



ADAPTATION FUND

AFB/PPRC.35/Inf.1
17 March 2025

Adaptation Fund Board
Project and Programme Review Committee
Thirty-fifth Meeting
Bonn, Germany, 8-9 April 2025

PROPOSAL FOR MOROCCO



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY:

Country/Region: Morocco
Project Title: Strengthening climate change resilience of urban residential neighbourhoods in the Tangier-Tetouan-Al Hoceima region
Thematic Focal Area: Disaster risk reduction and early warning systems
Implementing Entity: UN-HABITAT
Executing Entities: Ministry of National Territory and Urban Planning, Housing and City Policy
AF Project ID: AF00000409
IE Project ID: **Requested Financing from Adaptation Fund (US Dollars):** 9,981,160
Reviewer and contact person: Angelica Ospina **Co-reviewer(s):** Estefanía Jiménez
IE Contact Person:

Technical Summary

The project “Strengthening climate change resilience of urban residential neighborhoods in the Tangier-Tetouan-Al Hoceima region” aims to strengthen the resilience of the housing sector to climate change, with a focus on floods, marine submersion, and landslides in high populated coastal urban areas of the Tangier-Tetouan-Al Hoceima region of Morocco. This will be done through the three components below:

Component 1: Strengthening urban resilience to climate change in vulnerable residential neighborhoods (USD 6,020,000);

Component 2: Awareness, communication, and capacity building (USD 950,000);

Component 3: Monitoring, evaluation, and capitalization of experience in adaptation (USD 750,000).

Requested financing overview:

Project/Programme Execution Cost: USD 733,400

Total Project/Programme Cost: USD 8,453,400

Implementing Fee: USD 718,539

Additional fee (Project Cycle Management Fee): USD 733,400

	<p>Financing Requested: USD 9,905,339</p> <p>The initial technical review highlights several key issues, including the need to clarify the project's objectives and proposed activities, improve alignment between the identified climate change challenges, the project's scope, and its target beneficiaries, and provide a more detailed analysis of the specific challenges and climate vulnerabilities affecting the housing sector in the targeted area. Additionally, the review raises concerns about the project's cost-effectiveness, compliance with the Adaptation Fund's Environmental and Social Policy (ESP) and Gender Policy (GP), and inconsistencies in the budget. These concerns are detailed in the Clarification Requests (CRs) and Corrective Action Requests (CARs) included in the review.</p> <p>The second technical review finds that some of the issues raised in the initial review were not addressed such as proposed activities, adaptation rationale, compliance with the Adaptation Fund's Environmental and Social Policy (ESP), details in the budget. The proposal requires significant improvement. The entire document needs to be thoroughly reviewed and restructured to enhance readability and coherence. These concerns are detailed in the Clarification Requests (CRs) and Corrective Action Requests (CARs) included in the review.</p>
Date:	January 15, 2025

Review Criteria	Questions	Comments Initial Technical Review November 20, 2024	Comments Second Technical Review January 15, 2025
Country Eligibility	1. Is the country party to the Kyoto Protocol, and/or the Paris Agreement?	Yes.	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes. The country is vulnerable to the increasing frequency of extreme weather events, heavily influenced by the adverse effects of floods, drought, forest fires and landslides, as well as heat waves and sea level rise.	-
	1. Has the designated government authority for the Adaptation Fund endorsed the	Yes.	-

	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>No.</p> <p>The length of the proposal is 58 pages with annexes</p> <p>CAR1. Please reduce the length to no more than 50 pages.</p>	<p>CAR1: Cleared. The proposal is 50 pages long.</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>Not cleared.</p> <p>The project aims to strengthen urban resilience to climate change in residential neighborhoods in the Tangier-Tetouan-Al Hoceima region. The project focuses on strengthening urban climate resilience by working with various level of government and stakeholders in targeted communes (Tetouan, Chefchaouen and Al Hoceima), which were identified as being highly vulnerable to climate change. The first component supports an urban analysis of vulnerability and climate risk assessment, reinforcement of buildings' resilience to floods and landslides, as well as integrated nature-based solutions (NbS) to reduce run-off and reinforce soil stability, thus contributing to adaptation to riverine floors, altered rain patterns and landslides. The second component focuses on awareness raising, communication and capacity building of stakeholders to strengthen their capacity to cope</p>	<p>CR1: Not cleared.</p> <p>The proposal mentions the weaknesses and gaps that intensify the vulnerability to climate change and its impacts in the housing sector. However, it fails to specify what these gaps are. For instance, it does not identify whether the current gaps limiting the target area's adaptability to climate change are environmental, social, financial, institutional, or related to capacities. In the response sheet some of these are mentioned but they are not reflected in the proposal.</p> <p>Please update the proposal with the required information.</p> <p>The proposal would benefit from a more organized structure, such as incorporating subsections to enhance clarity and improve the overall flow.</p> <p>CR2: Cleared as per additional information in page 9 and 12. The proposal will be designed for both residential and commercial buildings.</p> <p>CR3: Not cleared. On page 11, under project</p>

		<p>with climate risks. The third component supports monitoring, evaluation, and capitalization of knowledge, including enhanced knowledge management for the housing sector and information sharing. The project expected outcomes and expected outputs are well articulated as documented on pages 21-22 of the concept note.</p> <p>Please strengthen the proposal by addressing the following:</p> <p>While the proposal identified the climate change impacts and associated vulnerabilities in the targeted region, the specific sectoral gaps that the project is seeking to fill and its value added in terms of climate change adaptation of the housing sector need to be strengthened. This includes the specific impacts of climate change (e.g., floods, drought, landslides, sea level rise) in buildings and construction sector in the targeted region, governance/existing regulations and enforcement, institutional capacity, challenges related to the physical infrastructure, etc. Overall, the specific challenges and climate vulnerabilities of the housing sector in the targeted area need to be further developed in the proposal, including details on the</p>	<p>beneficiaries, commercial buildings are not mentioned, despite being referenced in other sections of the proposal. Please clarify this inconsistency and make the necessary corrections.</p> <p>Note that quantification of the beneficiaries would be required at full proposal stage.</p> <p>The information on stakeholders provided in the review sheet is not reflected in the proposal. It would be beneficial to include at least a summary of this information in the proposal.</p> <p>CR4: Cleared as per information provided in page 11.</p> <p>CR5: Cleared as per information provided in page 5 and 23.</p> <p>CR6: Not cleared.</p> <ol style="list-style-type: none"> 1. Annual losses in DH are mentioned, however the reference paper could not be located. please submit with the re-submission. 2. Please also mention economic losses. <p>CR7: Cleared as per information provided in page 16.</p> <p>CR8: Cleared as per information provided in</p>
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		<p>vulnerabilities related to physical infrastructure (e.g. construction materials, designs), institutional capacity, policy and regulation, building's maintenance and sustainability of construction, awareness of key stakeholders at the local, sub-national and national level, coordination among key actors (including private sector, insurance providers, government officials and community groups).</p> <p>CR1: Please strengthen the proposal by clearly identifying the specific gaps in the housing sector that the project aims to address in relation to climate change impacts. Provide details on the vulnerabilities caused by floods, landslides, and sea level rise, focusing on physical infrastructure, governance, institutional capacity, and existing regulations. Explain how the project will add value to ongoing efforts in climate adaptation within the housing sector.</p> <p>While some impacts of floods in the building sector are identified in page 9 (under 'Environmental context'), there is no distinction of damages on residential and on commercial buildings.</p> <p>CR2: Please clarify whether the project distinguishes between the</p>	<p>page 16.</p> <p>CR9: Cleared as per information provided in page 17.</p> <p>CR10: Not cleared. The information provided in the review sheet is not reflected in the description of Component 1. While it is somewhat addressed in the Sustainability Section, it is unclear where in the proposal the Implementing Entity intended to address this CR. Please address.</p> <p>CR11: Cleared as per information provided on page 18.</p> <p>CR12: Cleared as per information provided on page 18.</p> <p>CR13: Not cleared. In the proposal, please clearly reference the sub-components, as the current description does not specify which trainings and workshops correspond to each sub-component. This clarification would also enhance the overall flow of the narrative.</p> <p>CR14: Cleared as per information provided in page 19.</p> <p>CR15: Cleared as per information provided in page 20.</p>
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		<p>impacts of climate change on residential and commercial buildings. If relevant, provide an analysis of how this distinction affects the identified vulnerabilities in the targeted urban neighborhoods.</p> <p>CR3: Please clarify the targeted beneficiaries of the project, and the key stakeholders that will play a role in its implementation. If the project targets the resilience of “the housing sector,” further details would be needed in terms of the project’s boundaries: what are the main stakeholders of the sector, and how will the project engage them? Will the beneficiaries be the inhabitants of the targeted neighborhoods, community groups, local authorities?</p> <p>CR4: Please identify if the project will engage with other key stakeholders from the housing sector (e.g., construction associations, other private sector stakeholders, regulators, insurance companies etc.).</p> <p>While the proposal identifies the population of the targeted neighborhoods, it would be useful to provide information about the percentage of women, as well as further details regarding socio-economic characteristics (including data on informal settlements,</p>	<p>CR16: Cleared as per information provided in page 21.</p> <p>CR17: Cleared as per response in review sheet and overall proposal.</p>
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		<p>migration, access to basic services). This would strengthen the overall vulnerability context, and the challenges that influence the local adaptive capacity.</p> <p>CR5: Please include gender-disaggregated data on the population in the targeted neighborhoods. Specify the socio-economic characteristics of the beneficiaries, such as informal settlements, migration patterns, and access to services, to strengthen the vulnerability context.</p> <p>CR6: Please provide an estimate of the economic, social, and environmental losses associated with climate change impacts in the targeted region. Reference credible sources to substantiate this information (Page 9).</p> <p>CR7: Related to component 1. sub-component 1.1.1. please clarify if there are any existing vulnerability or climate risk assessments for the targeted region. Specify how the project will build on these assessments to ensure effective implementation.</p> <p>CR8: Related to component 1., sub-component 1.1.2. Please clarify which activities will be undertaken to</p>	
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	<p>“reinforce buildings resilience” in response to floods and landslides. Indicate whether these activities involve rehabilitation of existing infrastructure, new construction, or retrofitting, and how they align with existing housing regulations and adaptation standards.</p> <p>CR9: Please describe the integrated Nature-Based Solutions (NBS) proposed in Component 1. Specify the activities involved, their expected outcomes, and their contribution to reducing climate vulnerabilities in the targeted neighborhoods.</p> <p>CR10: As part of the description of Component 1, please elaborate on how the proposed adaptation measures, including building resilience and NBS, will be maintained to ensure long-term sustainability. Highlight local ownership, community involvement, and gender-inclusive engagement strategies.</p> <p>CR11: Related to component 2, sub-component 2.1.1, please elaborate on the ‘reference framework’ being proposed for the resilience of targeted neighborhoods. What does this ‘framework’ consist of? Who will prepare it, how it will be developed, and whether it will require policy-level</p>	
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		<p>adoption for implementation?</p> <p>CR12: Related to component 2, sub-component 2.1.2, please identify the target audience for the proposed awareness-raising materials and technical guides, specifying whether they are aimed at community members, government officials, or other stakeholders.</p> <p>CR13: Please clarify how/if sub-components 2.1.4. (NBS workshops) and 2.1.5. (NBS training sessions) are different. Clarify their respective objectives, target audiences, and intended outcomes.</p> <p>CR14: Related to component 3, sub-component 3.1.1, please clarify what will the proposed “<i>climate change knowledge database for the housing sector</i>” consist of, and how will it build upon/complement other repositories that may be available in the climate change and/or housing sector. Please also indicate who will host the database, and how it will be sustained. Will the database include both adaptation and mitigation resources? How will it be linked to/complement other tools and resources linked to the country’s NDC and National adaptation strategy?</p> <p>CR15: Please clarify the activities</p>	
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		<p>planned under Sub-component 3.1.3. If this refers to monitoring and evaluation (M&E), include it as part of the project's overall M&E framework rather than listing it as a separate activity.</p> <p>CR16: Explain how the project aligns with the adaptation plan developed by the Ministry for the Tangier-Tetouan-Al Hoceima region. Describe how the project's outcomes will support scaling the plan to other regions in Morocco.</p> <p>CR17. Please ensure that all the figures (i.e., photos and maps) and annexes are numbered and properly referenced and included in the proposal's narrative, and that they are clearly linked to the activities proposed. This will help strengthen the project's rationale and help contextualize the climate change impacts that the project is seeking to address.</p>	
	<p>4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations,</p>	<p>Not cleared.</p> <p>The project proposes to reduce economic losses arising from the destruction of assets and infrastructure and guard against climate-related environmental degradation. The project will adopt a</p>	<p>CR18: Not cleared. Section B (Economic, social and environmental benefits) is difficult to read and comprehend. Please enhance the section by clearly linking the benefits to the outputs and organizing the information more effectively to significantly improve the flow and readability of the document.</p>

	<p>while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>participatory approach that takes into consideration the demographics that are more vulnerable to the environmental and socio-economic impacts of climate change. While the proposal identifies economic, social, and environmental benefits as part of section B, pages 27-28, the scope of its expected benefits is broad, and potentially beyond the project's scope. For example, is not clear if/how some of the economic benefits identified in Table 3 (e.g., reduction in 'economic and household losses' related to increased resilience of institutions, communities, physical and natural assets, ecosystems, and livelihoods) will be measurable and attributable to the implementation of the project activities. Social benefits include a planning approach sensitive to various vulnerable groups, however, the reference to Indigenous groups and gender inclusion is unclear and would need to be integrated explicitly as part of the description of project activities.</p> <p>CR18: Please clarify the project's contribution to economic, social, and environmental benefits, based specifically on the proposed activities and actions to be implemented. Please indicate if the estimated benefits can be quantified, as it would help to clarify the expected impact of</p>	<p>CR19: Cleared.</p> <p>As per initial gender assessment provided on pages 23-25.</p> <p>Please take note that while the initial gender assessment provided (pp. 23-25) is acceptable for concept stage, a detailed gender assessment along with a gender action plan and gender-responsive indicators would be required at full project stage.</p> <p>CR20: Cleared as per information provided on page 24.</p> <p>CAR2: Cleared as per information provided on page 25. See also CR19.</p>
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		<p>the project.</p> <p>At fully developed proposal stage, identify potential risks that might hinder the equitable distribution of benefits, particularly in relation to building resilience and NBS implementation. Provide strategies to mitigate these risks and ensure that benefits are accessible to all vulnerable groups, including women and marginalized communities.</p> <p>CR19: Please describe the approach to integrating women and other vulnerable groups into the project's planning and implementation. Highlight the specific benefits the project will provide to these groups and include gender-sensitive indicators to monitor their inclusion.</p> <p>Page 29 states that communities and local partners will provide 'significant in-kind and cash support', including by participating in infrastructure development. CR20: While community participation is a key element for fostering ownership and sustainability, please explain how the project will ensure that volunteering does not disproportionately impact the most vulnerable groups. Please consider safeguards to mitigate any potential risks, such as providing non-monetary incentives, flexible</p>	
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		<p>participation options, or capacity-building opportunities. Monitoring mechanisms should also be in place to assess the impact of community involvement on income generation and adaptive capacity, ensuring that contributions remain voluntary and equitable.</p> <p>CAR2: Please demonstrate compliance with the Gender Policy requirements of the AF. Compliance may be demonstrated through an initial gender analysis, and/or assessment to determine the different needs, capabilities, roles and knowledge resources of women and men, and/or identify how changing gender dynamics might drive lasting change.</p>	
	5. Is the project / programme cost effective?	<p>Not cleared.</p> <p>The section on cost-effectiveness outlines the project's general approach to efficient operations and the role of community contributions. However, it does not provide detailed analysis of cost-effectiveness for specific activities, such as the measures to reinforce building resilience or the selection of Nature-Based Solutions (NBS) under Component 1. Additionally, it lacks clarity on the expected in-kind and</p>	<p>CR21: Not cleared.</p> <ol style="list-style-type: none"> 1. Please explain how the proposed measures are cost-effective from a long-term sustainability perspective. 2. Also, 'cheaper local labour' is not considered cash contribution, please revise. 3. Additional information was included in the review sheet, but it was not located in Section C (Describe or provide an analysis of the cost-effectiveness of the proposed project/programme). Please provide the response in the

		<p>cash contributions from communities and government institutions.</p> <p>CR21: Please strengthen the cost-effectiveness analysis by incorporating comparative analyses of the cost-effectiveness of the proposed measures with alternative adaptation measures that may have been considered. Where possible, include quantitative comparisons to justify the selected approaches. Provide an analysis of the cost-effectiveness of the technical options proposed under Component 1, such as building reinforcement measures and Nature-Based Solutions (NbS). Clearly outline the in-kind and cash contributions expected from communities and government institutions, including any agreements established during project preparation to ensure collaboration. Ensure the analysis highlights how the proposed measures are cost-effective from a long-term sustainability perspective.</p>	proposal at Section C.
	<p>6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction</p>	<p>Yes.</p> <p>The proposal identifies a range of relevant national commitments, strategies and sectoral plans that are pertinent to the project. The project proposal is consistent with Morocco's policies, plans and strategies,</p>	-

	<p>strategies, national communications and adaptation programs of action and other relevant instruments?</p>	<p>consisting of –</p> <ul style="list-style-type: none"> • National Strategy for Sustainable Development (“NSSD) 2017 • Ministry of National Land Use Planning, Urbanism, Habitat and Urban Policy programs • National Adaptation Plan (NAP) 2022 • Nationally Determined Contributions (NDC) 2015 <p>The proposal is also aligned with the SENDAI framework for Disaster Risk Reduction (2015).</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>No.</p> <p>Section E, page 32, mentions that the project meets all relevant standards. The proposal indicates the need to elaborate on compliance procedures and assess the environmental and social impact of the proposed interventions. However, the relevant national technical standards are not identified, and compliance is not detailed or clearly stated.</p> <p>CAR3. Please specify the national technical standards that the project complies with (construction codes, permits, specific regulations, quality standards etc.) and outline how the steps that the project will take to ensure compliance, as required by the ESP of the AF. Kindly detail the relevant building codes, and any other</p>	<p>CAR3: Not cleared.</p> <p>The proposal does not explicitly list all the relevant codes and regulations, including their numbers and names, that would be considered. Please provide the required information within the proposal.</p>

		housing sector regulations being considered as part of the project-particularly considering the activities proposed as part of Component 1 (i.e., building resilience reinforced and NBS). Kindly indicate any technical/regulatory issues that will need to be further assessed as part of the project's preparation.	
	8. Is there duplication of project / programme with other funding sources?	<p>Not cleared.</p> <p>The proposal refers to a number of national and sectoral plans and strategies, evidencing that urban resilience and adaptation are an increasingly important priority in the country. However, there is no explicit reference to potential duplication with other funding sources or projects.</p> <p>CR22: Please identify other projects or funding sources that could complement or overlap with the proposed activities. Provide a table summarizing these initiatives, their lessons learned, and how they inform or strengthen the current proposal.</p> <p>Please clarify non-duplication and complementarities/ synergies, where relevant, with the following:</p> <p><i>-Guide Pratique de Résilience Urbaine pour les Villes Marocaines.</i></p>	<p>CR22: Not cleared.</p> <p>Please re-visit CR22. and provide a table summarizing the climate change adaptation projects mentioned in the proposal, their lessons learned, and how they inform or strengthen the current proposal. The table can have the following headlines for the columns: Project title, Status, Implementation period, Complementarities/lessons learned.</p>

		<p><i>Washington, D.C.: World Bank Group.</i></p> <p><i>- Des Bâtiments Sûrs et Durables pour Renforcer la Résilience Urbaine : Évaluation du Cadre Réglementaire Marocain pour la Prévention des Risques dans l'Aménagement du Territoire et de la Construction (French). Washington, D.C. : World Bank Group.</i></p> <p><i>-UNDP's Community Based Adaptation in Morocco (https://www.adaptation-undp.org/projects/spa-community-based-adaptation-morocco)</i></p> <p><i>- GCF-funded project, implemented by UNDP, focused on strengthening the institutional framework for adaptation planning, and the formulation of 3 regional adaptation plans along with their financing strategies.</i></p> <p><i>-IDDRI study Implementing NBS in climate policies: First lessons from Morocco and Tunisia.</i></p>	
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p>Yes, but further information is needed.</p> <p>Component 3 of the project is focused on knowledge management and information sharing and includes a number of activities aimed at</p>	<p>CR23: Not cleared.</p> <p>It is not clear the difference between the resilience neighborhood repository and the climate change knowledge management database. Please enhance this section to clearly link the information to the outputs and</p>

		<p>enhancing learning and effective dissemination. Component 2 also incorporates knowledge management mechanisms like the development of a strategic communication plan to disseminate lessons learned at the national and regional levels. However, further details are needed to illustrate the project's approach to reach different audiences, gather and disseminate data.</p> <p>CR23: Please provide details on what the "resilient neighbourhood repository" entails (Page 33, section G), including the data that will include, how it will be collected, accessed and used, and by whom. Please emphasize the link between all the proposed knowledge management activities and enhanced adaptive capacity of the targeted beneficiaries, ensuring that project impacts in this regard are measurable.</p> <p>CR24: Please elaborate on the proposed climate change database for the housing sector, as per the clarification comment provided above.</p>	<p>organizing the information to improve the flow and readability of the document.</p> <p>CR24: Not cleared.</p> <p>See CR23.</p>
	<p>10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender</p>	<p>Yes, but further information is needed. A consultative workshop was conducted with the participation of multiple stakeholders. Meetings were also organized with regional council and presidents of the communes to</p>	<p>CAR4: Not cleared.</p> <p>No changes were made to this section of the proposal. Even if added the information provided in review sheet, it is not sufficient. In Section H (Describe the consultative process...) please provide in tabulated form</p>

	<p>considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>discuss the project. However, the proposal falls short on indicating gender considerations during the consultative process in compliance with the Environmental and Social Policy and Gender Policy of the Fund, as well as other details about the consultative process that was conducted.</p> <p>CAR4: Please provide further information on the consultative process, including date of consultations, and specific concerns raised. Please indicate which community groups were included in the consultative process in each targeted neighborhood.</p> <p>CAR5: Please provide more details on the gender considerations which were followed, paying particular attention to the Environmental, Social and gender Risk policies of the AF. Provide gender disaggregated consultation data if available.</p> <p>CR25: Please clarify how where marginalized and vulnerable groups and Indigenous peoples identified in targeted areas, whether they were consulted at this stage, and how were their interests or concerns taken into account when designing the proposal.</p>	<p>the dates of the conducted consultations, the topics discussed, the outcomes, and a brief discussion on how the outcomes were considered in project design. The AF requires consultation with local communities, including marginalized/ vulnerable groups and Indigenous peoples, if any, to ensure their concerns are considered in the project design. Please provide the required information within the proposal.</p> <p>CAR5: Not cleared. No changes were made to this section of the proposal. Re-visit CAR5. The AF requires consultation with women to ensure their concerns are considered in the project design. Please provide the required information within the proposal.</p> <p>CR25: Not cleared. Information was provided on review sheet but no clarification on this matter was made to the proposal. Please provide the required information within the proposal.</p>
	<p>11. Is the requested financing justified on the</p>	<p>Not cleared.</p>	<p>CR26: Not cleared. 1. Information provided was not sufficient.</p>

	<p>basis of full cost of adaptation reasoning?</p>	<p>The overall scope of the project is relevant in addressing the country's adaptation objectives to increase housing sector resilience. The proposal provides information on the financing needed for each component of the project (pg. 21-22; pg.38-40). A detailed analysis of the funding impact compared to a baseline scenario (without funding) was also provided (pg. 34). However, the funding justification can be elaborated further, considering measurable outcomes that can be directly attributed to the project's activities.</p> <p>CR26: Please provide further information on the full cost of adaptation, including baselines and additionality of the proposed activities-including the reinforcement of building resilience and NBS proposed as part of Component 1. Explain how taken solely with the AFs resources the project will be able to deliver on its outcomes.</p>	<p>Explain how taken solely with the AFs resources the project will be able to deliver on its outcomes. Please provide the required information within the proposal.</p> <p>2. Also, last column of Table 4 is confusing. Please review.</p>
	<p>12. Is the project / program aligned with AF's results framework?</p>	<p>Not cleared.</p> <p>The proposal includes a table (Table 6, page 38-40) mapping the project's objectives, indicators and outcomes, and the AF' outcomes, outputs and corresponding indicators, aligned with the Adaptation Fund revised strategic results framework adopted in 2019.</p>	<p>CAR6: Not cleared.</p> <p>1. Please review alignment table and AF Outcome/Output indicators. For example, 4.1 AF Outcome indicator is '<i>Responsiveness of development sector services to evolving needs from changing and variable climate</i>' not '<i>No. of households and communities having</i></p>

		<p>However, the linkages between the project objectives and the AF's outcomes and indicators need to be further clarified.</p> <p>CAR6: Please ensure that the AF outcomes are clearly related to the project's objectives. For example, it is not clear how/if the project indicator on "number of residential neighbourhoods involved in awareness raising etc" is related to the AF's indicator on "strengthened institutional capacity"; or how the project indicator on "number of stakeholders involved in monitoring etc" relates to the AF outcome on improved policies and regulations that promote resilience. Furthermore, in the proposed outcome indicators for the project, please avoid using "number of stakeholders", as the term "stakeholders" is too broad.</p> <p>CAR7: Please check the 'grant amounts' included in Table 6, as they don't correspond to the amount provided earlier in the proposal.</p>	<p><i>more secure access to livelihood assets'</i> as indicated in the proposal.</p> <p>2. Please avoid using "number of stakeholders", as the term "stakeholders" is too broad.</p> <p>Please see link of the AF Strategic Results Framework: https://www.adaptation-fund.org/wp-content/uploads/2019/10/Adaptation-Fund-Strategic-Results-Framework-Amended-in-March-2019-2.pdf</p> <p>CAR7: Cleared</p> <p>As per information updated in Table 6.</p>
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p>Not cleared.</p> <p>Section J of the proposal provides the project's approach to institutional, social, economic, environmental, financial and technical sustainability.</p>	<p>CAR8: Not cleared.</p> <p>Section J (Sustainability) requires improvement. Currently, it contains duplicate sub-sections, such as Institutional Sustainability. The entire document needs to</p>

		<p>While these key areas are addressed, several points mentioned in the section require further clarification.</p> <p>CAR8: As part of section J of the proposal, please elaborate on how the adaptation benefits achieved through the project can be sustained over time. Please indicate how to enable replication and scaling up with other funds after the project's end, including arrangements through which this would be achieved (i.e., sustainability and maintenance of any infrastructure or installations to be developed, local ownership/engagement of community groups and other local stakeholders knowledge to be generated, management and other capacity to be improved, etc)</p> <p>CR27: Please provide further details about the proposed partnership with public utilities towards infrastructure sustainability.</p>	<p>be thoroughly reviewed and restructured to enhance readability and coherence.</p> <p>CR27: Cleared as per information provided in page 34.</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>No.</p> <p>CAR9: Part II.K should be revised to better align with the Environmental and Social Policy of the Fund (please refer to the ESP guidance document and/or the ESP itself, as needed). In the column labeled "Potential impacts and risks – further assessment and management required for</p>	<p>CAR9: Not cleared.</p> <ol style="list-style-type: none"> 1. Please review Table 5 and ensure that all potential direct, indirect, transboundary, and cumulative impacts and risks arising from the project are being considered in the third column. 2. Please organize the information better, for example, the principle on Conservation of Biological Diversity is difficult to comprehend. No text is necessary for the

		<p>compliance,” ensure the following:</p> <ol style="list-style-type: none"> 1. Exclude Risk Mitigation Measures: Do not include any risk mitigation measures or expected positive project outcomes during the risk screening process, as these will be detailed in the fully-developed Environmental and Social Management Plan (ESMP). 2. Comprehensive Scope: Consider all potential direct, indirect, transboundary, and cumulative impacts and risks arising from the project. 3. Evidence-Based Findings: Ensure all risks and impacts are supported by evidence and clearly substantiated. 4. Mandatory Principles: Always assess Principles 1, 4, and 6, as they are universally applicable. 5. Compliance Column: Only mark “No further assessment required for compliance” for principles where no risks have been identified. <p>CAR10: Please state the category in which the screening process has classified the project.</p> <p>CAR11: Please include an initial gender assessment in the proposal</p>	<p>second column, just the mark (X) is good enough.</p> <p>CAR10: Cleared. Project has been identified as Category B in Part II.K.</p> <p>CAR11: Cleared. As per initial gender assessment provided on pages 23-25.</p>
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		that examines gender roles, gender-sensitive activities, and the specific needs, opportunities, challenges, or risks faced by men and women. Clearly explain the relevance of these elements within the context of the gender analysis and provide recommendations to enhance the project's design and implementation to promote gender equality and inclusivity.	
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes.	-
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	<p>Yes, however, there are discrepancies in the figures of the project components and overall budget.</p> <p>There are discrepancies in the figures reflected in Table 1 and in Table 6. The amounts presented in Table 1 don't add up.</p> <p>CAR12. Please clarify the budget allocated per project component, as there are different amounts in Table 1 and Table 6.</p> <p>CAR13. The Amount of Funding Requested includes the total project cost plus the project cycle management services. Please check these amounts in Table 1 and ensure that they are consistent with the</p>	<p>CAR12: Cleared.</p> <p>Tables 1 and 6 match.</p> <p>CAR13: Not cleared.</p> <ol style="list-style-type: none"> 1. In the budget, please clarify what is <i>Project Cycle Management Fee charged by the Implementing Entity (if applicable)</i>? Note that the IE fee cannot exceed 8.5 per cent of the total project/programme budget before the fee. 2. Please also update the projected calendar as the project is not going to start on March 2025.

		<p>amounts presented throughout the proposal.</p> <p>Kindly note the IE and EE fees calculator available under Project Material on the AF Website can be used. https://www.adaptation-fund.org/document/ie-and-ee-fees-calculator</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>Yes, however, there are discrepancies in the figures of the project components and overall budget.</p> <p>Please see comments above and adjust the figures</p>	-
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	<p>Yes.</p> <p>UN-Habitat Accreditation Expiration Date: 01 October 2025</p> <p>https://www.adaptation-fund.org/imp_entity/un-habitat-unhab/</p>	-
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 environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	n/a at concept stage	
	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	n/a at concept stage	

	the supervision of the M&E function?		
	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?	n/a at concept stage	
	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage	



CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Strengthening climate change resilience of urban residential neighborhoods in the Tangier-Tetouan-Al Hoceima Region

Country: Morocco

Thematic Focal Area: Disaster risk reduction and early warning systems

Type of Implementing Entity: Multilateral Implementing Entity

Implementing Entity: UN-HABITAT

Executing Entities: Ministry of National Territory and Urban Planning, Housing and City Policy

Amount of Financing Requested: 9,171,939 (in U.S Dollars Equivalent)

Project Formulation Grant Request (available to NIEs only): Yes ☐ No ☒

Amount of Requested financing for PFG: (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☒ No ☐

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: <https://www.adaptation-fund.org/apply-funding/designated-authorities>

Stage of Submission:

- ☐ This concept has been submitted before
- ☒ This is the first submission ever of the concept proposal

In case of a resubmission, please indicate the last submission date:

Please note that concept note documents should not exceed 50 pages, including annexes.

Project/Programme Background and Context:

Main issues and needs

The Tangier-Tetouan-Al Hoceima (TTA) region in Morocco faces significant challenges due to its vulnerability to climate change. The main issues include frequent climate hazards such as floods, droughts, landslides, and marine submersion. These hazards cause extensive damage to infrastructure, particularly in the housing sector, leading to economic losses and adverse social impacts. For instance, the average annual loss due to flooding in the TTA region is estimated at 339 million DH/year, with the residential sector accounting for the highest losses.

The primary needs in the TTA region are to enhance the resilience of the housing sector to climate change and to mitigate the impacts of climate hazards. There is a critical need for improved urban planning and infrastructure development to withstand extreme weather events. Additionally, there is a need for increased funding and resources to implement effective climate adaptation measures. The region's rapid urbanization, with an urban population growth rate of 2.29% annually, exacerbates these vulnerabilities.

The aim of this project is to strengthen the resilience of the housing sector in the TTA region by addressing the vulnerabilities and risks associated with climate change. The project will focus on enhancing the capacity of urban areas to cope with floods, marine submersion, and landslides. By implementing targeted adaptation measures, the project seeks to reduce the damage and losses caused by climate hazards, improve living conditions for residents, and support sustainable development in the region.

Geography and climate

Morocco is located in southwest of the Mediterranean region, at the northwestern part of Africa. Morocco is bordered to the north by the Mediterranean Sea, to the west by the Atlantic Ocean, to the east by Algeria and to the south and south-east by Mauritania. The country has a long coastline that extends more than 3,500 km. The total land area of the country is about 710,850 Km² (8% forests, 13% agricultural lands and 65% pastures, rangelands and deserts).

Morocco is characterized by a Mediterranean climate, with mild and relatively wet winters and hot to dry summers. The climate shows enormous variations from sub-humid in the north to Saharan in the South. This diversity is due to the combination of several factors, namely its latitudinal location, the influence of the Atlantic Ocean and the Mediterranean Sea, and the influence of elevation through Atlas and Rif mountains. Spatial and temporal rainfall variability is considerably important. The average annual rainfall ranges from less than 100 mm (Saharan bioclimatic stage) to 1200 mm (humid bioclimatic stage). The rainy season lasts from October to March in most of the country, where maximum rainfall is between December and February. The summer months have low rainfall and are stormy in general.

The Tangier-Tetouan-Al Hoceima (TTA) region is located in the northwest of Morocco and is bounded to the north by the Strait of Gibraltar and the Mediterranean, to the west by the Atlantic Ocean, to the southwest by the Rabat-Sale-Kenitra region, to the southeast by the Fez-Meknes region and to the east by the Oriental region. It covers 17,262 km² and represents 2.43% of the national territory. The region consists of two prefectures and six provinces including provinces of Tétouan, Chefchaouen, and Al Hoceima.

The climate of the Tangier-Tetouan-Al Hoceima (TTA) is Mediterranean with an oceanic influence. Temperatures remain mild in winter and moderate in summer, both along the coast and at higher altitudes. In January, temperatures rarely drop to 0°C, with the most common maximum temperatures ranging between 14°C and 18°C. In summer, the atmosphere warms noticeably, with the most frequent maximum temperatures happening in July ranging between 16°C and 26°C. The average annual rainfall is 900 mm, varying from 1,800 mm in the high mountain areas to 600 mm around Jebha. Snowfall occurs above 1,000 meters in altitude.

Climate change trends, projections and impacts

Morocco is located in the MENA/Arab region, which is one of the most vulnerable regions to climate change impacts. The increasing frequency of natural disasters and extreme weather events coupled with the social and economic challenges related to increasing poverty, urbanisation, and population growth continue to increase the vulnerability of the region. Although Morocco's contribution to GHG emissions is low, it is very vulnerable to and is already suffering from the negative impacts of climate change¹. According to climate projections, climate change impacts in Morocco are expected to intensify during the coming years.

Morocco faces several types of climatic hazards, such as droughts floods, forest fires and landslides², in addition to extreme weather events, such as heat/cold waves, and sandstorms. These hazards and extreme events lead to severe impacts and considerable economic, social and environmental damage and loss. The assessment of current and projected impacts and vulnerabilities to climate change that has been carried out on various key sectors (water resources, agriculture, fisheries, forestry and biodiversity, coastline, habitat, and health), highlights the Kingdom's vulnerability to climate change. Furthermore, Morocco as a Mediterranean country, is highly impacted by sea level rise that leads to marine submersion and causes severe floods in coastal areas. These climate hazards occur in very populated and dense areas resulting in costly damages and losses. In addition to the resulting floods, sea level rise causes saltwater intrusion into the aquifers and groundwater, which results in water salinization, degradation of the water quality and therefore loss of fresh water. Morocco already suffers from water scarcity³, where the impacts of sea level rise further deplete freshwater to critical levels.

The TTA region is one of the most vulnerable to climate risks in the country, given its geographical position and its sensitive natural resources and socioeconomic conditions⁴. As mentioned in figures 1 and 2, according to RCP 8.5 scenario, the region's temperature will increase while precipitation will significantly decrease by 2050. Moreover, the region experienced several climate related hazards, such as floods, landslides, sea level rise, sea surges, shoreline erosion, as well as forest fires (MATNUHPV, 2021). These climatic hazards have become recurrent and destructive in the TTA region, causing considerable damage and losses over the past twenty years. Therefore, climate change related vulnerabilities and risks are a source of concern for the authorities, who have to deal with strong demographic pressure and the increasingly intensifying impacts of climate change on various sectors, including the housing sector.

Water resources are experiencing a decline of about 25% due to the impacts of climate change. For fisheries, a global comparative study of vulnerability of national economies conducted by Allison et al (2009) ranks Morocco as the 11th most vulnerable country to climate change. Climate change also has harmful impacts on forests, ecosystem architecture, and the distribution of species, which could lead to a decline in livelihoods and increased exposure to extreme events. In addition, the housing sector will be more subjected to various climatic hazards by 2050, such as floods, drought, etc., according to the projections of the Ministry of National Territory, Urban Planning, Housing and City Policy (MATNUHPV, 2020).

² UN-Habitat Regional Office for Arab States (2015), Climate Change Strategy for the Arab Region 2022 - 2025

DDD (2021), Quatrième communication nationale du Maroc

⁴

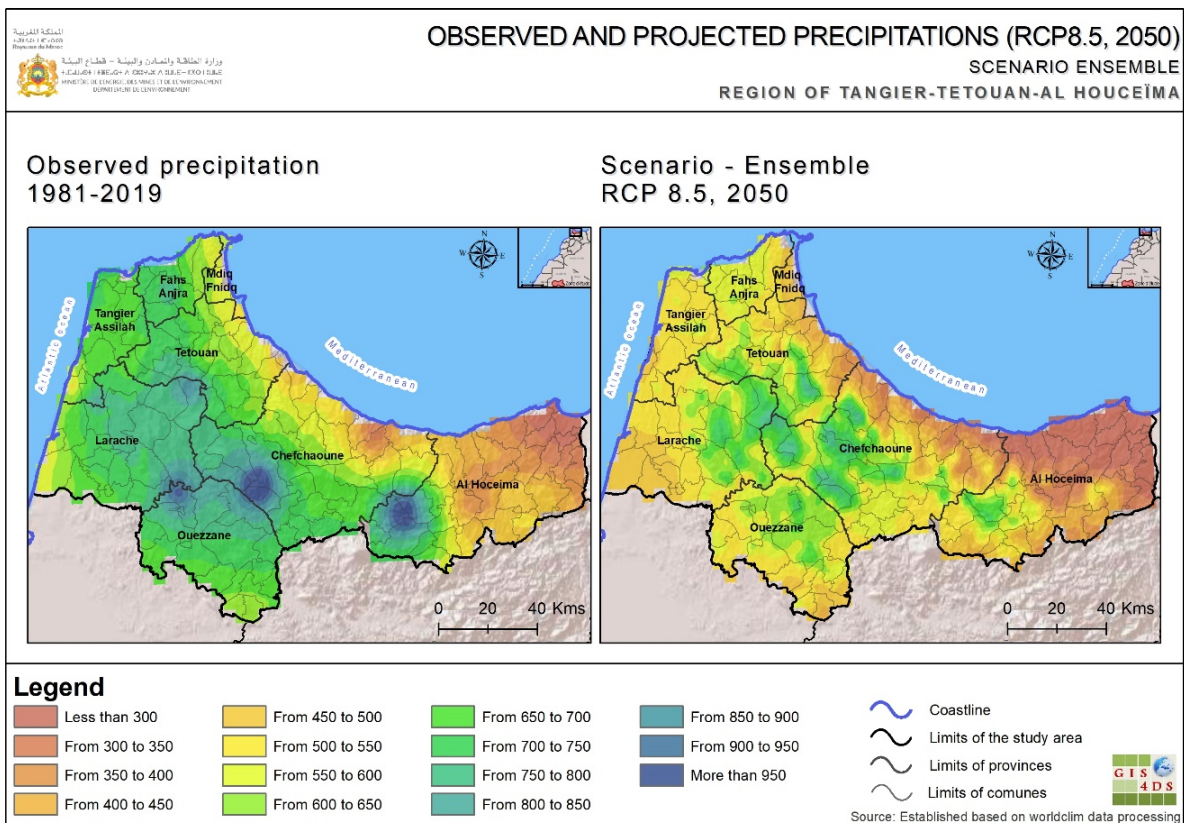


Fig 1. Observed and projected precipitation TTA in 2050

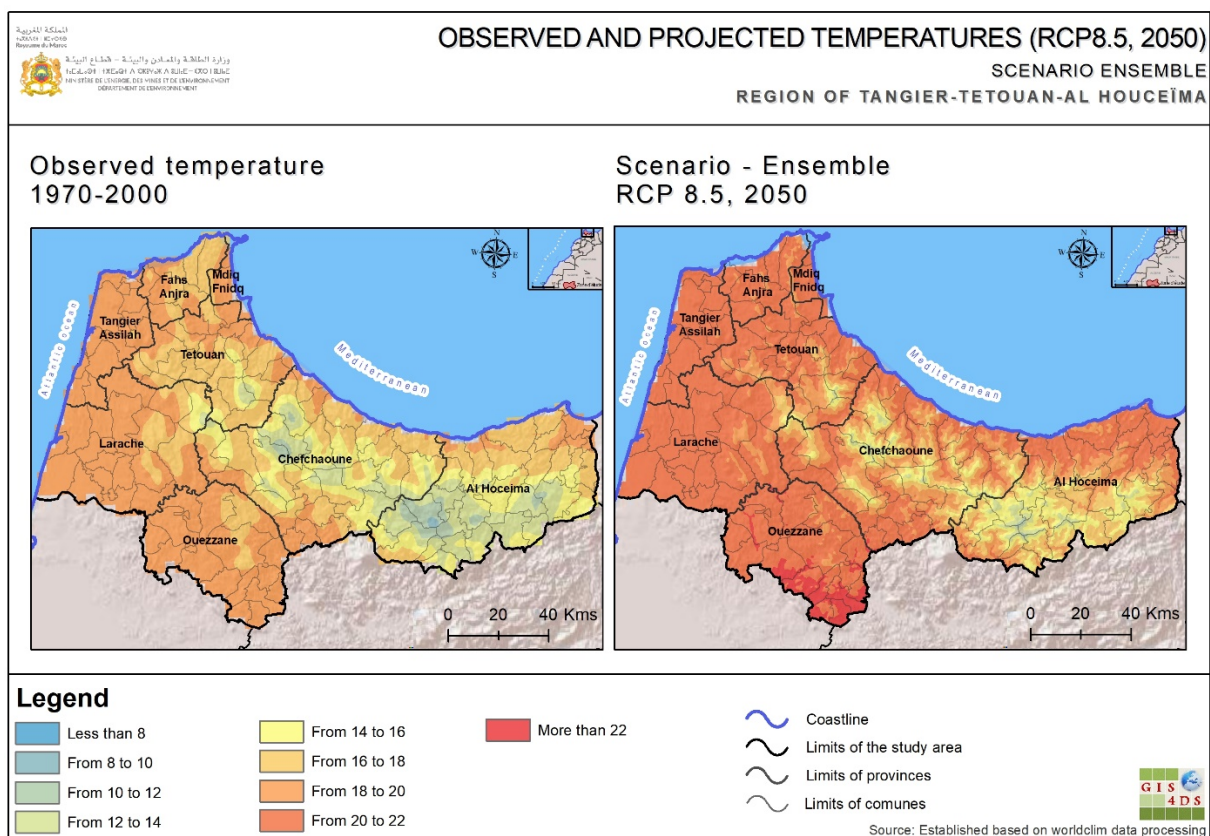


Fig 2. Observed and projected temperatures TTA to 2050 (RCP8.5)

The housing sector is characterized by several weaknesses and gaps that intensify its vulnerability to climate change. With more than 65% of the population living in urban areas, the TTA region is experiencing rapid urbanization, exacerbating climate vulnerabilities. By 2050, this figure is expected to reach 73.6%, increasing pressure on urban infrastructure. The region is known for several informal settlements that are often the most vulnerable and require particular attention. Furthermore, although the region has two adaptation plans (a territorial climate plan and an adaptation plan for the housing sector), the funds required to implement these two plans are insufficient.

The weaknesses and gaps that intensify vulnerabilities and risks have been analyzed and assessed as part of the study for the development of the Climate and Housing Plan for the TTA region. This analysis revealed that the housing sector is highly exposed to climate change, particularly rising temperatures, decreasing precipitation, sea level rise, floods, droughts, and landslides. The geographical distribution of these hazards is illustrated in Figure 3. For example, the TTA region has experienced periods of flooding and sea surges that are likely to continue in the future, according to the projections that have been made and illustrated in figure 3. The same figure shows areas that could be submerged by 2100, according to RCP 8.5, with submersion levels being relatively higher on the Atlantic side than on the Mediterranean side.

The municipalities identified in this study are also characterized by their fragility, which is linked to the nature of the constructions, their age, and the lack of regular maintenance. Moreover, the high exposure of housing is further amplified by significant biophysical sensitivity, resulting from the marl substrate and the area's topography. The region is marked by very low permeability and steep slopes, leading to intense surface runoff and recurrent flooding.

Buildings in residential areas are not always designed to maintain their performance (mechanical, thermal, etc.) in case of flooding. They are vulnerable to prolonged contact (from a few hours to several days) to flood frequencies and to the statics effects (water height at the level of the buildings) and dynamics effects (water flow speed, shocks of floating objects). The furniture and internal equipment of these buildings are also vulnerable to flooding. Impacts similar to those of floods can be generated by the rise in sea level. Direct damage is generally significant for individual buildings, as well as on a territorial scale. A simulation of expected damage resulting from flood using Moroccan Probabilistic Risk Assessment platform (WB, 2014⁵), show that the average annual loss due to flooding in the three provinces amounted to 333,020,720 DH/year, broken down as follows: 323,867,750 DH in Tétouan, 6,522,200 DH/year in Al Hoceima and 2,630,770 DH/year in Tangier. The highest losses of around 227,793,830 DH/Year were recorded in the residential sector, while losses in the commercial sector amounted to 74,383,480 DH/year. The remainder was recorded in other land use types.

In addition to these biophysical conditions, there are significant socioeconomic vulnerabilities, mainly due to the region's high population density and elevated poverty rates. Furthermore, according to the aforementioned study, the adaptive capacity of the municipalities considered in this analysis remains very low. Without sufficient adaptation measures and investments to improve the resilience of buildings, their vulnerability will only increase. Climate change threats directly affect populations through the destruction of homes and infrastructure and loss in human lives caused by extreme weather events.

⁵ World Bank (2014), Strengthening of resilience in Morocco: input on an integrated risk management strategy, Washington, D.C.

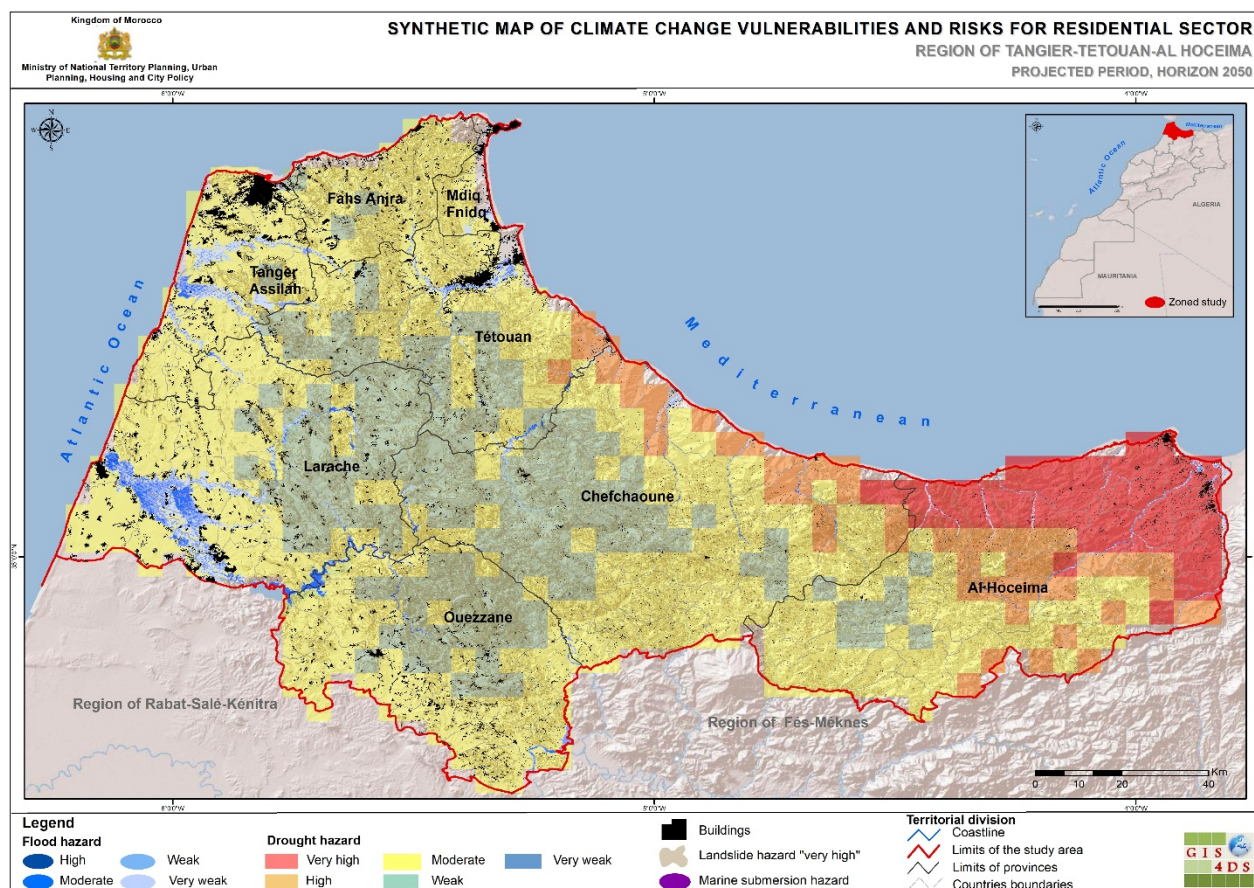


Fig 3. Synthetic map of climate change vulnerabilities and risks for the residential sector

Social context

Morocco's population has reached 36,828,330 on September 1, 2024 (General Population and Housing Census (GPHC), 2024), compared to 33,848,242 people in 2014. Historically, the population of Morocco doubled in 60 years from 5 million at the beginning of the 20th century to 11.6 million in 1960, then it tripled from 11.6 million to 33.8 million in 2014. According to the General Population and Housing Census (GPHC), the number of households has reached 9,275,038 according to the GPHC 2024 versus 7,313,806 in 2014 GPHC. In 2017 the urbanization rate in Morocco was 62%, with Higher Planning Commission (HPC) projections foreseeing that it will increase to 73% 2050. Despite the increase in population since 1960, the annual population growth rate of has shown a decreasing trend from 2.6% between 1960 and 1971 to 1.25% between 2004 and 2014 and 0.85% between 2014 and 2024. Conversely, housing production is increasing annually at a rate of 1.1% between 2010 and 2020 and should reach 0.9% between 2020 and 2030. HPC (Higher Planning Commission)The extension of urban zones could be spread over areas threatened by hazards. It is therefore important to strengthen the resilience of this area and its residents in order to reduce the damage and losses caused by climatic hazards.

According to the results of the GPHC conducted in 2024, the population of the TTA region is about 4,030,222 people, representing 10.9% of the national population in 2024. It is one of the most populated regions of Morocco with a relatively high density of 233.5 people/km² in 2024. This region has experienced an accelerated urbanization trend resulting from the strong growth of its urban population, following the development of commercial, industrial and administrative activities, essentially in all major cities of the region. According to the GPHC, the urban area in the region was home to 2,638,815 inhabitants in 2024, compared to 1,391,407 in rural areas. Thus, 107.1% of the regional population growth during the period 2014-2024 is due to the increase in the urban population. The annual urban population growth rate is 2.29% compared to a slight decrease of

0.24% in rural areas. In addition to the natural population growth in this region, this increase is also due to the extension of the urban perimeters of municipalities and districts, and by the creation of new urban centers in rural areas during the period 2004-2014. Thus, the urbanization rate in the region reached 59.9% in 2014 against 60.4% at the national level, with remarkable differences between provinces and prefectures. Indeed, the prefectures of Tanger-Assilah and M'diq-Fnideq are the most urbanized with urbanization rates of 94.3% each (GPHC, 2014). In terms of shantytowns in urban areas, Chefchaouen province includes 1.4% of shantytown or summary-type households. This percentage is around 1.1% in the province of Tétouan.

Economic context

The building and public works sector contributes significantly to Morocco's economic growth by participating in 6.2% of total value added at current prices. It employed more than one million people in 2017, or 9.8% of the employed population. Indeed, housing production is evolving in parallel with the growth of Morocco's population.

Natural population growth, the creation of new urban centers, the development of industry and services in cities, and the rural migration in search of jobs in urban areas explain the increase in the urbanization rate, which is reflected in the increase in demand for housing and tertiary buildings. In 2016, the number of building permits reached 110,677 with a built-up area of 5,986,031 m². However, the real estate sector experienced a 2.54% decline in production and construction in 2017 compared to 2008⁶. In parallel to this decline, cement sales have also decreased and have experienced an average growth of -0.70% between 2009 and 2017 varying between 14.52 Mtonnes in 2009 and 13.79 Mtonnes in 2017.

The housing sector contributes to the growth of the banking sector, which recorded an outstanding housing credit of 211.9 billion DH (approx. 21.2 billion USD) at the end of May 2019. This is due to the fact that the housing sector has an attractive financial framework and incentives for investors and the middle-income population due to the creation of the guarantee funds including:

- FOGARIM Guarantee Fund which guarantees credits accorded by banking establishments for the financing of housing acquisition for the benefit of low or non-regular income populations.
- FOGALOGUE Guarantee Fund which guarantees bank loans for financing the acquisition of housing or land and/or its construction, in favor of the middle class and Moroccans Residing Abroad (MRA).
- FOGALEF guarantee fund which guarantees loans accorded by banking institutions for the financing of the accession to property of the members of the Mohammed VI Foundation for the Promotion of Social Works of Education-Training.

Project target area and beneficiaries

The project will be carried out in the TTA Region, in specific districts that are vulnerable and highly exposed to climate hazards. The districts were identified according to a risk assessment study that was carried out within the development of Habitat Climate Plan, and according to a participatory approach involving all stakeholders. The council of the region and presidents of the three districts expressed their interest and their engagements.

➤ Province of Tetouan

The province of Tetouan is located in the extreme north of Morocco and covers an area of 2,541 km². It is bordered to the north by the prefecture of M'diq-Fnideq and the province of Fahs Anjra, to the east by the Mediterranean Sea, to the south by the provinces of Chefchaouen and Larache, and to the west by the prefecture of Tanger-Assilah. Characterized by a predominantly mountainous landscape with a rugged and harsh topography, the province of Tetouan has a

Mediterranean climate and experiences a wet and rainy season with an average interannual rainfall exceeding 700 mm, while temperatures vary on average between 5.3° and 32.9°. According to the latest administrative division, the province of Tetouan is composed of 2 municipalities (Tetouan and Oued Laou) and two rural circles grouping 8 caïdats and 20 rural communes.

In 2014, the population of the province of Tetouan was 550,374 inhabitants (49.8% females) representing 15.5% of the population of the TTA Region and 1.6% of the national population. Thus, the province of Tetouan stands out as the second most populated province/prefecture in the region (RGPH 2014). Based on the 2019 population census, the province of Tetouan had a population of 573,784 inhabitants, representing 15.2% of the regional population. The urban population amounts to 416,988 inhabitants, reflecting an urbanization rate of 72.7%, against 61.8% in the region (HCP).

In this province, the project focuses on the commune of Tetouan, which is highly exposed to climate change risks including flooding, drought, marine submersion and heat and cold waves (based on the multi-criteria analysis in Annex 2). In addition, it is characterized by a large number of households and a very high density of buildings including commercial buildings. Within this municipality, the Coelma neighborhood has been chosen for the scope of this project as it is highly exposed to the risk of flooding.



Fig 4. Area at risk of flooding in the Municipality of Tetouan (Coelma neighborhood)

➤ **Province of Chefchaouen**

Located in northwest Morocco, on the massif of the country of Jebala, the province of Chefchaouen covers an area of 3,443 km². It is bordered to the northwest by the province of Tetouan, to the northeast by the Mediterranean Sea with a coastline of 120 km, to the east by the province of Al Hoceima, to the southeast by the province of Taounate, to the southwest by the province of Ouezzane and to the west by the province of Larache. The province of Chefchaouen is characterized by its mountains formed of siliceous and limestone layers with very uneven peaks sometimes exceeding 2000m. Located at 600m above sea level, Chefchaouen is characterized by a Mediterranean climate experiencing rainy and cool winters with an average annual rainfall of 880 mm and an average annual temperature of 16.6 °C. According to the latest administrative division of 2009, the province of Chefchaouen consists of a commune (Chefchaouen) and 5 circles grouping 12 caïdats and 27 rural communes. In 2014, the population of the province of Chefchaouen was 457,432 inhabitants (48.3% females) or about 12.8% of the total population of the TTA region and 1.3% of the national population. Compared to 2004, this population has recorded an average annual increase of 0.79% with a provincial urbanization rate of 12.5% (RGPH, 2014).

According to the results of the multi-criteria analysis (Annex 2) conducted at the level of the TTA region, Chefchaouen is highly exposed to climate change risks including drought, landslides and heat and cold waves. It is also characterized by a large number of households with a very high multidimensional poverty rate and a moderate building density. Within this municipality, the Ain Haouzi neighborhood has been chosen for the scope of this project as it is highly exposed to the risk of landslides.



Fig 5. Areas at risk of landslides in the Municipality of Chefchaouen (Ain Haouzi neighborhood)

➤ Province of Al Hoceima

The province of Al Hoceima is located in the extreme north of Morocco and covers an area of 3,550Km². It is bordered to the west by the province of Chefchaouen, to the north by the Mediterranean Sea, to the east by the province of Driouch and to the south by the provinces of Taza and Taounate. Due to its location in the center of the Rif Mountain range, the Al Hoceima is characterized by a Mediterranean climate, where rainfall varies between 300mm and 1000mm, and temperature varies between 10°C and 30°C.

According to the latest administrative division, the province of Al Hoceima consists of 5 communes (Al Hoceima, Bni Bouayach, Imzouren, Targuist and Ajdir) and 4 circles comprising 17 caïdats and 31 rural communes. In 2014, Al Hoceima's population was 399,654 inhabitants (50.1% females) or about 11.2% of the total population of the TTA region and 1.2% of the national population (RGPH, 2014). This population grew at an average annual rate of 0.1% during the intercensal period 2004-2014 and the provincial urbanization rate was 34.4%.

According to the multi-criteria analysis (Annex 2) Al Hoceima is highly exposed to climate change risks including droughts, landslides and heat and cold waves. In addition, it is characterized by a very large number of households and a very high building density. Within this municipality, the Tassendayt neighborhood has been chosen for the scope of this project as it is highly exposed to the risk of landslides.



Fig 6. Area at risk of landslides in the municipality of Al Hoceima (Tassendayt neighborhood)

➤ **Project beneficiaries**

The main project beneficiaries are residents of urban residential areas. However, local communities, municipal authorities and regional housing departments will also benefit by strengthening their capacity to manage climate risks. They will also benefit from reduced costs linked to climate impacts, hazard-informed urban planning, and increased citizen confidence. In addition to these direct beneficiaries, several other stakeholders will also benefit from the project, this includes:

- **Keys stakeholders:** Ministry of Interior; Wilaya: Regional Council; Ministry of National Territory, Urban Planning, Housing and City Policy; Regional Inspectorate of Town Planning, Architecture and Territory Planning; Urban Agencies; Territorial communities; Regional Meteorological Department; Regional Environment Department; and Regional Department of the National Agency for Water and Forests.
- **Secondary stakeholders** include Moroccan Agency for Energy Efficiency; Regional Department of Equipment, Transport and Logistics; Private sector (construction companies, energy companies, etc.); Civil society and NGOs; and Insurance companies.
- It worth mentioning that the list of stakeholders from the housing sector covers several entities: the National Council of the Order of Architects and its regional representation in the TTA region; the Moroccan Federation of Consulting and Engineering and its regional representation in the TTA region, encompassing engineering and consulting firms; the Federation of Construction Materials Industries, which includes construction material producers; the National Federation of Real Estate Developers and its regional representation in the TTA region; the National Federation of Building and Public Works and its regional representation, which includes construction companies; and the National Order of Surveying Engineers. These federations and professional associations will mobilize professionals in the region to participate in the project (architectural design, technical studies, production of adapted construction materials, implementation of solutions, etc.). They will also take part in training and awareness-raising actions planned within the project framework and contribute to the development of solutions and the project's sustainability. Existing research institutes in the region, such as Tétouan National School of Architecture, that have conducted studies on NbS or climate change adaptation will participate in studies, trainings, and awareness-raising actions and contribute to the development and sustainability of solutions.

Project/Programme Objectives:

Overall objective

The project's overall objective is to strengthen the resilience of the housing sector to climate change throughout the TTA Region.

Sub-objectives

1. Strengthening urban resilience to climate change in vulnerable residential neighborhoods in the TTA Region

This is in line with the following AF outcomes:

- Outcome 1: Reduced exposure to climate-related hazards and threats

2. Awareness, communication and capacity building

This is in line with the following AF outcomes:

- Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level
- Outcome 4: Increased adaptive capacity of communities to respond to the impacts of climate change.

3. Monitoring, evaluation and capitalization of experience in adaptation

This is in line with the following AF outcomes:

- Outcome 7: Improved policies and regulations that promote and enforce resilience measures
- Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies

Although the project's main aim is to reinforce the residential neighborhoods resilience, commercial buildings located in these neighbourhoods are exposed to the same climatic hazards and suffer similar impacts. Thus, the projects/programs envisaged to reduce climate risks will be designed to apply to both residential and commercial buildings, ensuring that climate issues are fully addressed at the scale of the targeted neighbourhoods.

Project/Programme Components and Financing:

The proposed project will strengthen urban climate resilience by working with various levels of government and stakeholders and ensuring strong participation, in particular, of the most marginalized and vulnerable groups, in all its phases – from conception to operations, and evaluation. The main activities will take place in the provinces of Tetouan, Chechaouen and Al Hoceima which are highly vulnerable to climate change. These provinces were selected in coordination with the national and local authorities with participation of local communities, according to the following criteria: exposure to climatic hazards, total number of households, multidimensional poverty rate and building density (see annex 2). The selection of the municipalities was based on the same criteria. The identification of marginalized and vulnerable groups, as well as Indigenous peoples in the targeted areas, was carried out through a participatory approach in coordination with national and local authorities. These criteria ensured a focus on areas with high vulnerability and significant needs.

At the design stage, consultations were held with local communities, including marginalized and vulnerable groups, to ensure their active involvement and input. This participatory process included discussions with local authorities and community representatives to identify specific needs and priorities, ensuring cultural appropriateness and alignment with local realities. The concerns and interests of these groups were integrated into the project design through the co-selection of activities by communities and local authorities. This approach guaranteed that the proposed interventions address their specific vulnerabilities while promoting environmental, social, and economic benefits. These efforts reflect a strong commitment to inclusivity, ensuring that the project supports and uplifts the most disadvantaged groups in the targeted areas.

The project components and financing details are listed in the table below.

Table 1: Project components and financing

Project/Programme Components	Expected Outcomes	Expected Outputs	Amount (US\$)
1. Strengthening urban resilience to climate change in vulnerable residential neighborhoods	1.1 Strengthened urban resilience in vulnerable residential neighborhoods	1.1.1 Urban analysis, identification and prioritization of residential neighborhoods are realized, basing on vulnerability diagnosis and risk assessment related to CC at communal level. 1.1.2 Buildings resilience is reinforced in response to flood, landslides, in vulnerable neighborhoods in the three communes. 1.1.3 Integrated Nature based Solutions (NbS) to reduce run-off and adapt to increasing riverine floods and altered rain patterns are developed and implemented in the three communes, in collaboration with local stakeholders. 1.1.4 Integrated Nature based Solutions (NbS) to reinforce soil stability and reduce landslide are developed and implemented in the three communes, in collaboration with local stakeholders.	6,020,000
2. Awareness, communication, and capacity building	2.1 Stakeholders are fully informed and have strengthened capacity to cope with climate change risks	2.1.1 Climate change resilient residential neighborhood reference framework is developed. 2.1.2 Climate change awareness materials for different targets are developed. 2.1.3 A technical and financial guide for implementing NbS at neighborhood level is developed. 2.1.4 Workshops are organized for community groups and government officials on NbS implementation at neighborhood level. 2.1.5 Training sessions are organized for community groups and government	950,000

		<p>officials on NbS implementation at neighborhood level.</p> <p>2.1.6 Field visits are organized for community groups and government officials on housing sector adaptation actions.</p> <p>2.1.7 A strategic communication plan is developed.</p>	
3. Monitoring, evaluation, and capitalization of experience in adaptation	3.1 Enhanced knowledge management and sharing of information for increased climate resilience in Morocco's neighborhoods	<p>3.1.1 Climate change knowledge management database is created for the housing sector.</p> <p>3.1.2 Project activities and results are captured and disseminated through appropriate information for the beneficiaries, partners and stakeholders and the public in general.</p> <p>3.1.3 An Adaptation monitoring and evaluation system is developed.</p>	750,000,
4. Total component			7,720,000
5. Project Execution cost (IE fees 8,5%)			733,400
6. Total Project Cost			8,453,400
7. Project Cycle Management Fee charged by the Implementing Entity 9,5% (if applicable)			718,539
Amount of Financing Requested			9,171,939

Table 2: Main milestones for the project

Milestones	Expected Dates
Start of Project/Programme Implementation	September 2025
Mid-term Review (if planned)	February 2027
Project/Programme Closing	June 2028
Terminal Evaluation	August 2028

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Project/programme components

The three municipalities selected for this project are highly exposed to risks related to climate change. They are subject to several climatic hazards, such as floods, landslides, marine submersions, and forest fires. In particular, the building sector is one of the sectors highly exposed to climate change and is expected to face multiple impacts related to the gradual variability of climatic conditions (increased precipitation, rising temperatures, etc.). This sector is also confronted with extreme weather events and climate hazards that have become increasingly frequent and intense in recent years. These extremes and climatic hazards, such as droughts, floods, heat waves, landslides, etc., have a significant impact and cause considerable damage to the construction sector. These municipalities also have socio-economic characteristics with low adaptive capacity, such as the number of households, the poverty rate and the population density.

Based on this observation, it becomes necessary to act at the level of these localities in order to protect them against the harmful effects of climatic hazards. To achieve the objective of the project, "Strengthening the resilience of the housing sector to climate change in the TTA Region", the project is based on a comprehensive and participatory approach combining capacity building of local actors, the use of nature-based solutions and communication and awareness of local communities.

The actions proposed under this project have been designed to target the poorest and most vulnerable neighborhoods in one of the most vulnerable regions of Morocco to climate change. To achieve this, an interdependent set of soft and hard measures has been proposed to ensure sustainable resilience building at the household and community level. The soft measures focus on increasing community capacity and the capacity of officials and institutional systems at the sub-national level. All capacity building activities are designed to support, enhance and sustain the "hard" investments that will be made by the project. Such an approach is also consistent with Morocco's nationally determined contribution to "promote and enhance community adaptive capacity, including through community-based adaptation actions (...) and to "strengthen technical and institutional capacities (...) and integration of climate change into sectoral and sub-sectoral development plans". The heavy investments made by the project will concern all the infrastructure and ecosystems for protection and small-scale basic services. These investments have been fully identified and costed and have been subject to an initial environmental and social safeguard screening. They are presented briefly below. The specific needs of women, people with disabilities, and youth will be taken into account at all stages of the project. Extensive consultations were conducted during the formulation of the project proposal, with stakeholders and representative of the community (presidents of the three communes). More information and details are shown in Part II, Section H and in Annex 1, while implementation will use, to the extent possible, the grassroots process, where community groups are trained and supported at all stages of the project and through which communities participate in project implementation and monitoring. At the community level, women will have a decisive interest in the implementation of the project. They will contribute equally to their work at the community level and will be encouraged to participate in physical labor. The project supports concrete adaptation and resilience actions throughout its three components by:

Component 1. Strengthening urban resilience to climate change in vulnerable neighborhoods in the TTA Region In line with AF outcome 1, this component will focus on developing concrete actions to increase the resilience of the most vulnerable neighborhoods in the three municipalities selected for this project, through:

- 1.1.1 Urban analysis, identification and prioritization of residential neighborhoods are realized, based on vulnerability diagnosis and risk assessment related to CC at communal level.
- 1.1.2 Buildings resilience is reinforced in response to floods, landslides, in vulnerable neighborhoods in the three communes.
- 1.1.3 Integrated Nature based Solutions (NbS) to reduce run-off and adapt to increasing riverine floods and altered rain patterns are developed and implemented in the three communes, in collaboration with local stakeholders.
- 1.1.4 Integrated

Nature based Solutions (NbS) to reinforce soil stability and reduce landslides are developed and implemented in the three communes, in collaboration with local stakeholders. These interventions will be implemented taking in consideration the main regulations that are related to climate change adaptation in the housing sector, such as the Seismic Construction Regulation RPS 2000 "2011 Version", the Seismic Regulation for Earth Construction "RPCT", the Thermal Regulation for Buildings in Morocco (RTCM). Vulnerability and climate risk assessment was conducted in the targeted region at small scale (regional scale) within the context of the development of the Habitat Climate Plan (MATNUHPV, 2016). The project will build on this assessment and zoom in on the targeted provinces to choose the most vulnerable municipalities. This will involve using detailed and high scale data to refine the findings at the provincial level to ensure that the project is tailored to the specific climate risks and vulnerabilities of each area, thereby enhancing the effectiveness of its implementation. The result of the vulnerability and climate risk, including the figures 1, 2, 3, was used during the consultancy process to raise awareness among stakeholders of the risks posed by climate change across the region. While the result of this assessment was of key importance, it is insufficient for the purpose and scale of the project (neighborhood scale). In this sense, A detailed and high scale assessment of vulnerability and risks related to climate change will be essential for this component and will identify the degree of vulnerability of the neighborhoods in the three selected communes. The prioritization of neighborhoods will be reassessed based on the results of this assessment. In other words, this component will allow local authorities, communities and households to identify the most vulnerable neighborhoods and infrastructures exposed to risks related to climate change, as well as to prioritize adaptation actions to protect these areas. Based on the detailed and high scale assessment of vulnerability diagnosis and risks assessment related to climate change, the project will implement concrete actions to strengthen the resilience of the most vulnerable buildings to climate change. This will be achieved through several activities, including the rehabilitation of existing vulnerable infrastructure and the adaptation of new buildings in targeted at-risk neighborhoods. Measures include strengthening foundations and structures to make them resilient to flooding and landslides, installing appropriate and efficient drainage systems, and using materials adapted to local climate risks. These interventions will be guided by national planning regulations and international climate adaptation standards, ensuring their compliance with safety and sustainability requirements. The specific activities to strengthen building resilience also include: Improving building waterproofing: Implementation of waterproofing solutions for roofs, walls and windows, to prevent water infiltration during periods of heavy rain. Waterproof membranes and water-resistant materials will be used. Strengthening drainage infrastructure: In addition to conventional drainage systems, innovative features such as water retention basins, rain gardens and green walls will be installed to improve runoff absorption and reduce the risk of flooding. Renovation of load-bearing structures: Work to strengthen the load-bearing elements of existing buildings, including load-bearing walls and foundations, to better withstand landslides and other extreme climatic hazards. Creation of rainwater management systems: Installation of rainwater harvesting devices such as cisterns and tanks to reduce pressure on drainage systems and provide an alternative water source. Training local craftsmen: Practical workshops will be organized to train local builders in climate-resilient construction techniques, encouraging the dissemination of best practices and the creation of solutions adapted to local contexts. Strengthening urban resilience to climate change in vulnerable residential neighborhoods will be achieved through the integration of nature-based solutions (NbS). Nature-based solutions (NbS) are ecosystem management approaches that aim to solve environmental problems, build resilience to climate change, and promote sustainable development by drawing on the characteristics and processes of nature. These solutions capitalize on the ecosystem services provided by nature to achieve specific objectives. Within this project, NbS will help to reduce run-off and adapt to increased river flooding and changing rainfall patterns. The development and implementation of these actions in the three communes will be carried out in close collaboration with local stakeholders.

In this context, integrated NbS to reduce run-off and adapt to increasing riverine floods and altered rain patterns activities cover the establishment of infrastructure combining green and gray

solutions to manage river flooding and runoff in the district of the municipality of Tetouan. This includes the creation of **biological drainage channels** to channel rainwater, the development of **rain gardens to promote water infiltration** and filtration, and the installation of green infrastructure such as green roofs and absorbent green spaces. They also include the construction of river flood protection dikes. These initiatives aim to reduce the climate vulnerability of the targeted neighborhood by reducing the risk of flooding, improving water quality, and building community resilience to climate change. Expected results include a reduction in flood damage, an improvement in the quality of life of the residents of the targeted neighborhood and an increased awareness of the benefits of NbS.

Integrated NbS to reinforce soil stability and reduce landslide include the planting of plant species adapted to local conditions, with deep roots and fast growth, to stabilize vulnerable slopes, combined with the installation of rainwater harvesting systems in the two most vulnerable neighborhoods of the communes of Chefchaouen and Al Hoceima. They also include the construction of hedgerows to reduce soil erosion caused by runoff and promote water infiltration. Expected results include a reduction in the risk of erosion and landslides, improved resilience of targeted neighborhoods, and increased protection of downstream homes and infrastructure. These actions contribute to reducing climate vulnerabilities by ensuring sustainable land and water management and adaptation of communities to the impacts of climate change.

The sustainability of these interventions is guaranteed by their alignment with strategies and plans already launched (e.g., the Nationally Determined Contribution, the National Strategic Adaptation Plan, the National Climate Plan, the Regional Climate Plan, the Climate Change Adaptation Plan for the Housing Sector, etc.) and housing programs (e.g., Cities Without Slums, program to address dangerous housing, urban upgrading programs, etc.). Thus, the proposed adaptation actions are integrated into ongoing and projected plans and programs related to adaptation and housing, both at the national and regional levels. Furthermore, the involvement of all stakeholders and the training and awareness-raising actions planned within this project will contribute to its sustainability in the region and nationwide.

In addition to that, to ensure the long-term sustainability of proposed adaptation measures, such as building resilience and integrating nature-based solutions (NbS), it is essential to promote strong local ownership and ongoing community engagement. This involves training communities, including women and vulnerable groups, to acquire the skills they need to maintain infrastructure. In addition, local risk management committees will be set up to monitor and maintain these infrastructures. Finally, regular monitoring will ensure the effectiveness and inclusiveness of the measures taken, by ensuring that all voices, especially those of women, are included in the governance and management of these adaptation projects.

Component 2. Awareness, communication, and capacity building

In line with AF outcomes 2 and 3, this component aims to raise awareness among local communities, as well as local and national authorities on the risks related to climate change in the housing sector and the necessary adaptation measures. It also focuses on communication and capacity building of the actors concerned with the project, through:

- 2.1.1 Climate change resilient residential neighborhood reference framework is developed.
- 2.1.2 Climate change awareness materials for different targets are developed.
- 2.1.3 A technical and financial guide for implementing NbS at neighborhood level is developed.
- 2.1.4 Workshops are organized for community groups and government officials on NbS implementation at neighborhood level: These workshops aim to raise awareness and mobilize community groups and government officials on the concepts and benefits of Nature-Based Solutions at the neighborhood level. They are interactive and participatory, allowing for teamwork and identifying challenges and opportunities for the implementation of NbS together. These workshops target a wider audience to generate engagement and understanding from all stakeholders. The expected results include increased awareness and effective buy-in from all stakeholders.

- 2.1.5 Training sessions are organized for community groups and government officials on NbS implementation at neighborhood level. These training sessions focus on building the technical capacity of participants, providing them with knowledge, practical skills, and methodologies to effectively plan, implement, and evaluate NbS. They target more relevant key actors who will play an important role in the implementation of the different project activities. Expected results include enhanced expertise to ensure the effectiveness and sustainability of the NbS measures that will be implemented.
- 2.1.6 Field visits are organized for community groups and government officials on housing sector adaptation actions.
- 2.1.7 A strategic communication plan is developed.

The Capacity building of national, regional and local actors will be achieved through the organization of workshops, field visits and training sessions, and by developing awareness materials for each of the target groups of actors (local communities, local and national authorities, the stakeholders involved in the project, in addition to the public, schoolchildren and NGOs).

Regarding the reference framework for the resilience of targeted neighborhoods, it consists of a set of guidelines, standards and best practices that will define the actions to be implemented to strengthen urban resilience in the face of climate change. This framework will include technical, environmental, social and economic aspects to ensure effective adaptation to climate risks specific to the concerned neighborhoods. The framework will be developed in consultation with the various stakeholders involved in the project.

Implementation of the framework will require adoption at the political level, notably by local authorities and national institutions, to ensure that the proposed measures are integrated into urban planning and climate risk management policies. This adoption will formalize the commitment of the concerned stakeholders to follow and apply the framework's recommendations in their urban planning and development projects. Finally, this framework could be used as a reference for the implementation of adaptation plans in other localities, thus contributing to the wider deployment of climate change resilience strategies.

The development of a technical and financial guide focused on the implementation of adaptation measures and the strengthening of the resilience of the housing sector, will allow the various actors to better target their investments and thus target priority actions for adaptation to climate change.

Aside from that, several types of workshops and training sessions will be organized within this component. This includes:

- Training of trainers workshops: these workshops are aimed at professionals, representatives of regional departments and NGOs. The aim is to build their capacities and provide them with the support they need to deliver training courses on strengthening the climate change resilience of neighborhoods within their organisations;
- Workshops are organized for community groups and government officials on NbS implementation at neighborhood level: These workshops aim to raise awareness and mobilize community groups and government officials on the concepts and benefits of NbS at the neighborhood level. They are interactive and participatory, allowing for teamwork and identifying challenges and opportunities for the implementation of NbS together. These workshops target a wider audience to generate engagement and understanding from all stakeholders. The expected results include increased awareness and effective buy-in from all stakeholders.
- Training sessions are organized for community groups and government officials on NbS implementation at neighborhood level: The training sessions focus on building the technical capacity of participants, providing them with knowledge, practical skills, and methodologies to effectively plan, implement, and evaluate NbS. They target more relevant key actors who will play an important role in the execution of the different project activities. The expected results

include enhanced expertise to ensure the effectiveness and sustainability of the NbS initiatives that will be implemented.

Communication is an essential element for disseminating information about the project and ensuring appropriation of the adaptation actions proposed for the resilience of communities to climate change and the strengthening of the capacities of actors. To this end, a strategic communication plan will be developed to facilitate the sensitization of local communities and local and national authorities on the risks related to climate change in the housing sector and the adaptation measures necessary for its resilience.

Component 3. Monitoring, evaluation, and capitalization of experience in adaptation

This component will ensure that the project is fully transparent, and all stakeholders are informed of the project's outputs and outcomes, as well as have access to replicable adaptation experiences, through:

- 3.1.1 Climate change knowledge management database is created for the housing sector.
- 3.1.2 Project activities and results are captured and disseminated through appropriate information for the beneficiaries, partners, stakeholders and the general public.
- 3.1.3 An adaptation monitoring and evaluation system is developed.

This database will include the following modules:

Module 1: A directory of resilient neighborhoods, which will compile technical data sheets on nature-based solutions implemented within the study framework.

Module 2: A repository of technical guides and awareness guides intended for public institutions, municipalities, NGOs, and schoolchildren. The technical guides will outline the different steps for implementing nature-based solutions, complementing the awareness guides primarily designed for the general public and schoolchildren.

Module 3: Illustrated guides on methods for assessing vulnerabilities and risks related to climate change.

Module 4: Climate data, including temperature, precipitation, wind, climate hazards, extreme events, key issues, damages, and losses.

Module 5: Auxiliary data, encompassing all supplementary data collected as part of the study.

The proposed *climate change knowledge database for the housing sector* will be a centralized platform created, hosted and managed by the Regional Directorate of Housing. It will serve as a repository for information, data, and resources specifically focused on the intersection of climate change and the housing sector, addressing both adaptation and mitigation aspects. This database will build upon and complement existing repositories by ensuring integration and alignment with relevant tools, resources and national and regional systems, including the SIREDD, which is currently being enhanced to function as a system for monitoring and evaluating climate change adaptation efforts. The database will act as a key component in bridging housing sector policies with national priorities, such as the country's Nationally Determined Contribution (NDC) and National Adaptation Strategy, by providing tailored and actionable insights for policymakers and stakeholders. The maintenance and update of the platform will be supported through partnerships with relevant national and international organizations, alongside regular funding allocations. This database will ultimately serve as a dynamic tool for advancing climate-resilient housing policies and practices while supporting broader national climate objectives.

The monitoring and evaluation (M&E) system is an indispensable tool when it comes to implementing a climate change adaptation project. The main activities covered include:

- Setting up the M&E system: A monitoring and evaluation system will be designed with SMARTIE indicators to measure the project's progress and impacts. Reliable data collection mechanisms will be put in place to guarantee the quality of information;

- Capitalizing on experience: Lessons learned from actions will be documented to improve adaptation measures. A sector-specific knowledge base will gather best practices and innovative tools for dissemination.
- Stakeholder engagement: Coordination between national, regional, and local levels will be strengthened, with a clear division of responsibilities and effective mobilization of resources.
- Dissemination of results: Modalities for sharing data and analyses will be developed to inform decision-makers, technicians, and local communities, promoting transparency and the use of results.

Monitoring will be done through indicators to measure the progress of the project. These indicators must be SMARTIE (Specific, Measurable, Acceptable, Realistic, Timely, IT-Ready, and Equity-informed) and therefore carefully chosen. They may be intended to assess the impacts on the vulnerability of the housing sector, as well as social or economic indicators to ensure a consistent monitoring system that will make it possible to assess the efficiency of the project as a whole, while ensuring a management mode that promotes continuous improvement and the achievement of the co-benefits of sustainable development (economic, social, and environmental). The M&E system will be implemented by designated individuals, along with an identification of the procedure for obtaining data to ensure their reliability and quality, as well as the definition of the modalities for disseminating the data to the relevant actors once processed.

The development of this monitoring and evaluation system will be preceded by the creation of a knowledge management database on climate change for the housing sector. In addition, this component will focus on capitalizing on experiences in adapting the housing sector to climate change. The lessons learnt from these different experiences will be used to formulate recommendations for the effective implementation of adaptation actions.

The tools and methodologies used by this project can be replicated and scaled up in other regions of Morocco as follows:

- **Strengthening urban resilience:**

- The employed vulnerability diagnosis and risk assessment methodologies can be replicated to identify and prioritize neighborhoods in other regions facing similar risks;
- The NbS implemented to reduce runoff, adapt to fluvial flooding and enhance soil stability provide adaptable models for other communes, with measures tailored to local contexts.

- **Capacity building and stakeholder engagement:**

- The development of a reference framework for climate-resilient residential neighborhoods and technical guides creates standardized tools for regional adaptation planning;
- Training sessions, workshops and field visits build the capacity of community groups and government officials, enabling them to replicate best practices in other regions of Morocco;
- Strategic communication and awareness-raising campaigns improve understanding of climate adaptation issues. They provide transferable tools and approaches to promote climate adaptation in other regions, facilitating the implementation of proposed solutions on a national scale.

- **Knowledge management and dissemination of results:**

- A centralized database on climate change for the housing sector consolidates lessons learned, making data and tools accessible for wider application;
- Documentation and dissemination of project activities and results enable other regions to build on proven approaches and adapt them to their specific contexts;
- The adaptation monitoring and evaluation system provides a framework for measuring progress and enabling other regions to evaluate and refine their initiatives effectively.

B. Economic, social and environmental benefits

In order to address climate change risks in the target areas, this project aims to make the most vulnerable groups, including women and youth, more resilient and potentially avoid the negative environmental and socio-economic impacts of climate change. During the development and implementation of the project, a participatory approach will be adopted to identify specific needs and possible concerns related to the proposed interventions. Participatory assessment, planning and decision-making processes to be adopted during project preparation and implementation would help to avoid/mitigate potential negative impacts.

Quantifiable benefits could include the number of neighborhoods safeguarded, reduction in flood-prone areas, jobs created through project activities, and increased community awareness as measured through workshops and training participation. The table below details more benefits.

Table 3: Economic, Social, and Environmental benefits

Type of benefits	Baseline	With/after project
Economic	<ul style="list-style-type: none"> • Regular floods and landslides result in livelihood and economic and household losses and damages to community infrastructure and livelihood options • Informal urban settlements are fast growing and are characterized by high density and lack of basic and resilient infrastructure. Additionally, inhabitants have limited livelihood options. 	<ul style="list-style-type: none"> • Number of buildings, including those owned and/or inhabited by urban poor, vulnerable to the impacts of climate change-induced floods and landslides is reduced because of building reinforcement activities planned under output 1.1.2. • Job opportunities targeting the local communities, including vulnerable groups and urban poor, are availed as a result of the project activities under outputs 1.1.2, 1.1.3, and 1.1.4. • Quality of life and access to basic services and shelter is improved as a result of the rehabilitation of existing vulnerable infrastructure and the adaptation of new buildings in the targeted at-risk neighborhoods. This can be measured by quantifying the number of buildings rehabilitated/ built with appropriate adaptive measures and the number of beneficiaries of such activities, as well as the number of buildings benefiting from the rehabilitated/reinforced infrastructure. • Economic co-benefits are achieved through the implementation of integrated NbS aimed at the reduction of run-off and adaptation to increasing riverine floods and altered rain patterns and the reinforcement of soil stability and reduction of landslides (Outputs 1.1.3 and 1.1.4); for instance, number of green roofs, absorbent green spaces, raingardens, hedgerows that enhance the aesthetics of the target neighborhoods and improve water and air quality.

		<ul style="list-style-type: none"> • Disaster recovery costs for residents and municipalities are reduced as a result of the implementation of outputs 1.1.2, 1.1.3, and 1.1.4
Social	<ul style="list-style-type: none"> • Limited studies at the neighborhood levels make informed decision-making and adaptive measures less likely. • Lack of awareness about climate-related risks (e.g. floods, landslides) among the local community and limited knowledge on resilient construction methods among local actors result in limited autonomous adaptation measures. • Extreme weather events and climate change impacts such as floods, and landslides can increasingly be considered as co-drivers of poverty and compound social problems such as disease, sanitation, food security issues, community safety issues etc • Damage to infrastructure and property because of flooding has a disproportionate impact on the most vulnerable communities. 	<ul style="list-style-type: none"> • The most vulnerable neighborhoods and infrastructures are identified based on a detailed vulnerability diagnosis and risk assessment at the neighborhood scale. (Based on output 1.1.1). • Needs of and challenges faced by vulnerable and marginalized groups including women, children, people with disabilities, youth, the elderly, and urban poor are included and reflected in the project components based on the activities under output 1.1.1. A planning approach sensitive to marginalized and vulnerable groups, indigenous peoples and gender will ensure equal access to resilient infrastructure. • Local authorities, communities, and households' capacities are raised such that they are able to identify the most vulnerable neighborhoods and infrastructures exposed to risks related to climate change, as well as to prioritize adaptation actions to protect these areas. (Based on output 1.1.1 and the outputs of component 2). • Local craftsmen are trained in climate-resilient construction techniques, enhancing their livelihoods and building their capacities. (Based on the activities proposed under output 1.1.2). • Local authorities and local communities are more aware of the risks and impacts of climate change. (Based on outputs 1.1.1, 2.1.2, 2.1.7). • Local authorities and local communities have stronger knowledge of resilient infrastructure construction and maintenance techniques and are better equipped to undertake autonomous adaptation actions. (Based on outputs 2.2.1, 2.1.3, 2.1.4, 2.1.5, 2.1.6). • National, regional, and local actors are better equipped with knowledge and skills on climate adaptation in the housing sector. (Based on outputs 2.1.1, 2.1.2, and 2.1.3) - The climate change resilient residential neighborhood

		reference framework framework and technical and financial guide for implementing NbS at neighborhood level shall serve as valuable knowledge products that will help inform local authorities and national institutions. They shall also encourage the integration of the proposed measures into urban planning and climate risk management policies and projects and the allocation of investments and resources towards the upscaling and replication of such measures.
Environmental	<ul style="list-style-type: none"> • Rapid urban development increasingly leads to environmental degradation, land losses, increased waste production and energy use. Coupled with climate-change-induced floods and extreme weather events, this leads to environmental losses and exacerbated effects of flooding and landslides. • Extreme weather events and landslides cause soil erosion and land degradation. 	<ul style="list-style-type: none"> • Construction waste and debris are reduced as a result of the implementation of adaptation measures. This shall protect the environment by reducing contaminants and the amount of unrecyclable waste that goes to the landfills after each extreme weather event. This is in line with outputs 1.1.2, 1.1.3, and 1.1.4 • Groundwater is replenished and natural cycles are restored as a result of the implementation of integrated NbS that allow the infiltration of rainwater. (Output 1.1.3) • Soil erosion is reduced as a result of the integrated NbS aimed at soil stabilization and reduction of landslides. (Output 1.1.4) • Environmental degradation and losses resulting from the impacts of climate change are reduced as a result of informed and improved planning and preparedness for disasters. (Outputs 1.1.1, 2.1.2, 2.1.3, 2.1.6) • NbS and ecosystem-based adaptation in the urban environment are promoted, as stakeholders become more informed on these approaches. (Outputs 2.1.1, 2.1.3, 2.1.4, 2.1.5, 2.1.7) • Biodiversity is enhanced as a result of planting species adapted to local conditions, promoting natural cycles and attracting native fauna. (Outputs 1.1.3 and 1.1.4) • An alternative water source is provided through the use of rainwater harvesting systems as an alternative water source, also reducing pressure on the drainage systems. This can be measured by calculating the anticipated amounts of rain to be collected and diverted away from drainage infrastructure per year. (Output 1.1.2)

Social Benefits and Gender Considerations

The project targets the most vulnerable neighborhoods in a region highly susceptible to the impacts of climate change. Throughout the project's development and implementation, the needs of the local community, including marginalized and vulnerable groups, shall be sought after and considered. Through an in-depth urban analysis, vulnerability and risk assessments at the neighborhood scale (output 1.1.1), the project shall ensure the identification and prioritization of residential neighborhoods most at risk of climate change impacts, also mostly inhabited by marginalized groups. This comprehensive vulnerability diagnosis and risk assessment shall ensure the project promotes inclusivity and equity by prioritizing vulnerable neighborhoods and ensuring that women, marginalized groups, and low-income communities benefit from safer living conditions and enhanced adaptive capacities.

By implementing a combination of risk and vulnerability reduction measures aimed at local institutions, communities, and assets, particularly in vulnerable and poor urban areas, this project is expected to reduce climate-related economic, household, and livelihood losses, reduce the vulnerability of women, indigenous people, people with disabilities, and youth, and reduce environmental degradation.

The project shall follow a participatory approach, involving national, regional, and local authorities, local communities, and local craftsmen and construction workers. The involvement of the local community, and particularly vulnerable groups, throughout the project shall grant these stakeholders the opportunity to directly influence project activities and outcomes, thereby ensuring they reap direct benefits from the project. The proposed actions aim to reduce the impacts of floods and landslides on the local community and public and private assets, as well as strengthening the adaptive capacities of the beneficiaries and the target neighborhoods. Besides the hard interventions, the project also contains capacity building and awareness raising activities for the purpose of introducing new knowledge and stimulating behavior change. Component 2 of the project is designed to cater to different segments of the beneficiaries, with awareness raising and capacity building activities tailored to their profiles and needs, as is discussed in the description of the component's activities in Section A above.

Female population in the targeted municipalities is as follows: the female population represents 48.3% of the total population in Chefchaouen province, 49.8% in Tétouan province and 50.1% in Al Hoceima province. The female population in these provinces is particularly vulnerable to the risks associated with flooding, such as material damage and the economic losses it entails as well as health risks and the threat of loss of life. Their vulnerability is particularly attributable to their unemployment, which limits their ability to cope with the impacts of climate change and recover from the effects of extreme weather events. In addition, their limited access to economic resources and training opportunities exacerbates their vulnerability to climate risks.

Women's specific needs in the targeted municipalities include access to training to improve their employability, appropriate financing to undertake income-generating activities, and climate-resilient infrastructure to protect their livelihoods and households. However, the major challenges facing women include their under-representation in decision-making bodies, their limited access to land and financial resources, and restrictive socio-cultural norms.

To promote gender equality and inclusion, and in response to the above-mentioned needs and challenges, the following recommendations shall be taken into consideration during the design and planning of the project activities:

- Implement targeted training to improve women's skills in climate-resilient economic sectors, such as green entrepreneurship or adaptive technologies.
- Strengthen women's participation in decision-making processes through quotas or inclusive participatory mechanisms.
- Develop gender-sensitive policies that take into account the specific needs of men and

women in natural resource management, infrastructure and disaster response.

- Sensitize communities to the importance of gender equality, integrating men as allies in initiatives to strengthen inclusion.
- Monitor and evaluate the impact of projects using gender-sensitive indicators to ensure that they reduce existing gaps and do not create new inequalities.

Furthermore, the project is committed to promoting gender equality and women's empowerment as a core principle. Measures are in place to assess and manage potential risks related to gender dynamics, ensuring that the project complies with the AF's policies and safeguards. Through a monitoring and evaluation plan that reflects this commitment and through the inclusion of women in the job opportunities availed through the integrated NbS implementation and upkeep and the capacity-building activities.

Additionally, the project complies with the Gender Policy of the Adaptation Fund (AF) through the following points:

1. Gender-sensitive consultations: A participatory workshop was held to identify adaptation priorities and needs, taking into account specific gender-related vulnerabilities. Consultations were held with governments, NGOs, local communities and vulnerable groups, to integrate gender perspectives into the project.

2. Capacity building: The project includes actions to strengthen the capacities of national and sub-national actors to respond to climate risks, with monitoring of strengthened capacities, including by gender (number of men and women trained).

3. Social benefits of the project: The baseline situation indicates that flood damage disproportionately affects the most vulnerable communities. With the project, a planning approach sensitive to marginalized and vulnerable groups, indigenous peoples and gender considerations will ensure equal access to resilient infrastructure, helping to reduce inequalities and strengthen the resilience of vulnerable communities.

4. Environmental and social principles: The project must guarantee gender equality and women's empowerment, ensuring that appropriate measures are put in place to assess and manage potential impacts in this area.

Changing gender dynamics, in particular by empowering women and ensuring their equal participation in decision-making processes, can bring about lasting change in climate change adaptation. By promoting the inclusion of women in the planning and management of resilient infrastructure, the project contributes to improving community resilience. The active participation of women in adaptation-related activities means that the specific needs of different groups can be better addressed, enhancing the impact and sustainability of proposed solutions. This approach also promotes equal economic and social opportunities, creating a virtuous circle of sustainable development and gender equality.

Socially, the project will promote inclusivity and equity by prioritizing vulnerable neighborhoods based on a comprehensive vulnerability diagnosis and risk assessment, ensuring that women, marginalized groups, and low-income communities benefit from safer living conditions and enhanced adaptive capacities. *Environmental Benefits*

The project will mitigate the impacts of climate change by reducing runoff, stabilizing soil, and adapting to altered rainfall patterns through integrated NbS, contributing to ecological balance and biodiversity conservation. Besides the points mentioned in the table above, the adoption of local materials shall reduce the emissions associated with the project activities. Additionally, the use of local plants and plants adapted to the selected sites' conditions shall help in the stabilization of the soil and restoration of the natural rhythms and cycles in the site. Furthermore, the introduction of the integrated NbS such as rain gardens and green open areas shall contribute to enhanced public health.

Considerations for mitigation of negative impacts of project activities and potential risks that may hinder equitable benefit distribution

At the fully developed proposal stage, the project will address potential risks that could hinder equitable benefit distribution. Key risks include limited access to resources or decision-making processes for marginalized groups, unequal distribution of NbS benefits, and insufficient local capacities to sustain interventions. The project ensures the meaningful integration of women and vulnerable groups through a participatory and inclusive approach at all stages of planning and implementation. Community consultations and workshops will actively involve these groups in identifying priorities and designing interventions, ensuring their voices are heard. Gender-sensitive training sessions, field visits, and awareness campaigns will empower participants with knowledge and skills while addressing accessibility needs, such as flexible schedules and supportive services like childcare. The project will also create employment and leadership opportunities for women and marginalized groups in implementing Nature-based Solutions (NbS).

Benefits include safer living conditions in vulnerable neighborhoods, enhanced adaptive capacities, and economic empowerment through targeted initiatives. Gender-sensitive indicators, such as participation rates, job creation, leadership roles, and improved safety and resilience perceptions, will monitor and ensure equitable inclusion. To ensure project activities does not disproportionately impact vulnerable groups, the project will adopt several safeguards, as detailed in the paragraph below.

Activities will offer flexible participation options, such as sessions scheduled during non-working hours or near participants' communities, to accommodate diverse needs. Non-monetary incentives like skills training, certification, and public recognition will be provided to encourage engagement while fostering long-term benefits. Tailored capacity-building opportunities will empower marginalized groups, including women and persons with disabilities, to contribute meaningfully. Participation will remain entirely voluntary, with mechanisms to address concerns promptly. A robust monitoring system will assess the socioeconomic impacts, including income generation and time allocation, ensuring contributions are equitable and do not negatively affect livelihoods or adaptive capacities. These measures aim to foster inclusive and sustainable community engagement and mitigate risks that may hinder the equitable access to project benefits.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

Detailed costs per action / project activity will be provided during the full proposal phase, including cost effectiveness (cost per person). This can only be done once the project interventions are fully identified. The cost-effectiveness rational of possible project interventions is discussed in the table 4 below.

Table 4 Proposed adaptation actions' cost-effectiveness rationale

Proposed adaptation actions / outputs	Alternative actions and rationale why priority actions have been selected from a cost-effectiveness perspective
1.1 Strengthened urban resilience in vulnerable residential neighborhoods 1.1.1 Urban analysis, identification and prioritization of residential neighborhoods are realized, basing on vulnerability	Component 1 Through the implementation of interventions aimed at reinforcing buildings' resilience and integrated NbS aimed at reducing run-off and floods and enhancing communities' resilience, stabilizing soil and reducing incidents of landslides, the project shall reduce the anticipated costs of recovery and rehabilitation of buildings and infrastructure that may be damaged due to incidents of floods,

<p>diagnosis and risk assessment related to CC at communal level.</p> <p>1.1.2 Buildings resilience is reinforced in response to flood, landslides, in vulnerable neighborhoods in the three communes.</p> <p>1.1.3 Integrated Nature based Solutions (NbS) to reduce run-off and adapt to increasing riverine floods and altered rain patterns are developed and implemented in the three communes, in collaboration with local stakeholders.</p> <p>1.1.4 Integrated Nature based Solutions (NbS) to reinforce soil stability and reduce landslide are developed and implemented in the three communes, in collaboration with local stakeholders.</p>	<p>landslides, and extreme weather events. Additionally, the project aims to identify the most vulnerable neighbourhoods and marginalized groups such as urban poor and women and propose concrete and effective measures to reduce the impacts of climate hazards. The interventions proposed in this project will help reduce these anticipated costs, and relieve the most vulnerable beneficiaries of their burden.</p> <p>Alternatively, the identified climate hazards, floods and landslides, will cause economic losses in the form of destruction of infrastructure and buildings, besides the loss of livelihoods and potential loss of life. A no action (business as usual) scenario will result in progressively higher costs over time on account of damages and losses resulting from flood and landslides events. These costs, including health and recovery-related costs, will be severely impactful in particular on vulnerable groups, such as urban poor and inhabitants of informal urban settlements.</p> <p>Sub-component 1.1.2:</p> <p>The measures that will be implemented to strengthen the resilience of buildings to the risks of flooding and landslides include interventions such as the rehabilitation of existing infrastructure, the adaptation of new buildings and the installation of adapted drainage systems. These measures involve upfront costs related to the acquisition of construction and maintenance materials and labour. However, they can significantly reduce future financial losses due to natural disasters and improve the safety of residents in targeted neighbourhoods. Although the initial costs can be high, these interventions offer significant profitability through the reduction of future losses. Their effectiveness will also be enhanced through compliance with existing housing and development regulations and strict compliance with building standards in the targeted neighbourhoods.</p> <p>Additionally, the minimization of recovery costs helps enhance the quality of life and allows local authorities and local communities to direct the limited resources elsewhere, where investment is needed, contributing to the overall improvement of condition and enhancing their resilience.</p> <p>Sub-component 1.1.3</p> <p>Nature-based solutions aimed at reducing runoff and adapting to increased river flooding, such as rain gardens, biological drainage swales, green roofs, and protective dikes, have lower upfront costs compared to purely gray solutions. However, these solutions require the costs of</p>
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	<p>acquiring materials and regular maintenance. In return, they offer multiple benefits, including reduced urban flooding and related losses, better rainwater management, and other environmental benefits that justify its efficiency and cost-effectiveness. The involvement of the local authorities and communities throughout the project's development and implementation, and specifically in the outputs of Component 2, shall also ensure ownership and proper maintenance of the planned interventions. This shall ensure the upkeep of the solutions and cost-effectiveness and long-term sustainability.</p> <p>Sub-component 1.1.4</p> <p>The planting of plant species adapted to local conditions, the implementation of water harvesting systems, as well as the installation of hedgerows are economic and sustainable options. They help stabilize vulnerable soils and slopes, reduce erosion and contribute to sustainable water management. In addition, although the initial cost is significant, the long-term impact helps prevent landslides and protect infrastructure and communities. Thus, these interventions will avoid the future costs of the impacts of landslides in the targeted neighbourhoods.</p> <p>Additionally, Cost-effectiveness through community contributions</p> <p>The project will be implemented in close collaboration with local communities and government institutions. This partnership model will result in significant cost savings as communities and local partners will provide significant in-kind support. For example, communities will provide in-kind contributions by participating in infrastructure development. In addition, the community could benefit from capacity building and the recruitment of semi-skilled and skilled workers. On the side of the local communities, in-kind participation translates into direct involvement in the work and the organization of community groups for the maintenance of the infrastructure. Additionally, cheaper local labour helps reduce project costs.</p> <p>For government institutions, in-kind contributions include technical support (studies, supervision of works), the provision of seedlings, or the necessary tools, as well as the implementation of training to strengthen local capacities. Additionally, a reduction in taxes for the work financially supports the implementation of the project. As such, these combined contributions not only reduce costs, but also build local commitment and capacity while ensuring community and government support critical to the success of the project.</p>
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<p>2.1 Stakeholders are fully informed and have strengthened capacity to cope with climate change risks</p> <p>2.1.1 Climate change resilient residential neighborhood reference framework is developed.</p> <p>2.1.2 Climate change awareness materials for different targets are developed.</p> <p>2.1.3 A technical and financial guide for implementing NbS at neighborhood level is developed.</p> <p>2.1.4 Workshops are organized for community groups and government officials on NbS implementation at neighborhood level.</p> <p>2.1.5 Training sessions are organized for community groups and government officials on NbS implementation at neighborhood level.</p> <p>2.1.6 Field visits are organized for community groups and government officials on housing sector adaptation actions.</p> <p>2.1.7 A strategic communication plan is developed.</p>	<p>Awareness raising and capacity building activities are required to ensure the informed decision-making and action in order to cope with the identified climate change risks. The inclusion of the most vulnerable and marginalized groups including women, children, people with disabilities, youth, the elderly, and urban poor ensures their needs are properly met and encourages project ownership. This ensures the project's cost-effectiveness in responding to the needs of the stakeholders and supports it long-term sustainability.</p> <p>Skill building of beneficiaries and community leaders to operate, maintain and replicate interventions is required to sustain them.</p> <p>Proper dissemination of knowledge strengthens local authorities, communities, and households' capabilities in responding to the climate risks beyond the project's activities and shall pave the way for future interventions by the local actors in this regard.</p> <p>Training local craftsmen in climate-resilient construction techniques, enhances their livelihoods and builds their capacities, while simultaneously reducing project's labour costs. Furthermore, it paves the way for such techniques to be embedded in the construction practices of the targeted areas.</p> <p>The activities under Component 2 ensure that local authorities and local communities have stronger knowledge of resilient infrastructure construction and maintenance techniques and are better equipped to undertake autonomous adaptation actions. The financial guide will help local actors better direct investments and resources towards the upscaling and replication of such adaptive measures.</p> <p>Alternatively, local authorities and communities are left to grapple with the impacts of the identified risks on an ad-hoc basis, depending on the available resources at the time of an incident of floods and/or landslides.</p>
<p>3.1 Enhanced knowledge management and sharing of information for increased climate resilience in Morocco's neighborhoods</p> <p>3.1.1 Climate change knowledge management database is created for the housing sector.</p> <p>3.1.2 Project activities and results are captured and disseminated through</p>	<p>Capturing information through a proper monitoring and evaluation plan during implementation and the involvement of all identified stakeholders throughout the project's development and implementation shall enhance the resilience of the local actors and encourage the replication and upscaling of the project's impacts. The activities planned under this component not only serve to promote its long-term sustainability through keeping everyone involved informed but also enhance the overall resilience of the targeted neighborhoods and encourages future actions towards climate adaptation.</p>

<p>appropriate information for the beneficiaries, partners and stakeholders and the public in general.</p> <p>3.1.3 An Adaptation monitoring and evaluation system is developed.</p>	<p>Alternatively, the local actors are less informed on climate resilience, specifically in the area of buildings and neighborhoods' adaptation to the climate-induced risks of floods and landslides. As a result, the local actors remain improperly equipped to respond to these risks and plan accordingly.</p>
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Overall, the project aims to be cost-effective through : avoiding anticipated costs of climate change impacts; efficient project operations; community involvement/contribution ensuring sustainability of interventions; and selecting technical options to be implemented based on a criteria that considers nature-based solutions' appropriateness, cost, feasibility and resilience/sustainability.

Cost-effective and Efficient project operations

UN-Habitat works in a very efficient way to make the project operations cost-effective. Indeed, it conducts technical assistance, capacity building, and design primarily internally; in other words, UN-Habitat eliminates intermediaries (e.g., consulting firms) and works directly with local government partners (thereby building their capacity while reducing costs). In addition, its strategy strongly involves the community, thus significantly reducing costs. This is relevant to all components of the project.

D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

This project aligns with several commitments taken by Morocco for the fight against climate change in the housing sector, namely:

1. Commitments taken by Morocco for the housing sector in the framework of the NSSD

The housing sector is one of the sectors targeted by the National Strategy on Sustainable Development (NSSD) in the framework of its strategic axis 11, which encourages the integration of sustainability in urban development strategies in order to ensure social cohesion, urban planning and pollution control as well as the implementation of ecological construction practices for new buildings and for the renovation or rehabilitation of existing buildings. This involves constructing buildings that optimize non-renewable resources and improve their energy and environmental performance throughout their life cycle by favoring a more economical use of resources, particularly in terms of energy consumption, water and waste production.

2. Commitments taken for the housing sector in the framework of the Sustainable Development Goals (SDGs)

In terms of delivering on the Paris Agreement in conjunction with SDG 13 and with a focus on the housing section, Morocco commits to: build resilience and adaptive capacity to climate-related hazards and natural disasters; incorporate climate change measures into national policies, strategies and planning, including urban planning; improve education, awareness, and individual and institutional capacity for climate change adaptation, mitigation, and impact reduction, and early warning systems.

3. Commitments taken by Morocco for the housing sector in the framework of the National Adaptation Plan (NAP) The housing sector in Morocco is called upon to face its vulnerability, to strengthen its resilience and its adaptive capacity to the impacts of climate change. One of the particularities of adaptation in the building sector lies in the fact that the measures taken to adapt are often valid for mitigating GHG emissions (e.g., building insulation to reduce energy demand and GHG emissions while also mitigating the impacts of heat or cold waves). In order to strengthen adaptation to climate change in the housing sector, the NAP includes a number of measures, divided into the following areas:

of climate change in the housing sector. A2: Develop a better resilience of "urban areas at risk" to climate hazards.

4. Commitments taken by Morocco for the housing sector in the framework of NDC Morocco's NDC was updated through a participatory approach. Before COP22 in 2016, Morocco has committed to reduce its GHG emissions by 42% by 2030, with an unconditional target of 17%. The new updated NDC includes a GHG reduction target of 45.5% of which 18% is unconditional. The updated NDC contains 67 projects focused on seven sectors, including the land use and housing sector.

5. Commitments taken by Morocco for the housing sector in the Sendai framework The Sendai Framework for Disaster Risk Reduction includes several actions that concern the housing and building sector. Therefore, the fourth priority, related to strengthening disaster preparedness to respond efficiently and to "build back better" during the recovery, rehabilitation, and reconstruction phase, also addresses disaster risk reduction measures that the housing sector engages in, namely: promote the integration of risk reduction measures into post-disaster recovery and rehabilitation programs; better link the activities of rescue, rehabilitation and development; take advantage of opportunities during the recovery phase to build capacity to reduce disaster risk in the short, medium and long term, namely including measures for land-use planning, improvement of structural standards and exchange of technical expertise, knowledge and data from post-disaster assessments and experience; and to integrate post-disaster reconstruction into the sustainable economic and social development of affected areas. This should also apply to temporary facilities that welcome people displaced by a disaster. Provide guidance on post-disaster reconstruction preparedness, namely including land-use planning programs and improvement of structural standards, inspired by the recovery and rebuilding programs carried out in the decade following the adoption of the Hyogo Framework of Action, and sharing of experiences, knowledge and lessons learned.

6. Morocco's commitments as a member of the Global Alliance for Building and Construction (GABC)

The MATNUHPV is a member of the GABC launched in December 2015 during the COP21 and supported by the United Nations Environment Program (UNEP). Indeed, the GABC aims to promote the emergence of a low-carbon and climate change resilient building sector through the sharing of experiences and strengthening cooperation between the different actors of the construction sector at the global level.

7. Commitments taken by Morocco for the housing sector within the framework of the National Plan to Combat Global Warming

The housing sector is one of the sectors targeted by the National Plan to Combat Global Warming, both for the mitigation and adaptation components. In terms of adaptation, the Ministry of National Territory and Urban Planning, Housing and City Policy (MATNUHPV) adopts a bottom-up territorial approach based on the participation, awareness and training of actors. Several adaptation actions are carried out by considering sustainable development as a vector of social and spatial solidarity, in a concerted manner with several other Ministries, among the most relevant actions are:

- Accelerating the national program "cities without slums" to improve the housing conditions of the populations concerned, to face the increasing frequency of floods,
- Implementing rehousing programs for populations whose homes are located in sites at major risk and threatened by flooding,
- Implementing a rehabilitation program for ksours, kasbahs and medinas threatened by the intensity of the rain, Draft law on the urban planning code integrating sustainability,
- protection of natural areas and flood risk prevention in the master plans of agglomerations and in the communal development plans,
- Development of rainwater harvesting systems, and on-site wastewater treatment and reuse systems in new cities.

8. Alignment with the TTA region's climate change adaptation plan for the housing sector and the region's territorial climate plan

The project's first component relating to "Strengthening urban resilience to climate change in vulnerable residential neighborhoods" is aligned with strategic axis 2 "Promoting the resilience of housing and populations to climate change" of the Habitat Climate Plan and operational objective 2.3 "Strengthening the consideration of climate change in the housing and urban policy sector" of strategic objective 2 "Assessing, preventing and reducing climate vulnerabilities and risks" of the Territorial Climate Plan. Similarly, component 2 focusing on awareness, communication, and capacity building is aligned with strategic axis 3 "Strengthen the capacities of players: Education, training, communication and awareness" of the housing climate plan. tDescribe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund. The project will comply with current Moroccan building codes and housing sector regulations, in particular the Urban Planning Code, which governs building safety, seismic resistance and energy performance standards. This code will be particularly relevant to the project's activities relating to building resilience, by ensuring their resistance to climatic risks such as heat waves and flooding. In addition, earthquake-resistant construction rules will be applied in seismically sensitive areas, while thermal and energy standards will ensure that buildings are more energy efficient. The project will also draw on the National Strategic Plan for Adaptation to Climate Change (PNSA), which guides the adaptation of residential infrastructure to the effects of climate change, notably through the adoption of sustainable materials and measures to improve the thermal insulation of buildings. At the same time, regulations on stormwater management will guide the integration of NbS, such as green roofs and the creation of green spaces to sustainably manage rainwater. To ensure compliance, regular audits, site inspections and specific training for local players will be implemented. However, certain technical and regulatory issues require further assessment, including the adaptation of building standards to new climate risks and the integration of NbS into town planning regulations, to ensure that housing projects meet future climate challenges. The project meets all relevant national technical standards, such as national standards for environment assessment, national building code and complies with the AF ESP. A full assessment of the environmental and social impacts of the proposed interventions will be done during the full project development and an Environmental and Social Management Plan will be developed. While during the concept note development phase, compliance procedures and information about authorizing offices will be elaborated upon. The project will also comply with Law 12-03 on Environmental Impact Studies (EIS) and law 49-17 of 2020 on environmental assessment, which significantly improved the EIS framework and provides an opportunity to integrate the climate dimension in public investment programming.

E. Describe if there is duplication of project/programme with other funding sources, if any.

The TTA Region has benefited from several climate change adaptation projects, such as the housing climate plan and the territorial climate plan. However, the available financial resources are not enough for carrying out the identified measures. The project will avoid overlapping with other projects and will build on the lessons learned where possible as indicated in the table below.

Table 4: Duplication with other funding sourcesProject title	Status	Implementat ion period	Complementarities/lessons learned
Urban Resilience Handbook for	Completed (As part of the	Handbook published in 2022	This project supported 2 pilot cities, Fez and Mohammedia, in preparing urban resilience strategies and action plans to develop a

Moroccan Cities (available in French and Arabic)	<i>Strengthening Urban Resilience in Morocco Project</i>		holistic and integrated approach for mainstreaming Disaster Risk Management (DRM) at the city level. Some of the key lessons learned include: the importance of integrating DRM and CC adaptation across sectors and incorporating future climate scenarios into urban planning for effective resilience-building, implementing of NbS can be more cost-effective and sustainable than traditional infrastructure approaches, and the success in pilot cities can lay the groundwork for scaling-up urban resilience strategies across Morocco and other regions. The handbook also provides practical guidance for cities to develop and implement resilience strategies.
Des Bâtiments Sûrs et Durables pour Renforcer la Résilience Urbaine: Évaluation du Cadre Réglementaire Marocain pour la Prévention des Risques dans l'Aménagement du Territoire et de la Construction (World Bank Group)	Completed (As part of the <i>Building Regulation for Resilience Program</i>)	2020	This study was conducted to assess and improve the urban planning and construction regulations in Morocco, particularly in relation to risk management, urban resilience, and sustainable development. This study was important to better understand the risks associated with climate-related hazards as well as anthropogenic risks on the built environment in Morocco as well as the building regulatory framework, supporting the government's efforts to comply with safe standards for land use and construction.
Community-based Adaptation in Morocco Programme (UNDP)	Completed	2008-2012	This multi-partner program in Morocco consists of 7 projects addressing various climate-related challenges, particularly water scarcity, declining agricultural yields, and soil erosion. The program focuses on building resilience at the local level through community-based adaptation activities in natural resource-dependent communities, targeting ecosystems such as agricultural areas, forests, and oases, rather than highly-dense urban areas. The target areas of this program do not overlap with the region covered by the project proposal, however, there are notable complementarities, particularly in the areas of awareness-raising, policy-oriented capacity building, and strengthening local adaptive capacities. The full project proposal can also build upon

			lessons learned from the implementation of anti-erosion and soil regeneration measures, particularly those that involve NbS or ecosystem-based adaptation, to further enhance ecosystem resilience.
<i>Supporting the foundations for sustainable adaptation planning and financing in Morocco</i> (UNDP-led, GCF readiness support project)	On-going	2021-on-going	This GCF NAP readiness support project aims to strengthen Morocco's institutional framework for adaptation planning, enhance regional and local capacities for adaptation planning and financing, develop regional adaptation plans for 3 vulnerable regions along with their financial strategies and reinforcing the adaptation component in 2 Territorial Plans against Global Warming (PTRC). The regional adaptation plans were designed for regions that are not part of the TTA region targeted by this project. Close coordination with UNDP will be established to ensure that lessons learned from the project are effectively applied, particularly the methodology used to integrate climate adaptation into development and territorial planning, as well as the guidelines developed for regional-level climate vulnerability and risk assessments and complement the national-level capacity-building efforts for adaptation planning.
<i>Implementing NBS in climate policies: First lessons from Morocco and Tunisia</i> (study by IDDRI and IUCN)	On-going (part of the Nature-based solutions in the Mediterranean region project)	Study published in 2017 Project (2017-on-going)	The key lessons learned from the study highlight the importance of integrating NbS with biodiversity protection to address both climate risks and ecosystem restoration. An important takeaway is the need to prioritize biodiversity conservation and avoid overexploitation when implementing NbS projects, ensuring that biodiversity concerns are considered throughout planning and execution. Also, aligning NbS measures with existing policies and incorporating biodiversity targets into climate strategies will strengthen impact and ensure long-term sustainability.
<i>Urban Adaptation to Climate Change in the Maghreb Project (UrbA-CliMa, GIZ)</i>	On-going	2024-2027	This ongoing project has significant potential for complementarity, as it focuses on enhancing climate change resilience at the local level, but with different geographic and sectoral emphases. It aims to build capacity for climate adaptation in urban areas across 30 Maghreb cities, including the development of local risk profiles and adaptation plans. The two projects can collaborate by sharing knowledge and best practices, particularly in integrating NbS into urban and housing sector resilience efforts, while supporting mutual

			capacity building through experience exchanges that could also help replicate successful housing sector solutions across other regions.
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F. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

In addition to Component 3, which is dedicated to knowledge management, the other components of the project contribute directly to knowledge management mechanisms and dissemination of lessons learned at local, national and international levels. Through these knowledge management mechanisms, practical experiences in the field will be capitalized and shared widely with the larger public and can be used in policy making.

The participatory approach adopted at the local level, through workshops, field visits and trainings, will not only increase the knowledge of local communities in planning and implementing resilience actions, but also allow them to take ownership of the project and maintain the infrastructure that will be put in place. Involving local communities in the implementation of the project would also contribute to the dissemination and sharing of information, as well as to the training of these communities.

The development of a strategic communication plan will be an effective tool for disseminating learning at the regional and national levels. Indeed, knowledge on assessment of vulnerability and risks related to climate change, as well as on adaptation, will be consolidated in manuals that will be accessible to project managers. These manuals will allow for a broad sharing of lessons learned in the development and implementation of the project throughout the country. A resilient neighborhood repository will also be developed and will remain available for replication at the regional and national levels. The resilience neighbourhood repository is part of the climate change knowledge management database. It will include all the technical data sheets on the nature-based solutions implemented during the project, in addition to all the necessary illustrations. This technical data sheets and illustration will help other districts to implement similar NbS in their territory.

It is worth mentioning that the climate change knowledge management database. will capitalize on all the data and information produced as part of this project and that could be used to strengthen resilience in other municipalities in the TTA region. This data and information could also be used to strengthen the knowledge of local authorities in other regions of Morocco. The proposed repository will be structured into different components. By way of illustration, the first component will include all the technical data sheets on the nature-based solutions implemented during the project. A second component will bring together all the technical guides and awareness-raising guides aimed at public institutions, municipalities, NGOs, and schoolchildren. The technical guides will describe the various stages involved in implementing nature-based solutions. They will complement the awareness-raising guides aimed primarily at the public and schoolchildren. The repository will include another component offering illustrated guides t

methods for assessing the vulnerabilities and risks associated with climate change at the neighborhood level. In addition to these components, there is another that brings together all the data required for such an assessment. In particular, this includes data relating to climate data, hazards and extreme events, exposure, vulnerabilities, damage, and losses.fThe various products resulting from the knowledge management activities will be capitalized on through the repository components (as cartographic and alphanumeric data and documents). These will be collected throughout the project. Similarly, a data collection protocol will be drawn up and signed by all the stakeholders potentially holding the data, to ensure regular update of the repository and through that the continuity and sustainability. At the international level, the UN-Habitat website will be a tool for disseminating the knowledge generated by this project.fThe knowledge management strategy will be developed during the elaboration of the strategic communication plan, in which

the objectives and corresponding targets will be made explicit, as well as the strategies to guarantee the sustainability of the process. At this level, the means and tools, including media, social networks, documentaries, etc., to capture and disseminate the knowledge acquired as a direct result of the project interventions will also be described. In addition, in order to ensure sustainability of knowledge management, a climate change knowledge management database for the housing sector will be created during this project. This database will be developed in a collaborative manner to ensure continued ownership after project implementation.

G. Describe the 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 and Gender Policy of the Adaptation Fund.

In order to select the priority areas to be considered in the AF project, a participatory workshop was organized. This workshop was attended by representatives of all institutions and actors involved in climate change adaptation. Furthermore, consultations will be held with National and local governments, UN agencies, NGO's, local communities, and vulnerable groups and other relevant stakeholders in order to identify vulnerabilities and risks related to climate change, needs and priorities, for the concept note stage. Furthermore, several meetings were organized with regional council and presidents of the communes to discuss the project's contents and take into account different suggestions. The identification of marginalized and vulnerable groups, as well as Indigenous peoples in the targeted areas, was carried out through a participatory approach in coordination with national and local authorities. The selection of the communes was based on objective criteria, including exposure to climate hazards, the total number of households, the multidimensional poverty rate, and building density. These criteria ensured a focus on areas with high vulnerability and significant needs. At the design stage, consultations were held with local communities, including marginalized and vulnerable groups, to ensure their active involvement and input. This participatory process included discussions with local authorities and community representatives to identify specific needs and priorities, ensuring cultural appropriateness and alignment with local realities. The concerns and interests of these groups were integrated into the project design through the co-selection of activities by communities and local authorities. This approach guaranteed that the proposed interventions address their specific vulnerabilities while promoting environmental, social, and economic benefits. These efforts reflect a strong commitment to inclusivity, ensuring that the project supports and uplifts the most disadvantaged groups in the targeted areas. Women played an active role in the consultation process, demonstrating strong engagement from the outset. In the first consultation session, more than 60% of participants were women, highlighting their commitment to shaping the project's development and ensuring their voices were heard in the decision-making process.

Table 5: Summary of consultations' discussions and outcomes

Consultation	Dates	Topics discussed	Outcomes	Capitalization of results
Consultation 1	May 12, 2022	Stakeholder consultation and presentation of the concept note	<ul style="list-style-type: none"> The concept note was clear to all stakeholders Guided the selection of municipalities Stakeholders approved and shared useful data and information for developing the concept note 	<ul style="list-style-type: none"> Stakeholders endorsed the project (the concept note) Municipalities were identified
Consultation 2	June 10, 2022	Consultation des communautés locales	<ul style="list-style-type: none"> The concept note was clear to local community representatives Guided the selection of 	<ul style="list-style-type: none"> Local communities' endorsement Neighborhood

		(présidents des communes)	<ul style="list-style-type: none"> neighborhoods Local community representatives showed interest and engaged in the process 	ds were identified
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H. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The proposed project's components, outcomes, and outputs are fully aligned with national and local government/institutional priorities, with the needs identified at the commune and vulnerable group levels, and with the outcomes of the Adaptation Fund (see Part II, Section A), as outlined in the Adaptation Fund's results framework. This alignment has allowed for the design of a comprehensive approach in which the different components are mutually reinforcing and in which the outcomes and activities are intended to address the gaps identified in Morocco's current response to climate change. This project aims to maximize funding for component 1. Allocation of funds to Components 2 and 3 is necessary for complementarity/support of Component 1 and sustainability and quality assurance of the project. The table below justifies the requested funding, focusing on the total cost of adaptation by showing the impact of FA f

unding versus no funding (baseline) versus the expected project outcomes.

Table 6: Overview of impact of AF funding compared to no funding (baseline) related to expected project outcomes

Outcomes	Baseline (without AF)	Additional (with AF)	Comment and alternative adaptation scenario's
Outcome 1.1. Strengthened urban resilience in vulnerable neighborhoods	The TTA region is highly vulnerable to climate change, with frequent floods, sea level rise, and shoreline erosion causing significant damage and losses. Vulnerable neighborhoods, particularly informal settlements, are at heightened risk due to rapid urbanization, inadequate infrastructure, and limited resources for climate adaptation. Without sufficient funding for adaptation, the housing sector remains exposed to the increasing impacts of climate hazards, endangering both buildings and residents. Vulnerability assessments at the communal level are necessary to identify the most at-risk areas and tailor context-specific solutions. A territorial climate plan and an adaptation plan for the housing sector are developed for the	With AF funding, stakeholders at the national and sub-national levels will gain a clearer understanding of the specific vulnerabilities in the housing sector at the community level. This will enable the identification and implementation of NbS that offer multiple co-benefits, improving the resilience of buildings to flooding and landslides. Additionally, the damage related to floods will be reduced by approximately 40%, within the studied area.	Without adaptation measures to enhance the resilience of the housing sector, the region will continue to experience escalating damage from climate hazards. In the coming years, the TTA region is expected to face significant annual losses from flooding, with an estimated cost of 333,020,720 DH/year (approx. USD 330k) in the three provinces. Without a comprehensive vulnerability assessment to identify and prioritize the most at-risk areas, targeted resilience interventions will fail to deliver effective results and adaptation plans for the

	TTA region but the funds required for implementation are insufficient.		housing sector will be fragmented and insufficient, hindering substantial progress to build resilience at the building level.
Outcome 2.1. Stakeholders are fully informed and have strengthened capacity to cope with climate change risks	Target communities have limited understanding of local climate change vulnerabilities and disaster risks and have no strategies in place to address these challenges	The AF funding will enable the target communities to be fully involved in identifying climate change vulnerabilities and disaster risks and in implementing the necessary adaptation measures. The funding will drive transformative change by developing the CC neighborhood reference framework that will allow further replication and scaling up in other areas, in addition to facilitate the enabling environment for NbS integration at the housing sector through awareness raising, development of technical guides and capacity building.	The housing sector in vulnerable areas of the TTA region would struggle to implement essential climate resilience strategies. The lack of resources for a climate-resilient neighborhood framework, awareness-raising, and capacity-building would leave communities, especially marginalized groups, unprepared to address climate risks and hinder the adoption of NbS for long-term resilience.
Outcome 3.1. Enhanced knowledge management and sharing of information for increased climate resilience in Morocco's neighborhoods	The housing sector currently lacks a centralized platform for managing climate change knowledge, which limits the integration of climate resilience into housing policies and practices. There is also a gap in M&E systems needed to track progress and assess the effectiveness of adaptation measures.	The activities related to this outcome, including the establishment of a CC knowledge database, will enable effective tracking and continuous improvement of adaptation measures in the housing sector. This will create a replicable and scalable framework that can be expanded to other regions, enhancing alignment with national climate objectives and fostering long-term resilience through informed decision-making.	Without the knowledge management component, there will be a critical void in the housing sector's capacity to manage and disseminate essential data on climate adaptation. The absence of a robust monitoring and evaluation system will impede the tracking of adaptation efforts and the assessment of their effectiveness and limit the sector's ability to replicate successful strategies and scale resilience initiatives.

I. Sustainability of the project/programme outcomes

Technical sustainability

The project will be implemented in close partnership with communities and public utilities, thus ensuring the technical sustainability of the implemented infrastructure and NbS. This will be done through:

- Awareness raising, training and capacity building: Training and awareness raising of local communities and government institutions on the planning, construction and maintenance of the implemented infrastructure and NbS interventions will support the technical sustainability. Local players will be trained in the planning, construction and maintenance of resilient infrastructures, ensuring their proper long-term operation.
- Engaging utilities: A strong partnership with utilities will help maintain installed infrastructure and ensure its sustainable management. Local utilities will play a key role in maintaining infrastructure through sustainable financing mechanisms (such as tariffs tailored to the needs of vulnerable populations), ensuring that infrastructure remains functional after the end of the project.
- Establishing local risk management committees to monitor and maintain these infrastructures.

Social sustainability

By fully involving informal settlement households in project activities, including assessments, plan/strategy development, and monitoring, the project aims to achieve inclusivity and ownership of project interventions, as well as sustainable household awareness and engagement. In addition, the increased resilience of homes and infrastructure at the community level will reduce community vulnerabilities in the long term. In addition, households will benefit from training sessions and awareness raising on building and maintaining resilient homes (and other infrastructure) and improving their livelihoods in a sustainable and resilient manner. The project directly addresses the needs of the most vulnerable communities and will help to reduce imbalances in social dynamics with regard to vulnerability to climate impacts.

Economic sustainability

Investing in the resilience of vulnerable physical, natural, and social assets and ecosystems is a sustainable economic approach. It helps avoid future costs related to climate change and disaster impacts, as well as enhances livelihood options. The city-level and community level plans will include economic opportunities, as well as the ongoing resilience building within this project opportunities, including economic benefits of resilience, which can be integrated into national plans and policies. Implementing NbS can also offer a cost-effective alternative to traditional infrastructure by reducing long-term climate-related disaster impacts and lowering both upfront and maintenance costs.

Environmental Sustainability

The implementation of site-specific NbS measures to strengthen the resilience of communities will also raise the resilience of the environment, e.g. through protecting ecosystems, enhancing biodiversity and/or reducing waste production.

Institutional sustainability

The project will pave the way for the national government and local authorities to support and expand the project to other neighborhoods and communes through the governance framework, processes and tools provided. Implementation units will be designated at the communal level to implement the project to ensure that the project results are well anchored in the local government institutional framework. The project will be implemented with the effective involvement of civil society to ensure lasting local ownership. In addition, trainings will be organized to build the capacity of the governments involved and best practices and lessons learned from all component results will be shared at the national and sub-national levels. In order to ensure the institutional sustainability of adaptation benefits after the end of the project, several mechanisms are put in place:

- Capacity building will include the sharing of best practices and lessons learned from the results of each component at national and sub-national levels. This will facilitate replication and extension of the project with other funds after its completion, building on existing partnerships and funding networks.
- As outlined in section D, the project alignment with national and sub-national strategies and plans ensures sustainability and potential replication in other neighbourhoods, which is also

supported by the knowledge products that will be developed and shared with national and local governments.

J. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

The proposed project aims to be fully aligned with the Environmental and Social Policy (ESP) of the Adaptation Fund. To this end, an initial screening has been carried out to evaluate environmental and social impacts of the project, and areas where steps will be taken and where further assessment is needed. The selection process resulted in the project being classified as **category B**, or medium-risk projects/programs, given the suggested physical interventions, i.e. NbS that are associated with moderate environmental and social risks and/or impacts. The proposed activities are on a small scale, very localized, and will be managed by communities to the extent possible. This means that the potential for direct impacts is low and localized, and that there may be few indirect impacts, which will be assessed during full project development. Transboundary impacts are very unlikely as the target area is not close to a border. Under these conditions, cumulative impacts are also unlikely. The expected impacts can be effectively mitigated through the implementation of an environmental and social management plan (ESMP), while any unforeseen impacts can be controlled and addressed through an environmental and social monitoring plan (E&S monitoring plan).

Table 7: Overview of the environmental and social impacts and risks identified as being relevant to the project

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>		Environmental & social impact assessments in compliance with AF and UN-Habitat policies, as well as Moroccan law will be conducted
<i>Access and Equity</i>		Potential risk of NbS interventions not addressing the specific needs of vulnerable populations, exacerbating inequalities. This will be assessed and included in the ESMP during full project development
<i>Marginalized and Vulnerable Groups</i>		Potential risk of social tensions due to perceived favoritism or unequal distribution of resources. This will be assessed and included in the ESMP during full project development
<i>Human Rights</i>		Potential risk of infringing on land use rights. This will be assessed and included in the ESMP during full project development
<i>Gender Equality and Women's Empowerment</i>	X	
<i>Core Labour Rights</i>		Potential risk of exploitation or unsafe working conditions for workers. This will be assessed and included in the ESMP during full project development to align with ILO standards
<i>Indigenous Peoples</i>	X	
<i>Involuntary Resettlement</i>		Potential risk of involuntary resettlement in areas suffering from landslides. This will be assessed and included in the ESMP during full project development.
<i>Protection of Natural Habitats</i>	X	
<i>Conservation of Biological Diversity</i>	X	
<i>Climate Change</i>	X	
<i>Pollution Prevention and Resource Efficiency</i>	X	
<i>Public Health</i>		Potential risk of accidents or injuries in NbS areas. This will be assessed, taken into consideration in the NbS design and included in the ESMP during full project development.
<i>Physical and Cultural Heritage</i>	X	
<i>Lands and Soil Conservation</i>		Potential risk of soil erosion or compaction during construction. Long-term degradation of land if soil health is not maintained. This

		will be assessed and included in the ESMP during full project development.
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PART III: IMPLEMENTATION ARRANGEMENTS

A. Project/programme alignment with the Results Framework of the Adaptation Fund

Table 8: Alignment of the project with results framework of adaptation fund

Project Objective	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
1. Strengthening urban resilience to climate change in vulnerable residential neighborhoods	Number of residential neighborhoods benefiting from climate resilience strengthening	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	6,020,000
2. Awareness, communication, and capacity building	Number of residential neighborhoods involved in awareness-raising, communication, and capacity-building on climate change adaptation	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	950,000
	Outcome 4: Increased adaptive capacity of communities to respond to the impacts of climate change.	Outcome 4: Increased adaptive capacity of communities to respond to the impacts of climate change.	4.1. Responsiveness of development sector services to evolving needs from changing and variable climate 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	
3. Monitoring, evaluation, and capitalization of experience in adaptation	Number of national and sub-national stakeholders involved in monitoring, evaluating and capitalizing of experience in adaptation	Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	750,000
		Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies	8. Innovative adaptation practices are rolled out scaled up, encouraged and/or accelerated at regional, national and/or subnational level.	
Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)

1.1 Strengthened urban resilience in vulnerable residential neighborhoods	Proportion of vulnerable residential neighborhoods with strengthened resilience	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) 1.2 No. of early warning systems (by scale) and no.of beneficiaries covered	6,020,000
2.1 Stakeholders are fully informed and have strengthened capacity to cope with climate change risks	Number of national, sub-national stakeholders and local communities informed and made aware of the project with their capacities strengthened Number of national and sub-national stakeholders integrating climate change awareness into institutional activities	Output 2.1: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities Output 3.2: Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender) 2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale) 3.1.1 No. of news outlets in the local press and media that have covered the topic 3.2.1 No. of technical committees/associations formed to ensure transfer of knowledge 3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	950,000
3.1 Enhanced knowledge management and sharing of information for increased climate resilience in Morocco's neighborhoods	Number of national, sub-national stakeholders and local communities informed of project products and results Number of national and sub-nationals stakeholders reproducing project results	Output 7: Improved integration of climate-resilience strategies into country development plans Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated.	7.1. No. of policies introduced or adjusted to address climate change risks (by sector) 7.2. No. of targeted development strategies with incorporated climate change priorities enforced 8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated 8.2. No. of key findings on effective, efficient adaptation practices, products and technologies generated	750,000

¹ The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

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

A. Record of endorsement on behalf of the government

Mohammed BARAOUI Director of Climate and Biodiversity Department of Sustainable Development, Ministry of Energy Transition and Sustainable Development Avenue Araar, 420/1 Secteur 16, Hay Riad, Rabat, Morocco Tel: +212 6 62 63 44 73 Email: baraoui@environnement.gov.ma Alternate emails: baraoui.mohammed@gmail.com ;	Date: <i>(Month, day, year)</i>
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B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans, including Moroccan INDC, NAP, ... and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
Rafael Tuts Director, Programme Division UN-Habitat Signature	
Date: January 17, 2024	Tel. and email: (+254) 20 7621234 raf.tuts@unhabitat.org
Project Contact Person: Soukaina Ait El Qadi	
Tel. And Email: +212661967800 soukaina.aitelqadi@un.org	

⁶ 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.

ROYAUME DU MAROC

MINISTRE DE LA TRANSITION ENERGETIQUE
ET DU DEVELOPPEMENT DURABLE

Département du Développement Durable

DCDB



المملكة المغربية

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وزارة الانتقال الطاقى والتنمية المستدامة

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قطاع التنمية المستدامة

1.018.11 1.018.11

م.م.ت.ب

To : The Adaptation Fund Board
c/o : Adaptation Fund Board Secretariat
Email: secretariat@adaptation-fund.org
Fax : 2025223240/5

Subject: Endorsement for “Strengthening climate change resilience of urban residential Neighborhoods, case of the Tangier -Tetouan- Al Hoceima region” project.

We would like to refer to the project “Strengthening climate change resilience of urban residential Neighborhoods, case of the Tangier –Tetouan- Al Hoceima region” in Morocco, which is included in the funding proposal submitted by UN-Habitat.

In my capacity as the Adaptation Fund Focal Point for Morocco, we acknowledge having reviewed the proposal and would like to communicate our no-objection to the proposed project as included in the funding proposal.

By communicating our no-objection, we would like to clarify that:

- (a) The government of Morocco have no-objection to the project as included in the funding proposal;
- (b) The project as included in the funding proposal is in conformity with Morocco’s National Strategic Adaptation Plan;
- (c) The program as included in the funding proposal is in conformity with relevant national laws and regulations, in accordance with the AF’s environmental and social safeguards.

We confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly completed. Additionally, we confirm that our no-objection applies to all activities to be implemented within the scope of the project.

We acknowledge that this letter will be made publicly available on the AF website. Please accept our kind regards.

Mr Mohammed BARAOUI
Director of Climate and Biodiversity

Annex

Annex 1.1: Consultation with stakeholders

MINUTES OF THE CONSULTATION WORKSHOP	
SUBJECT	DATE : 12/05/2022
Organization of a workshop on adapting the housing sector to climate change in the TTA Region	VENUE: Headquarters of the Chamber of Commerce, Industry and Services of the Tangier - Tetouan - Al Hoceima region
PARTICIPANTS The workshop was attended by a number of executives and managers representing various structures, including: - UN-HABITAT, Quality and Technical Affairs Department, - Direction régionale de l'Habitat et de la Politique de la Ville- de la région Tanger-Tétouan-Al Hoceima, DGRN / MI, DRE/OREDD, DRHPV, DEGR Wilaya de Tanger, DRE / TTA,DPHPV of Chefchaouen, Tangier DRHPV, Regional Inspectorate of Urban Planning and Agriculture, Direction Régionale des Eaux et Forêts du Rif, Ministry of the Interior, DGRN / Ministry of the Interior, FSTT, AMEE,Regional Directorate of Equipment and Water, Regional Town Planning Inspectorate, Tétouan Urban Agency, DQAT / MATNVHPV, TTA Regional Council, Tetouan DRHPV, DRHPV of Larache, DPHPV of Al Hoceima, UN – Habitat, Vice-President of the Regional Council of Architects,DRTE,. A full list of workshop participants is attached.	
CONTEXT & OBJECTIVES The workshop was part of the efforts made by the Ministry of National Territory, Urban Planning, Housing and City Policy, in particular the Department of Housing and Urban Policy, to combat climate change. To this end, with technical and financial support from UN-Habitat, a concept note for a project to adapt the housing sector to climate change is currently being prepared. This concept note will be prepared using a participatory and highly concerted approach, and will be submitted to the Adaptation Fund. In this context, the workshop aimed to present the results of the study on the adaptation plan for the housing sector in the TTA Region, and to present the project to be submitted to the Adaptation Fund as well as their various components of the project.	
BREAKDOWN At the start of the workshop, Ms. Soraya KHALIL, Director of the Quality and Technical Affairs Department of the Ministry of National Territory, Urban Planning, Housing and City Policy, thanked the regional authorities and the TTA Regional Housing and Urban Policy Department for their support in organizing this event. She then briefly outlined the objectives of the consultation workshop, before giving an overview of the main projects undertaken by Morocco in this field in general, and more specifically in the housing and construction sector. The floor was then given to Soukaina AIT ELQADI, Programme Officer -UN-Habitat. She gave a brief account of the activities of this UN agency and the projects completed and/or underway in the MENA region and in Morocco. Particular attention was paid to those linked to strengthening urban resilience in the face of climate change. She then stressed the importance of the consultation workshop as a crucial step in the process of preparing the concept note to be submitted to the Adaptation Fund. A photo illustrating the general atmosphere of the workshop is shown below. Following these two presentations, the floor was given to Mr. Hicham EZZINE, consultant in the field of climate change and disaster risk. An initial presentation was given on the vulnerability and risk assessment study and the development of an adaptation plan for the housing sector in the TTA Region. Mr. EZZINE outlined the main phases of the study, followed by the methodology adopted to assess vulnerabilities and risks linked to climate change. Emphasis was then placed on the Tanger-Tétouane-Al Hoceima region's climate change adaptation plan. During this first presentation, Mr. EZZINE also gave a brief overview of the monitoring and evaluation system for adaptation to climate change. Following this initial	

presentation, the floor was opened for comments and suggestions from the various participants.



Figure 1: Photo illustrating the workshop process

Mr. EZZINE's second presentation focused on the project proposal to be submitted to the Adaptation Fund. After outlining the context and objectives, Mr. EZZINE presented the project area, highlighting the criteria used to select the three municipalities (Tétouane, Al Hoceima and Chefchaouen), notably exposure to climatic hazards, total number of households, multidimensional poverty rate, building density, and the orientations of the regional directorate and the Adaptation Fund. He then gave an overview of the various components of the project.

DECISIONS TAKEN

As a result of the workshop proceedings and the discussion initiated by the participants, the following decisions were taken:

- The workshop participants endorse the proposal to be submitted to the Adaptation Fund and will provide all the necessary support for its successful completion;
- Workshop materials will be shared with participants, including the two PPT presentations;
- A consultation meeting will be held with representatives of the three above-mentioned municipalities to present the project proposal and gather suggestions;
- Other municipalities in the region may be considered for further expressions of interest to submit proposals to the Adaptation Fund or other funds.

LIST OF PARTICIPANTS

ROYAUME DU MAROC



Ministère de l'Aménagement du Territoire National,
de l'Urbanisme, de l'Habitat et de la Politique de la Ville

- Habitat et Politique de la Ville -

Secrétariat Général
Direction de la Qualité et des Affaires Techniques

Objet : Atelier sur l'adaptation du secteur de l'Habitat face au changement climatique dans la région Tanger-Tétouan-Al Hoceïma

Le jeudi 12 mai 2022, au siège de la Chambre de Commerce, d'Industrie et de Services de la région de Tanger - Tétouan - Al Hoceïma

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
ASMAA EL KHAOU	DEGR/SEEV	DEGR un pays de Chiffre	0630395912	ASMAAEELKHAOU@gmail.com	
SERRAJ Najat	CREDD.TTA	D.R.E./TTA	0666398325	serrajnajat@gmail.com	
ABAYANE NADA	CREDD.TTA	DRETTA	0613341163	abayane.nada@gmail.com	
BOUHIAL ANOUAL	D.P.H.P.U. CHERCHARGEUR	D.P.H.P.U. CHERCHARGEUR	0632359113	abo-hial@ch.ou.com	
Abichem ESTATE	chef service Habitat D.P.H.P.U.	D.P.H.P.U. chef de service	06-76-40-2216	abichem.estate@gmail.com	
ELHAKKAOUL KAUTAR	D.P.H.P.U. Tanger	D.P.H.P.U. Tanger	06-64-02-4613	kautar.elhakkaoul@gmail.com	

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
EL KHATIB Hassan	Architecte chef de service	Inspection Régionale de l'Urbanisme		el.khatib.hassan@gmail.com	
Derek Melch	Ingénieur	Direction Régionale Faune et Forêt de Rif		melch28@hotmail.com	
EMMELT NORA	chef de service D.G.R.N./Direction de l'Urbanisme			emmelt.nora@gmail.com	
Hakim Gachari	Ingénieur	D.G.R.N./MI		hakim.gachari@gmail.com	
JAMALEDDIN RAHIA	ADM	DEGR/Urbanisme		jamal.kharrat@gmail.com	
AHMARRAS Amina	AMEE/CS		066308278	ahmarras.amin@gmail.com	
ELJABARI Amina	Etudiante Master science d'ingénierie	FSTT/Inspection régionale de l'urbanisme		amina.eljabari@gmail.com	
ASSANDI Sara	Ingénieur d'état	Direction Régionale de l'Urbanisme et de l'Aménagement		assandi.sara@gmail.com	
ERRAÏE J. Hani	Cache administratif	Inspection Régionale de l'urbanisme		j.hani.erraie@gmail.com	

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
Naima Bil Laoussi	Arch. Tech	Agence urbaine Tétouan	0662518944	Naitlaoussi.Bil@gmail.com	
ELHARZAGI Jorik	chef de division	D.G.A.T./H.A.M.U.A.R.V.	0662031563	jorik.elharzagi@gmail.com	
DERRAD Imane	chef de service urbanisme et habitat durable	Direction de la région T.T.A	06100641797	imane.derrad@gmail.com	
AGOURI Joud	chef de service	D.P.H.P.U. Tanger		agouri.joud@gmail.com	
Mounir BAHADJ	Direct. Prov. Tétouan	D.P.H.P.U. Tét.	0661044469	mounir.bahadj@gmail.com	
Abdelhak ABZIZ	Directeur Provincial	D.P.H.P.U. Lixab	0661814045	abdelhak.abziz@gmail.com	
ATIF M. Mohamed	D.P.H.P.U. Hoceima	D.P.H.P.U. Hoceima	0661581349	atif.mohamed@gmail.com	
Hicham ELKINE	conseiller		0660599209	hicham.elkine@gmail.com	

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
ES Samaha Khalid	Architecte	DRHPV Tanger			
ALAMI Mohamed	chef de service de l'Observatoire	DRHPV Tanger	0655249631	alamimohamed@gmail.fr	
HAZIM Khalid	chef de service AAF	DRHPV/Tanger	0655279532	hazim.khalid777@gmail.fr	
EL FAH EL ANASSER RAYDA	Adjointe technique	DRHPV Tanger	0629553484	raydahazim@gmail.com	
HATTACHAIGER	Technicien	DRHPV Tanger	0654092922	hettachakhalid13@gmail.com	
Bouayd Haouda	Ingénieur d'Etat	DRHPV Tanger	0666506300		
YAMOUL NADA	Architecte	DQAT/MATNUHVP	0655319675	yamoul.nada@gmail.com	
AITEI OABO Soukaina	chargée de programmes	ONU-Morocco	0661967800	soukaina.aitelqadi@gmail.com	
KHALIL Soufyane	Directrice	DQAT	0662172324	khalilSoufyane@yahoo.fr	

Objet : Atelier sur l'adaptation du secteur de l'Habitat face au changement climatique dans la région Tanger-Tétouan-Al Hoceima

Le jeudi 12 mai 2022, au siège de la Chambre de Commerce, d'Industrie et de Services de la région de Tanger - Tétouan - Al Hoceima.

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
AMEZIANI Idriss	DRHPV Tanger	D.R.H.P.V		amezianiidriss@gmail.com	
AHRAZEM Khalid	Architecte	vica président du Conseil Régional des Architectes	0661309442	ahrazemkhalid@gmail.com	
Samah Jneidi	Architecte D.R.H.P.V Tanger	DRHPV Tanger	0668140711	samahjneidi@gmail.com	
Robie Brikali	DR Transitions Energétiques	DR TE	0622072063	rbrikali@gmail.com	
ELMOABEN Nada	Chef de service	DQAT/MATNUHVP	0600303943	nada.elmoabeni@gmail.com	

Annex 1.1: Consultation with community


A consultation with community was carried out the 10 June 2022. The objective of this consultancy is to discuss with the representative of the community the project content, component, and actions. Some pictures and a list of presence are given hereafter.



Figure. Photo illustrating the course of the meeting

List of participants of the coordination and consultancy meeting (10 June 2022)

Royaume du Maroc















Ministère de l'Aménagement du Territoire National,
de l'Urbanisme, de l'Habitat et de la Politique de la Ville

- Habitat et Politique de la Ville -

Secrétariat Général
Direction de la Qualité et des Affaires Techniques

Objet : Réunion de coordination relative au projet « Renforcement de la résilience au changement climatique des quartiers urbains au Maroc, Cas de la région Tanger-Tétouan - Al Hoceima » - le vendredi 10 juin 2022 à 10h à la Direction Régionale de l'Habitat et de la Politique de la Ville de Tanger - Tétouan - Al Hoceima

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
Khadija Bouya	Directrice	DRAT/HATN/DPV	0662772324	khadija.bouya@yahoo.fr	
BOUAFIA Abdelhak	Représentant	ONU-Habitat	0661200585	abdelhak.bouafia@onu.org	
Youssef Sefam	Président	Commun. chefcha	0661205805	youssef.sefam@gmail.com	
Abdelhak NANNAD	chef S.C	Commun. chefcha	0661313082	abdelhak.nannad@yahoo.fr	
MOHAMMED BEN OUA	P. Le coordinateur	Commun. Al Hoceima	0664481501	MOHAMMED.BEN.OUA@orange.ma	
EL HASSANI JAWAD	Chef de Bureau	DRAT/DPV/HATN/DPV	0662031363	jawad.elhassani@gmail.com	
ELMOADEN Nadi	Chef de service	DRAT/DPV/HATN/DPV	0600709143	nadi.elmoaden@gmail.com	
FAKIH LAOUKI NASSAR	1er Vice Président Commun. de Tétouan	Commun. de Tétouan	0661367548	fakih.laouki@nassar.ma	

Nom, Prénom	Fonction	Organisme	Tel/fax	e-mail	Signature
ESSAMHA Khadi	Architecte	DRH.P.V. Tanger		essamha.khadi@yahoo.fr	
AGOURI JAWAD	chef de service H.P.V.	DRH.P.V. Tanger			
SAMEL JAWAD	Architecte D.R.H.P.V.	DRH.P.V. Tanger			
HILALI EZZINE	consultant		0660599209	ezzine@hilmat.com	

Annex 2: Multi-criteria analysis

1. Description of the study area

The TTA region is located in northwest Morocco. This region has undergone a process of accelerated urbanization resulting from the strong growth of its urban population, following the development of commercial, industrial and administrative activities, essentially in the region's major conurbations. The TTA region is one of the most vulnerable to climatic hazards in the country and it is highly exposed to climatic hazards, such as flooding, landslides, marine submersion and forest fires, that become increasingly frequent and intense in recent years. In this regions, the building sector is one of those highly exposed to increased rainfall, higher temperatures, etc.). This sector is also confronted with extreme weather events and climate hazards, These climatic extremes and hazards, such as droughts, floods, heat waves, landslides, etc., have a major impact and cause considerable damage to the building sector.

2. Methodology

The prioritizing municipalities in the TTA was based on two stages. The first consisted in organizing a participatory workshop to guide the choice of the various aspects relating to vulnerability and risks associated with climate change. The second involved a multi-criteria analysis based on the guidelines resulting from the first stage. Thus, the method recommended for assessing vulnerability and risks linked to climate change for the housing sector in the TTA region was based on approach developed by the IPCC in its fifth report (AR5) and illustrated in the figure below.

2.1. Consultation and participatory selection of hazards and criteria

In order to select the priority communes to be considered in the FA project, a participatory workshop was organized. The workshop was attended by representatives of all the institutions involved in climate change adaptation.







2.1.1. Selection of climatic hazards

This participatory workshop provided an opportunity to decide on the major manifestations of climate change and their impacts on the housing sector in the TTA region. To this end, the main climatic hazards likely to affect the housing sector in the region were analyzed, in particular: flooding, landslides, drought, marine submersions, heat waves and cold snaps.

2.1.2. Selection of criteria

The work undertaken during the workshop also focused on the choice of the various criteria that will help to select the priority regions. To this end, through a participatory exercise, participants identified the main criteria relating to the different components of climate risk, in line with its conceptual framework, as defined and described in the IPCC's fifth report. The different components in question are climate hazard (danger), exposure, vulnerability (sensitivity and adaptive capacity) and risks linked to climate change.

Through this participatory exercise, several criteria were chosen by workshop participants. These criteria were then reviewed in order to select the most relevant ones. The selected criteria are listed below:

-  Political support and involvement of decision-makers in climate change issues;
-  Demographics: number of beneficiaries, population density, etc;
-  Presence of fragile ecosystems;
-  Socio-economic sensitivity or vulnerability: poverty, precariousness, etc. ;
-  Economic criteria: Major investments, contribution to GDP, etc. ;
-  Degree of exposure of the housing sector to climatic hazards;

 Presence of different climatic conditions: climates/bioclimates and ecosystems.

3. Results of multi-criteria analysis

In order to identify the exposure of the various municipalities to climatic hazards, the risk map was superimposed overlaid toon the administrative division of the region. A summary was then drawn up and presented in the table below, showing the municipalities and their level of risk to climatic hazards.

The study enabled us to select the district at very high risk. Furthermore, the working session held with the regional stakeholders provided an opportunity to discuss the major manifestations of climate change and their impact on the various socio-economic sectors, particularly the housing sector. The results of the multi-criteria analysis show that the communes of the TTA region are globally exposed to risks linked to climate change and will have to cope with climatic hazards and extreme events. ties and all stakeholders, three priority communes were selected, taking into account not only the exposure of their housing sector to climate hazards, but also their socio-economic characteristics, such as the number of households, poverty rate and population density. These are the municipalities of Tétouan, Chefchaouen and Al Hoceima.

4. Conclusiont

This study led to the selection of priority communes for the project to be submitted to the Adaptation Fund (AF). To this end, a multi-criteria analysis was carried out using the vulnerability and risk analysis method developed by the IPCC in its fifth report. This exercise required the organization of a participatory workshop to involve local stakeholders in the choice of priority communes. This work resulted in the selection of three priority communes, namely Tétouan, Chefchaouen and Al Hoceima, which will be the focus of this project.

Table 1- Annex: Multicriteria analysis

Provinces et Préfectures	Municipalités	Inondation	Sècheresse	Glissement de terrain	Submersion marine	Vagues de chaleur	Vagues de froid	Nombre total de ménage	Taux de pauvreté multi-dimensionnelle	Densité Bati
Tanger Assilah	Tanger	+	+++	++++		+++	+++	+++++	+	+++++
	Gueznaia	++	+++	+++	++++	+++	+++	++++	+	+++
	Aqouass Briech	++++	+++	++	+++	+++	+++	+	+	++
	Assilah	+	+++	+	+++	+++	+++	++	+	+++
	Saleh chamali		+++	++++		+++	+++	+++	+++	++
Fahs Anjra	Al bahraoyine		++	+++		+++	+++	+++	+	+++
	Ksar sghir		+++	++++	+	+++	+++	+++	++	++
	Ksar el majaz		+++	+++++		+++	+++	+++	++	++
	Taghramt		+++	++++		+++	+++	++	++	++
	Belyounech		+++	+++++		+++	+++	++	++	+
M'diq Fnideq	Sabta		++	++		+++	+++			+++
	Fnideq		++	+	++	+++	+++	++++	+	++++
	M'diq	+++	+++	+	+++	+++	+++	++++	+	++++
	Martil	++	++	+	+++	+++	+++	++++	+	++++
Tétouan	Tétouan	+++	+++		+++	+++	+++	+++++	+	++++
	Azla		+++	+++	+	+++	+++	+++	++	++
	Zaouiati sidi kacem		+++	+++		+++	+++	++	+++++	++
	Oued laou		++++	+++	+	+++	+++	++	++	+++
Larache	Sahel	+	+++	++++		+++	+++	+++	++	+++
	Larache	++++	+++	++	+++	+++	+++	+++++	+	++++
	Laouamra	+	+++		+	+++	+++	+++	++	+++
Chefchaouene	Tizgane	+	++++		+	+++	+++	+++	+++	++
	Steha		++++			+++	+++	+++	+++	++
	Bni bouzra	+	+++	+		+++	+++	+++	+++	++
	Amtar		++++	+		+++	+++	++	+++	++
	Bni smih	+	++++	+		+++	+++	+++	+++	++
	M'tioua		+++++	+++		+++	+++	++	++++	++
Al Hoceima	Bni gnil	+	+++++	++++		+++	+++	++	+++	++
	Bni boufrah	++	+++++	+++		+++	+++	++	++	++
	Senada		+++++	+++		+++	+++	++	+++	++
	Rouadi		+++++	+++		+++	+++	++	+++	++
	Izemmouren	++	+++++	++		+++	+++	+	+	++
	Al hoceima		+++++			+++	+++	++++	+	++++
	Ajdir		+++++			+++	+++	+	+	+++
	Ait youssef ouali	++++	+++++			+++	+++	++	+	+++