordance with the female participation targets in the activities and Results Framework. All staff and consultants will be required to promote the principles outlined in the Gender Policy of the Adaptation Fund. Women will be encouraged to apply for all staff and consultancy positions advertised and Executing Entities should seek gender balanced staff and project implementation teams, in so far as possible. The Project Manager with the support of the Gender and Environment Advisor will have the day-to-day responsibility for ensuring that provisions for gender mainstreaming outlined here and throughout the Project are being implemented. In addition, all terms of reference and contracts, i.e., Agreements of Cooperation (AoCs) and Community Implementation Agreements (CIAs) will make explicit reference to compliance with the Gender Policy of the Adaptation fund, as well as the Environmental and Social Policy of the fund and the

<sup>100</sup> [http://www.climatechange.lk/CCS%20Policy/Climate\\_Change\\_Policy\\_English.pdf](http://www.climatechange.lk/CCS%20Policy/Climate_Change_Policy_English.pdf)

<sup>101</sup> [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-colombo/documents/publication/wcms\\_616216.pdf](https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-colombo/documents/publication/wcms_616216.pdf)

<sup>102</sup> <http://www.irinnews.org/report/99017/sri-lankan-schoolchildren-miss-out-on-sanitation-gains>

provisions for gender mainstreaming in the Project. Gender and Environment Advisor of the UN-Habitat Country Office in Sri Lanka will periodically review the project's implementation progress and provide advisory support if issues arise, and/or upon request from the Project Manager.

**BUDGET, MONITORING AND EVALUATION**

Gender considerations are mainstreamed into the Project activities, under the outputs listed above. These activities provide budget lines accordingly. The Gender Action Plan, will be incorporated into the overall monitoring and evaluation of the Project, including the indicators. The monitoring of the Gender Action Plan will be done through participatory means with key stakeholders in the communities, District and Divisional Secretariats.

**GENDER ACTION PLAN**

Outcome	Outputs	Activities	Indicator	Responsible Party
<b>Outcome 1:</b> Developing resilient and adaptive small-scale infrastructure and ecosystems for improvement of livelihoods in the three (3) selected Divisional Secretariat (DS) Divisions in Mullaitivu District.	<b>Output 1.1:</b> Reduce vulnerability of coastal communities to face risks of climate change	<b>Activity 1.1.1:</b> Construction of 1km earth bund with sluice gate with spill arrangement in Irattai Vaikaal in Puthukkudiyiruppu DS Division to prevent saltwater intrusion.	Number of women benefited through prevention of saltwater intrusion through the 1km earth bund constructed.	Executing Entity; Project Manager with the support of Gender and Environment Advisor (Backstopping and quality control); and NSC (Oversight)
		<b>Activity 1.1.2:</b> Renovation of fifteen (15) minor irrigation tanks, including desilting of irrigation canals, weeding out the bushers, renovation of auxiliary structures and strengthening the tank bund in Maritimpeattu and Puthukkudiyiruppu DS Divisions.	Number of women using water through minor irrigation tanks renovated.	
		<b>Activity 1.1.3:</b> Improvement of existing 3km long evacuation route with culvert and causeway in Raalkulam Grama Niladhari (GN) Division as well as provision of the early warning system and rescue facilities with the improvement of the causeway in Nayaru GN Division in Maritimpeattu DS Division.	Number of women utilising the evacuation route improved during flooding season.	
		<b>Activity 1.1.4:</b> Construction of eighteen (18) appropriate sanitation facilities (disaster-resilient toilets) at household level and two (2) in common places (evacuation/safe centres used by people during flooding season) for flood-prone/waterlogged/inundated areas and conduct five (5) training sessions on sanitation and hygiene.	Number of women benefited through the construction of sanitation facilities, especially during the flooding season.	
	<b>Output 1.2:</b> Promote climate resilient sustainable agriculture and increase productivity with climate resilient crops (e.g., groundnut, coconut) in 18 acres of coastal lands.	<b>Activity 1.2.1:</b> Twenty-five (25) training and capacity building workshops on sustainable land management, water conservation practices and climate change impacts and adaptation strategies in Welioya (10 workshops), Maritimpeattu (8 workshops) and Puthukkudiyiruppu (7 workshops) DS Divisions.	Number of female participants in the training and capacity building workshops.  Capturing of gender differentiated issues with regard to sustainable land management, water conservation practices and climate change impacts and adaptation strategies.	Executing Entity; Project Manager with the support of Gender and Environment Advisor (Backstopping and quality control); and NSC (Oversight)
		<b>Activity 1.2.2:</b> Training 250 individuals from vulnerable families (125 individuals in Welioya DS Division, 75 individuals in Maritimpeattu DS Division and 50 individuals in Puthukkudiyiruppu DS Division) on a variety of methods for home garden development with selection of drought-tolerant crop varieties (groundnut and coconut), multi-cropping, adjusting cropping patterns, soil fertility adjustment and agroforestry in selected lands.	Number of women selected and trained.	
		<b>Activity 1.2.3:</b> Distribution of equipment (tools) for home gardening and planting material of resilient crops (groundnut and coconut) for 250 individuals from vulnerable families (125 individuals in Welioya DS Division, 75 individuals in Maritimpeattu DS Division and 50 individuals in Puthukkudiyiruppu DS Division).	Number of women selected and supported with equipment (tools) and planting material for home gardening.	
	<b>Output 1.3:</b> Increase income of vulnerable fishing households, in particular women and youth through value-added fish processing and rehabilitating 1.5km mangroves for improved lagoon fishery.	<b>Activity 1.3.1:</b> Training 100 individuals from vulnerable fisher families (50 from Maritimpeattu DS Division and 50 from Puthukkudiyiruppu DS Division, including women and youth) on proper handling, preservation and value-adding of fish mainly using locally available resources.	Number of women selected and trained.	Executing Entity; Project Manager with the support of Gender and Environment Advisor (Backstopping and quality control); and NSC (Oversight)
		<b>Activity 1.3.2:</b> Training 150 women on establishment of home-based industries and business management (50 from Welioya DS Division, 50 from Maritimpeattu DS Division and 50 from Puthukkudiyiruppu DS Division).	Number of women selected and trained.	

		<b>Activity 1.3.3:</b> Provision of relevant equipment for fish value addition to established fisher societies (one in Maritimpeattu DS Division and another in Puthukkudiyiruppu DS Division), facilitate exposure visits.	Number of women benefited through provision of equipment for fish value addition.		
		<b>Activity 1.3.4:</b> Developing business models for long-term functioning and sustainability are developed.	Number of women engaged in development of business models.		
		<b>Activity 1.3.5:</b> Establishing five (5) community-based mangrove nurseries.	Number of women engaged in community-based mangrove nurseries.		
		<b>Activity 1.3.6:</b> Replant/rehabilitation of 1.5km of mangrove forests in Irrattai Vaikal in Puthukkudiyiruppu DS Division and Nayar GN Division in Maritimpeattu DS Division to buffer and protect coastal areas from storm surges and sea level rise.	Number of women engaged in community-based mangrove nurseries.		
<b>Outcome 2:</b> Address capacity needs and gaps in adaptation measures that can reduce vulnerability to climate change and increase coping capacity	<b>Output 2.1.:</b> Participatory vulnerability/risk assessments to mainstream community-based climate change adaptation in local development plans and promote climate change/disaster resilient local development plans.	<b>Activity 2.1.1:</b> Identifying climate change risks and vulnerabilities in the three (3) DS Divisions and documented, including gaps in knowledge and data/information, and identifying and selecting preferred adaptation options with special emphasis on community-based climate change adaptation.	Number of gender specific risk and vulnerabilities identified and taken into consideration.	Executing Entity; Project Manager with the support of Gender and Environment Advisor (Backstopping and quality control); and NSC (Oversight)	
		<b>Activity 2.1.2:</b> Three (3) frameworks for implementation of adaptation action (strategy and action plan) in-line with the local and national climate change adaptation strategies and plans developed.	Number of gender specific adaptation action identified and incorporated.		
	<b>Output 2.2:</b> Share knowledge and lessons through documentation of climate resilient actions with increased adaptive capacities.	<b>Activity 2.2.1:</b> Conducting 10 participatory dialogues, focused group discussions to deliberate concerns of communities (5 in each DS Division).	Number of women involved in the participatory dialogues and focused group discussions.	Executing Entity; Project Manager with the support of Gender and Environment Advisor (Backstopping and quality control); and NSC (Oversight)	
		<b>Activity 2.2.2:</b> Conduct 6 workshops/seminars to inform the framework for implementation of climate change adaptation actions to relevant stakeholders, with 2 in each DS Division.	Number of gender specific issues highlighted at these meetings.		
		<b>Activity 2.2.3:</b> One (1) video documentary consisting of lessons learnt/experiences, case studies and broader policy interventions developed.	Number of female participants.		
		<b>Activity 2.2.4:</b> Conduct at least five (5) periodic media campaigns (print and electronic) at provincial and national levels (in Sinhala, Tamil and English) to improve communication/visibility of climate change adaptation action implemented.	Number of gender specific case studies.		
				Number of campaigns that have also highlighted the contribution of women.	