



ADAPTATION FUND

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17 March 2025

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

PROPOSAL FOR DJIBOUTI



ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project Concept

Country/Region: Republic of Djibouti

Project Title: Climate Change Project in the Great Green Wall National Corridor

Thematic Focal Area: Multiple Focal Areas

Implementing Entity: International Fund for Agricultural Development (IFAD)

Executing Entities: Ministry of Environment and Sustainable Development of Djibouti

AF Project ID: AF00000402

IE Project ID:

Requested Financing from Adaptation Fund (US Dollars): 9,997,436

Reviewer and contact person: Alpha O. Kaloga

Co-reviewer(s):

IE Contact Person:

Technical Summary

The project "Climate Change Project in the Great Green Wall National Corridor" aims to sustainably improve the resilience to climate change and food security of poor rural households by strengthening ecosystem resilience and communities' capacity to adapt to climate change through sustainable land management and agro-sylvo-pastoral development in the GGW National Corridor. This will be done through the four components below:

Component 1: Improving sustainable access to water resources (USD 2,400,000)

Component 2: Promoting climate-resilient agriculture and improving food security and nutrition for local populations (USD 2,000,000)

Component 3: Restoration of sylvo- pastoral ecosystems in the GGW Corridor (USD 2,300,000)

Component 45: Knowledge management institutional capacity monitoring-evaluation in the GGW area (USD 1,638,318)

Requested financing overview:

Project/Programme Execution Cost: USD 875 166

Total Project/Programme Cost: USD 9 213 484

Implementing Fee: USD 783 952

	<p>Financing Requested: USD 9 997 436</p> <p>The initial technical review raises several issues, such as the need for a more detailed analysis of how the project will distribute benefits equitably among vulnerable groups, the need for further clarification on the consultation process with marginalized groups, the identification of potential overlaps with other projects, the requirement for a more comprehensive sustainability plan and the impact of the boreholes. These issues and others are discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.</p> <p>The second review finds that the concept still needs to address compliance with AFs Gender Policies, the need to strengthen synergies with ongoing initiatives, providing stronger rationale for adaptation activities; robustness of vulnerability assessments among other issues raised as identified in the CARs and CRs raised in the review.</p>
Date:	21 January 2025

Review Criteria	Questions	Comments First Technical Review (August 23, 2024)	Comments Second Technical Review (January 21, 2025)
	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?	<p>Yes.</p> <p>Djibouti is likely to experience more frequent extreme precipitation events, but there is still uncertainty as to the rates of change in future return periods at sub-national level</p> <p>In Djibouti's arid climate, groundwater is the only available resource, but it is showing signs of degradation due to the combined effect of climate change hazards (lack of rainfall and seawater intrusion) and population growth. Rainfall is irregular in time and space, generating only ephemeral surface runoff (average annual rainfall does not exceed 150 mm). However, during major rainfall events, several millioncubic meters of water flow into the sea, when it could be used to meetthe water needs of the population. Under these conditions, the mobilization of surface water is of paramount importance and is a government priority in development plans.</p>	-
	1. Has the designated governmentauthority for the Adaptation Fund endorsed the	<p>Yes.</p> <p>As per the endorsement letter dated 17 July 2024.</p>	-

	<p>project/programme?</p> <p>2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?</p>	<p>Yes</p> <p>The proposal contains 51 pages including annexes.</p>	
	<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>	<p>Partly.</p> <p>The project goes beyond business-as-usual development by integrating climate considerations into every component, from infrastructure design to agricultural practices and ecosystem management Through its various components the project. It focuses on implementing tangible adaptation measures and building adaptive capacity at both community and institutional levels.</p> <p>Output 1.1.2: "Defective hydraulic infrastructures rehabilitated" under Outcome 1.1: " Many hydraulic infrastructures are defective, due to a lack of maintenance, a shortage of technicians, high repair costs for users, and a lack of user involvement in the management of these infrastructures. While this paragraph provides a general overview of some causes, it doesn't delve into the root causes or provide a detailed analysis of why these issues occurred. The current section does not address the underlying issues that led to the defective infrastructure, and a clearer understanding of these causes is essential for developing effective solutions.</p> <p>CR1: Please provide additional information into the root causes of the infrastructure defects. Additionally, please clarify the proposed project approach for mitigating such recurrences with the implementation of this project.</p>	<p>CR1: Not cleared.</p> <p>The insights regarding the causes of poor infrastructure are commendable. Nonetheless, in order to further strengthen the proposal;</p> <p>(1) Please clarify how specific actions—such as decentralized DHR services, hydro-geological studies, and water user committees—will directly address these root issues. (2) Please include indicators to gauge their long-term effectiveness; for example, monitoring borehole maintenance frequencies or evaluating training outcomes within water committees (see Pages 76-77; Output 1.1.22).</p>
		<p>Output 1.1.3 of Outcome 1.1: The question about the total volume of deep water available is crucial for this component because it relates to the sustainability and potential risks of the proposed drilling activities. Without accurate data on the available deep-water resources, there's a risk that the boreholes could lead to overexploitation of groundwater, potentially resulting in maladaptation over time. It is noted that the project proposes hydro geophysical and pedological studies at paragraph 71, however it would be important to provide any current or baseline</p>	<p>CR2: Not cleared.</p> <p>Further details concerning the sustainability and availability of deep-water resources are necessary. Please provide total volumes of deep groundwater reserves alongside current trends associated with aquifer health metrics. Please also justify sustainable water extraction activities while especially noting any measures addressing potential over-extraction risks (refer to Pages 69–71; Output 1.1.33).</p>

		<p>information in that regard.</p> <p>This output also raises important technical considerations about the long-term viability and sustainability of the boreholes, which are not explicitly addressed in the current concept note. It suggests the need for more detailed technical studies and risk mitigation strategies to ensure the boreholes will provide a reliable, year-round water supply.</p> <p>CR2: Please provide information on the total volume of deep water available and any other information that would support the justification of the proposed action for the concept stage.</p>	
		<p>CR 3: Please clarify how the project will address the risk of borehole failure, where a borehole initially considered 'successful' might later fail to provide a sufficient yield of safe water year-round? Would additional studies, such as assessments of borehole depth in relation to dynamic water levels, the depth of the cylinder below the dynamic water level, and the season during which drilling took place, be considered to mitigate this risk?</p>	<p>CR3: Not cleared. The project's strategy to minimize borehole failure risks through technical studies is beneficial but requires additional detail about execution methods. Specifically, please outline methodologies associated with hydro-geological and geophysical studies along with considerations for seasonal drilling including borehole depth assessments—while integrating lessons learned from prior borehole projects that could assist informed site selection and relevant specifications.</p>
		<p>Output 4.1.1 Knowledge management ensured.</p> <p>CR 4: Please provide more details on how the project plans to facilitate the sharing and use of regional best practices among the different members of the Great Green Wall initiative, as outlined in Outcome 4.2. Specifically, how will the project draw from projects in other member of the initiative and ensure effective dissemination and application of these best practices across the participating regions?</p> <p>The proposal's Theory of Change appears coherent, with activities that are generally suitable for responding to the threats posed by likely climate scenarios. However, the background and context section could be clearer in addressing the magnitude and uncertainty of these threats. To fully assess the suitability of the proposed activities, the proposal should provide a more detailed analysis of the magnitude and uncertainties associated with the climate scenarios.</p>	<p>CR4: Not cleared. While the proposal effectively articulated regional knowledge-sharing mechanisms linked to the Pan-African Agency, providing additional clarification may enhance this section further. As some explicit modalities for knowledge exchange remain undetermined, please define the tools and platforms involved in knowledge management including web portals or workshops—as well as a timeline detailing process utilized for collecting, sharing, and utilizing regional best practices within the context of the Great Green Wall framework.</p>

		<p>CR5: Please provide more specific climate projections for the project area, including a) Quantitative estimates of temperature and precipitation changes over the project timeframe b) Projected changes in frequency and intensity of extreme weather events c) Seasonal variability projections.</p>	<p>CR5: Not Cleared Despite having access to climate projections and pertinent statistics, there exists a need for a more thorough vulnerability assessment supporting proposed actions throughout various climate change impact scenarios affecting target areas and populations significantly. It would greatly benefit the proposal if its offered an extensive analysis detailing adaptive capacity among targeted groups across differing climatic conditions in future submissions.</p>
		<p>In the fully developed proposal stage, please, provide a more detailed vulnerability assessment of the target areas and populations, including a) How different magnitudes of climate change might affect vulnerability b) Analysis of adaptive capacity under different scenarios.</p>	<p>Comment Cleared As per response to comment, the fully developed proposal will go more in depth in the vulnerability assessment of the target populations with regard to their vulnerability to the effects of climate change and their adaptive capacity under different scenarios, para 106, 179, table 15</p>
		<p>Alignment with AF Strategic Objectives</p> <p>The project/programme activities generally align with its overall goal and objectives, ensuring cohesion among the components. The proposal includes activities that supports strategic results areas under outcomes 4, 6, 5 and 7 of the Adaptation Fund. However, a more detailed review of the specific linkages between activities and the stated goals would strengthen the assessment of this alignment.</p> <p>CR6: Please provide additional information to strengthen the linkages between activities and the specific goals.</p>	<p>CR6: Cleared</p> <p>As per Section III.A and Table 16 of the document.</p>
	<p>4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Not fully. The proposal does include information on the expected beneficiaries and addresses the equitable distribution of benefits to vulnerable groups, though some aspects could be strengthened. The proposal specifies that the target number of beneficiaries will be around 24,000 people. Further it focusses on vulnerable group such as small-scale producers, rural women, and young people. Among other it identifies three main socio-productive categories among the beneficiaries: agro-pastoralists, sedentary pastoralists, and semi-sedentary pastoralists. However, while the proposal does address vulnerable groups, it could benefit from more specific quantitative targets for inclusion of women, youth, and other vulnerable/marginalized groups in</p>	<p>CAR1:Not cleared</p> <p>The proposal outlines targeting strategies and gender quotas but it lacks sufficient details on strategies to overcome barriers for the most vulnerable groups, particularly marginalized and indigenous communities (if any). Please provide further details of the strategy to ensure the participation of the most disadvantaged groups (i.e., women, youth, and marginalized communities) by addressing socio-cultural and economic barriers. Please state clearly whether indigenous communities are present in the target areas. If not, this must also be absolutely clear.2. para 43–45, and 46–62</p>

		<p>project activities. In addition, the proposal does not address indigenous communities. If there are no indigenous communities in the target areas, this should be explicitly stated.</p> <p>CAR 1: Please provide more detail on how the project will ensure that the most vulnerable within the target communities are reached and benefit from the interventions, by further elaborating on strategies to overcome potential barriers to participation for the most vulnerable groups.</p>	
		<p>On marginalized and vulnerable groups and indigenous communities, while the proposal does outline benefits for some identified vulnerable groups, particularly women and youth, it could be strengthened by providing more comprehensive and specific information on all potential marginalized and vulnerable groups in the target areas, including any indigenous communities if present. Further, despite the fact that the proposal does outline benefits in all three areas - economic, social, and environmental - the level of quantification varies and is generally limited. The economic and environmental benefits have some quantification, while social benefits are largely described qualitatively. To strengthen the proposal, more comprehensive and consistent quantification of benefits across all three areas would be beneficial.</p>	<p>CR6: Not cleared</p> <p>Some of the comments are only partially addressed. The response does not present additional information on marginalized groups and consistent benefits of quantification across all dimensions. Outline 180-182 and table 14: Identify and describe all relevant vulnerable groups, and specify their:</p> <ol style="list-style-type: none"> 1. needs; 2. potential barriers to participation in project activities. Source specific indicators for bedrock social outcomes 3. The number of beneficiaries, gender-disaggregated data, and improvements in community resilience
		<p>CAR 2: Kindly provide more specific quantification of: expected income increases or economic impacts would strengthen the proposal, more quantitative targets for social outcomes (e.g., percentage increase in women's participation in decision-making, More quantitative targets for environmental improvements(e.g., hectares of land improved, percentage increase in vegetation cover) would enhance the proposal and A more systematic approach to quantifying benefits across all three areas would strengthen the proposal</p>	<p>CAR2: Not cleared</p> <p>While gender and youth participation targets are presented, the proposal lacks specific quantitative targets in economic, social, and environmental benefits. Please provide quantitative targets for:</p> <ol style="list-style-type: none"> 1. Impacts on the economic: Expected percentage increase in income for participating households (e.g., 20% within the first five years, based of relevant IFAD project experience). 2. Social Outcomes: Percentage increase in women's participation in decision-making (e.g., 30% women in water committees). Specify expected job creation, particularly for youth and women (e.g., ,1000 temporary jobs). 3. Climate outcomes: Total hectares restored (e.g., 30,000 ha), with breakdowns for pasture restoration (20,700 ha), irrigated land (25 ha), and CES measures (9,275 ha). Para: §127, Outputs 2.1.2, 2.2.2, 3.1.2, 3.2.2 3. para 43–45, and 46–62
		<p>The proposal does not explicitly state that there are</p>	<p>CR7: Not cleared</p>

		<p>no concerns of negative development or maladaptation. However, based on the information provided, there are no apparent major concerns of maladaptation or negative development. The project appears designed to increase resilience and adaptive capacity. Nevertheless, a more thorough environmental and social risk assessment would be needed to fully confirm this.</p> <p>Please ensure that the full proposal include a more detailed analysis of potential negative impacts and strategies to mitigate them. Particularly the project should: assess potential impacts on non- beneficiaries, more detailed plans for ensuring long-term sustainability of interventions to assess long-term sustainability of interventions would help assess potential future vulnerabilities.</p> <p>CR 7: Please provide a more explicit assessment of any potential trade-offs between different adaptation strategies or between short- term and long-term resilience.</p>	<p>The project does not seem to fully encompass a rigorous assessment of potential trade-offs among different adaptation strategies or short-term versus long-term resilience.</p> <ol style="list-style-type: none"> 1. Please include a more explicit assessment of potential negative impacts, particularly on non-beneficiaries, to ensure the project minimizes unintended adverse outcomes. 2. Provide detailed plans to monitor and mitigate any identified risks during the implementation stage. 3. Kindly provide an assessment of potential trade-offs between different adaptation strategies (i.e. for water-resource management versus agriculture) and between short- and long-term resilience outcomes.
		<p>The proposal does include an initial gender assessment that addresses many key areas, demonstrating compliance with Gender Policy requirements. However, to fully meet these requirements and strengthen the gender-responsive approach of the project, the full proposal should expand on this initial assessment, addressing the areas for improvement. For instance, While the assessment provides a good overview, it could delve deeper into the specific needs, capabilities, and knowledge resources of women and men in the context of climate change adaptation.</p> <p>CAR 3: Kindly provide more detailed analysis of potential barriers to women's participation in project activities would be beneficial.</p>	<p>CAR3: Not cleared</p> <p>While the proposal includes an initial gender assessment that mostly aligns with the requirements of the Gender Policy and gives a broad overview of gender dynamics and women's roles in the target areas, it misses an in-depth analysis of those obstacles at the socio-cultural, economic, and structural level that impede women's participation in, and actionable solutions aiming to address, this challenge.</p> <p>Please expand the gender assessment to specify cultural, economic, and structural barriers and propose targeted solutions- such as capacity development and training, flexible schedules, and better access to resources- to ensure that women participate actively and equitably in project activities.</p>
		<p>CR8: Please provide more j to create unique vulnerabilities or capacities.</p>	<p>CR8: Not cleared</p> <p>The preliminary Gender Assessment has mentioned some barriers but needs a more in-depth analysis into specific challenges and intersectional vulnerabilities. Please elaborate on some barriers hindering women's participation (for example socio-cultural norms, time spent on household chores, access to water). Please describe how access to water and efficient cooking systems would lessen the time burden and increase women's participation. Para 43-45, Gender Assessment Section</p>
	5. Is the project /	Not fully.	

	<p>programme cost effective?</p>	<p>The proposal provides a logical explanation for its scope and approach, the demonstration of cost effectiveness from a sustainability point of view is limited. The project's overall objective and components are clearly aligned with Djibouti's climate change adaptation needs, particularly in water resource management, agriculture, and ecosystem restoration. The intervention areas are selected based on specific criteria, including water availability, poverty index, and agricultural potential. The approach is grounded in the Great Green Wall initiative, providing a clear strategic framework. The proposal outlines a clear theory of change, linking project activities to expected outcomes and impacts.</p> <p>CAR5: Please provide more rationale for the scale of interventions (e.g., number of hectares to be rehabilitated) as well on Cost effectiveness demonstrated from a sustainability point of view, and more specific plans for financial sustainability post-project, such as mechanisms for continued funding of maintenance and operations.</p> <p>CR9: Please provide more detailed cost-benefit analysis or comparison with alternative approaches, as well as quantitative analysis of the long-term economic benefits of the proposed interventions.</p>	<p>CAR5 Not cleared:</p> <p>The proposal provides initial estimates for the number of beneficiaries (24,000 people, 30% women) and project area coverage (30,000 ha), however additional information is required on cost-effectiveness and long-term sustainability.</p> <ol style="list-style-type: none"> 1. Please provide a rationale for the scale of interventions, such as the specific basis for targeting 30,000 ha and the anticipated cost per hectare. 2. Provide clarity on how a post-project maintenance of rehabilitated infrastructure can be assured, including concrete financial mechanisms, such as contributions from DHR, user fees, or partnerships. <p>CR9 Not cleared: Kindly provide a brief account of the methodology and models that content hydraulic investments, agro-pastoral production, and income-generating activities and please Include preliminary estimates of net additional income or productivity gains for beneficiaries to indicate economic viability at this stage. Kindly also include outlines of the planned sensitivity analysis to respond to unknowns around costs, benefits, and external risks (such as climate variability, economic shocks).</p>
	<p>6. Is the project / programme consistent with national or sub- national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?</p>	<p>Not cleared.</p> <p>The proposal does a good job of identifying relevant plans and strategies, including important adaptation-related plans and sectoral strategies. It covers national development strategies, adaptation plans, sectoral plans, and international frameworks. However, there is room for more detailed alignment with specific adaptation strategies and sub- national plans.</p> <p>CAR6: Kindly provide more specific details on how the project aligns with NAPA priorities, any existing national or sectoral climate change adaptation strategies.</p> <p>CAR7: Since this project will support a regional initiative, please provide more information on local or regional development plans, if they exist, would strengthen the proposal's alignment with sub-national strategies.</p>	<p>CAR6: Not cleared:</p> <p>The proposal linked well the NAPA (2006) and the National Climate Change Strategy (2017) with project priorities, with opportunities for further strengthening, e.g. details on how project activities contribute towards these priorities will enhance the alignment. Please clarify how each key activity will address NAPA priorities and expected national strategy outcomes, particularly for water resource management, agriculture, and ecosystem restoration. If applicable, please include further examples of synergies with ongoing national adaptation programs or sectoral strategies to further substantiate the alignment.</p> <p>CAR7: Not cleared</p> <p>The proposal demonstrated a strong connection linking project priorities with NAPA (2006) and the National Climate Change Strategy (2017). However, it requires preliminary information on</p>

			<p>alignment with existing sub-national strategies that can set a foundation for coherence.</p> <p>1. Please explain briefly how the project will engage with local or regional development plans and coordinate with sub-national institutions and stakeholders to ensure the integration of project activities within existing development frameworks, while also providing preliminary details on alignment and coordination mechanisms</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>Not fully. The proposal does address national technical standards to some extent, but the coverage is not comprehensive and could be strengthened. The proposal would benefit from a more systematic presentation of standards and compliance, perhaps in a table format that links specific standards to project components and activities. CAR 8: Please provide more comprehensive identification of standards such as building codes, sector-specific regulations (e.g., for agriculture or forestry) specific. Please also provide a detailed compliance plan to ensure it fully meets the Adaptation Fund's requirements.</p>	<p>CAR8: Not cleared The proposal sufficiently cites the Environment Code and ESIA requirements. However, a stronger connection between certain project activities, and compliance with relevant technical standards is needed. para: Environmental Code, Environmental and Social Impact Assessment (ESIA), Article 101</p> <p>1. Please identify the appropriate national standards (e.g., building codes, regulations for agriculture and forestry) that apply to the proposed activities and explain how those standards will be applied and outline a preliminary compliance plan that includes key steps (e.g., environmental screening, ESMP development, and monitoring actions), possibly in tabular format, aligning project activities with applicable standards.</p>
	<p>8. Is there duplication of project / programme with other funding sources?</p>	<p>Not fully. The proposal does a good job of identifying relevant projects and stating a lack of overlap, however, there is room for improvement in providing a more detailed and specific analysis of complementarity and coordination mechanisms. Strengthening these aspects would enhance the proposal's alignment with Adaptation Fund requirements and demonstrate a more robust approach to avoiding duplication and maximizing synergies with existing initiatives. CAR 9: Please provide for each project, provide a more detailed analysis of potential areas of overlap and specific measures to avoid duplication. Please also outline more concrete plans for how the proposed project will complement and build upon the work of existing initiatives, as well as include an analysis of gaps in existing initiatives that the proposed project will address.</p> <p>While the proposal makes an effort to identify relevant projects and briefly mention complementarity, it falls short in providing a comprehensive analysis of linkages, synergies, and lessons learned. To fully meet the Adaptation Fund's requirements, the proposal should significantly expand its discussion of how it will build upon and</p>	<p>CAR9, CR10, CR11: Not cleared</p> <p>The proposal, references a number of cross-sectoral initiatives and indicates the initial opportunities for complementarity, whereas the analysis of synergies and prevention of duplication is lacking.</p> <p>Please provide a clearer analysis of specific areas where the proposed project will complement or enhance existing initiatives, especially within the Great Green Wall (GGW) regional context.</p> <p>Please outline concrete measures to avoid duplication with ongoing projects meaning coordination mechanisms with other stakeholders (e.g., African Union GGW Initiative) and highlight lessons learned from past or ongoing projects-explaining how these lessons informed project design. If thorough stakeholder consultation has not yet been conducted, confirm that this will be prioritized for the full proposal stage.</p>

		<p>complement existing initiatives, drawing specific lessons from earlier projects to inform its design and implementation approach.</p> <p>CR10: For each relevant project, please provide a more in-depth analysis of potential synergies, outlining specific ways the proposed project will complement and enhance existing efforts.</p> <p>CR11: Please conduct a more thorough assessment of potential areas of overlap for each project, even if the conclusion is that there's no significant risk of duplication. Please also include insights from stakeholders involved in other projects to enrich the understanding of potential synergies and lessons learned</p>	
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p>Not fully.</p> <p>The proposal demonstrates a good understanding of the importance of knowledge management and includes relevant activities in this area. It has a dedicated component for KM, plans for dissemination of lessons learned, and systems for tracking and analyzing experiences. However, there are areas where the KM approach could be strengthened.</p> <p>CR12: Please provide more detailed plans for how lessons learned will be disseminated, including specific channels and target audiences. Further, kindly elaborate on how the project will contribute to global and national knowledge bases on climate change adaptation.</p> <p>CR13: Please include more explicit mechanisms for periodic analysis of which interventions are most effective and why. Kindly detail how KM activities will continue beyond the project lifetime to ensure long-term learning and knowledge sharing.</p>	<p>CR12: Not Cleared.</p> <p>The proposal lays out a knowledge management approach and initial suggestions for dissemination. However, additional considerations are required to ensure that lessons learned will be distilled and applied effectively. Please clarify how such lessons will be disseminated (e.g., online platforms, mobile applications, workshops, social networks) and articulate which communities will receive them (local communities, national institutions, regional stakeholders, etc.).</p> <p>CR13: Not cleared.</p> <p>The resubmission partially addresses the CR. The proposal mentions collaboration for dissemination of regional knowledge, yet further clarity on mechanisms for periodic learning and sustainable longevity are required. Please elaborate on the mechanisms for periodic reflections on project interventions to evaluate their effectiveness, as well as the insights gained (e.g., regularly scheduled progress reviews, stakeholder feedback loops, impact evaluations). Finally, please present a plan to secure knowledge-sharing activities after the end of the project, for instance, through partnerships with organizations such as the Pan-African Agency and other GGW initiatives to foster cross-learning.</p>
	<p>10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Not fully.</p> <p>The proposal demonstrates that an initial consultative process has taken place with various stakeholders, including some vulnerable groups, there are areas where this could be strengthened. More detailed information on the consultation process, broader inclusion of all potential vulnerable groups, and clearer linkages between stakeholder input and project design would enhance this aspect of the proposal. The lack of explicit mention of indigenous peoples is a gap that should be addressed, either by</p>	<p>CAR10: Not cleared.</p> <p>The revised Section H and Appendix 3 provide a stronger foundation for the consultative process. To fully address the initial comment: 1. Clearly outline the methodology used for participant selection and meeting facilitation. 2. Specify the key topics discussed during consultations and how feedback was integrated into the project design. 3. Provide examples of how stakeholder input has directly influenced project activities or components. Reference: Section H, Appendix 3 CAR11: Comment: The identification of women, youth, and displaced people as vulnerable groups is noted, and the absence of indigenous peoples is appropriately clarified. To strengthen this response: 1. Provide</p>

		<p>including their consultation or by clarifying their absence in the project area.</p> <p>CAR10: Please provide a more comprehensive description of the consultation methodology, including how participants were selected and how meetings were conducted, topics discussed and more detailed account of how the feedback received during consultations has been incorporated into the project design.</p> <p>CAR11: Kindly identify all relevant marginalized and vulnerable groups in the project area and describe how they were consulted, by highlighting issue related to indigenous peoples in the project area.</p>	<p>more details on how consultations with marginalized groups were conducted, including the tools and techniques used to ensure their meaningful participation. 2. Include examples of how the specific concerns and needs of these groups were incorporated into project planning and activities. Reference: Table 15, Environmental and Social Impacts and Risk</p> <p>CAR11: Not cleared. The resubmission partially addresses the CR. The revised Section H captures a more detailed account of the consultation process, including discussions at national, regional, and local levels. Appendix 3 provides insights into preliminary findings from discussions with communities, including women and youth. However, to enhance the proposal please ensure that the proposal does sufficiently describe how participants were selected, how meetings were conducted, or the specific topics discussed, including feedback from consultations was integrated into the project design.</p>
	11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	<p>Not fully.</p> <p>The proposal demonstrates that its activities are relevant to addressing adaptation objectives and are designed to achieve these objectives with the requested funding. The activities generally go beyond business-as-usual development, with a clear focus on climate resilience. However, the proposal could be strengthened by more explicitly stating its ability to achieve objectives without additional funding, and by providing more detailed justification for any activities that might be perceived as standard development. Adding these elements would enhance the proposal's alignment with the Adaptation Fund's full cost of adaptation reasoning requirement.</p> <p>CAR12: Please include an analysis of how the proposed activities go beyond what would be done in the absence of climate change, highlighting the adaptation additionality? Please also provide for each major activity or output, provide a more detailed explanation of how it contributes to adaptation, particularly for those that might be considered business-as-usual development.</p> <p>CAR 13: a) Could you provide a more detailed analysis of how each proposed activity directly addresses the specific climate change impacts identified in the project area? b) Please include quantitative targets where possible, and explain how these activities, when implemented solely with Adaptation Fund</p>	<p>The proposal demonstrates improved alignment with the Adaptation Fund's policies and guidelines, particularly in addressing the climate resilience and adaptation components. However, while the proponents have made progress in addressing the initial comments, certain areas require further clarification and detail to ensure full compliance and enhance the proposal's overall quality.</p> <p>CAR12: Not cleared. The resubmission partially addresses the CR. While the description of adaptation measures is appreciated, please provide additional justification for how each activity directly addresses climate change impacts and goes beyond business-as-usual development. For example: 1. Clarify how climate-proofing interventions mitigate risks from flash floods or erratic rainfall in water infrastructure projects. 3. Strengthen the rationale for ANR and reforestation as key adaptation strategies by linking them to ecosystem-based adaptation outcomes.</p> <p>CAR13: Not cleared. The resubmission partially addresses the CR. Please strengthen the link between the proposed targets and specific climate change impacts identified in the project area. For example: 1. Provide further detail on how the 30,000 hectares of rehabilitation will enhance resilience to projected droughts or temperature increases. 2. Clarify how the expected outcomes for beneficiaries (e.g., 30% women participation) contribute to long-term climate adaptation goals.</p>

		<p>resources, will effectively contribute to achieving the stated adaptation objectives. This analysis should clearly distinguish the proposed interventions from business-as-usual development activities by highlighting their specific contributions to climate resilience and adaptation.</p> <p>c) Project Independence and Co-financing: Please clarify whether this project involves any co-financing from other sources. If co-financing is involved, could you demonstrate how the Adaptation Fund-supported components of the project are designed to deliver their intended outcomes and outputs independently of any other funding or projects? If there are no co-financing arrangements, please confirm this explicitly in the proposal to ensure clarity on the project's financial structure and implementation strategy.</p>	
	12. Is the project / program aligned with AF's results framework?	<p>Cleared for this stage.</p> <p>The proposal does specify its alignment with the Adaptation Fund's revised strategic results framework in a clear and structured manner. It demonstrates alignment across multiple outcomes and outputs, showing a comprehensive integration of the project's objectives with those of the Adaptation Fund. While this alignment is well-presented, there is room for more detailed explanation and specific target-setting to further strengthen this aspect of the proposal which should be provided in the fully developed proposal as indicated below.</p> <p>Adaptation Relevance and Effectiveness:</p> <p>a) A more detailed analysis of how each proposed activity directly addresses the specific climate change impacts identified in the project area.</p> <p>b) Quantitative targets where possible, and explain how these activities, when implemented solely with Adaptation Fund resources, will effectively contribute to achieving the stated adaptation objectives. This analysis should clearly distinguish the proposed interventions from business-as-usual development activities by highlighting their specific contributions to climate resilience and adaptation.</p>	<p>CR12: Not cleared.</p> <p>The resubmission partially addresses the CR. The proposal outlines a knowledge management approach and ideas for dissemination. However, further clarification is needed to ensure that lessons learned can curve within the project and eventually provide input into future projects. Please define the means by which lessons learned will be shared (such as online platforms, mobile applications, workshops, social networks) and specify the target audiences (local communities, national institutions, regional stakeholders, etc.). Also, please elaborate on how the project promotes national and global knowledge bases on climate change adaptation, explicitly working with initiatives such as the Pan-African Agency for the GGW Initiative and IFAD's GGW Regional Support Programme.</p> <p>CR13: Not cleared</p> <p>The resubmission partially addresses the CR. While the proposal mentions collaboration for regional knowledge dissemination, there is a lack of clarity regarding mechanisms for periodic learning and long-term sustainability. Provide specifics regarding mechanisms for periodic analysis of project interventions to assess their effectiveness and identify lessons learned (progress reviews, stakeholder feedback systems, impact evaluations, etc.). Please provide a plan for how these partnership institutions would ensure that knowledge-sharing activities continue beyond the project's duration.</p>
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p>Not fully.</p> <p>The proposal does address sustainability and shows potential for replication, these aspects could be significantly strengthened. More detailed plans for ensuring long-term sustainability across all key</p>	<p>CR14: Not cleared.</p> <p>The resubmission partially addresses the CR. The integration of project activities into Regional Development Plans and community involvement are key strengths. To further enhance the</p>

		<p>areas (economic, social, environmental, institutional, and especially financial) would improve the proposal. Additionally, more concrete strategies for replication and scaling up would enhance this aspect of the proposal.</p> <p>CR14: Could you provide a detailed sustainability strategy that addresses long-term maintenance plans for infrastructure, an exit strategy for transitioning project activities to local stakeholders, and financial sustainability, including potential income generation and funding strategies? How will you ensure the integration of project outcomes into local and national policies, while covering economic, social, environmental, institutional, and financial dimensions of sustainability? Additionally, could you outline your plans for replicating and scaling up successful project elements, identifying potential partners and funding sources, and establishing a framework for long-term impact monitoring with key indicators to inform future adaptation efforts and contribute to the project's overall sustainability and long-term impact?</p> <p>CR15: How will your sustainability framework ensure long-term project viability by addressing economic viability post-implementation, long-term community involvement, social equity, environmental impact, and resilience measures? Additionally, how will you strengthen local institutions for ongoing adaptation and develop a financial plan for future funding and cost management? Can you explain how these sustainability aspects interconnect, balancing synergies and trade-offs, aligning with national and local strategies, and defining stakeholder roles in maintaining sustainability measures?</p>	<p>sustainability strategy, please specify financial mechanisms to ensure long-term infrastructure maintenance post-project, such as user fees, public-private partnerships, or local budget allocations. Please also outline a basic framework for monitoring long-term project impacts, including key indicators and roles of stakeholders in data collection and reporting.</p> <p>CR15: Not cleared.</p> <p>The resubmission partially addresses the CR. The emphasis on capacity-building and integration into Regional Development Plans is positive. To strengthen the long-term viability of the project, please clarify how the economic sustainability of project activities will be ensured post-implementation, including financial plans for future funding and cost management and also explain how synergies and trade-offs across economic, social, environmental, and institutional dimensions of sustainability will be balanced to optimize outcomes.</p>
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	<p>14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund</p>	<p>demonstrate a more robust approach to managing environmental, social, and gender-related issues throughout the project lifecycle. It is noted however that the ESMP and Gender assessments will be developed and submitted at the fully developed proposal stage. Notwithstanding the concept note could be strengthened as follows.</p> <p>CAR14: Please update section K of Part II of the proposal to improve the ESS risk screening. Some areas for strengthening include the following:</p> <ol style="list-style-type: none"> 1. A more thorough analysis for each of the 15 Adaptation Fund Environmental and Social Policy principles, addressing direct, indirect, transboundary, and cumulative impacts, and justifying risk assessments, especially for principles assessed as having "no risk" Based on the fact that the full gender assessment is being developed for the fully development state 2. <u>Access and equity</u> may require further assessment and should be considered in this upcoming study. <ol style="list-style-type: none"> a. On <u>marginalized and vulnerable groups</u>, further assessment is required especially given the indication in the potential impact and risk column. b. on <u>Human rights</u> not only IFADs policies must be applied but AF policies. 3. <u>Pollution Prevention and Resource Efficiency</u>, please complete column two. 4. <u>Physical and Cultural Heritage</u>: Please amend risk level to no/low please amend potential impact column to reflect that the assessment will be made and any mitigation measure required will be taken not only to "check that they have no impact". <p>CAR15: Please also consider:</p> <ol style="list-style-type: none"> a) Providing an analysis of each identified risk's magnitude and likelihood, and how these risks relate to project activities b) Elaborating on regional gender dynamics, including how cultural norms might affect women's participation, and conduct a thorough stakeholder analysis to identify all potentially affected groups and their vulnerabilities. <p>The proposal does state the category in which the screening process has classified the project. In Table</p>	<p>CAR14: Not cleared.</p> <p>The adjustments to Section K underline progress, particularly on Physical and Cultural Heritage, and the inclusion of some of the AF principles on Human Rights are welcomed. However, in order to provide additional strength to the concept note, please:</p> <ul style="list-style-type: none"> ▪ 1. Include a preliminary analysis of the probability and severity of identified risks related to project activities. ▪ 2. Complete column three for Pollution Prevention and Resource Efficiency to include potential impacts and mitigation measures. <p>CAR15: Not cleared.</p> <p>The Preliminary Gender assessment gives a valuable overview of regional gender dynamics and targeted opportunities. To provide additional strength to this section, please:</p> <ul style="list-style-type: none"> ▪ 1. Conduct a preliminary stakeholder analysis to identify all potentially affected groups, including their vulnerabilities and specific needs, particularly marginalized populations. ▪ 2. Include running gender-related outcome goals that monitor such outcomes throughout the life origination and sustainability of women's participation. ▪ 3. Illustrate how synergies will be developed across the economic, social, and environmental dimensions, including specific strategies to minimize trade-offs and maximize outcome optimization. Section §50-Gender Dynamics, Stakeholder Analysis.
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		11 (Environmental and social impacts and risks), the project is classified as Category B. This classification appears to reflect the Adaptation Fund's Environmental and Social Policy (ESP)	
Resource Availability	1. Is the requested project / programme funding within the cap	Yes.	Yes.
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes.	Yes.
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes, but amendment required. The project execution cost is 9.5% of the proposed budget. However, the execution cost in the component table on page Project/program components and funding Table 7: Project components and Outcomes is incorrectly labelled. CAR16: Please correctly label the execution cost in the component table.	Yes.
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes. IFAD is accredited until 21 December 2025.	-
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance	n/a at concept stage	

	with the Gender Policy of the Fund?		
	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 the supervision of the M&E function?	n/a at concept stage	
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core	n/a at concept stage	

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



CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAM INFORMATION

Title of Project/Programme: Climate Change Adaptation in the Great Green Wall National Corridor (Adapt-GMV)

Country: Djibouti

Thematic Focal Area:

Type of Implementing Entity: Multilateral Implementing Entity

Implementing Entity: Ministry of Environment and Sustainable Development of Djibouti

Executing Entities: IFAD

Amount of Financing Requested: 10.000.000 U.S Dollars

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: Click or tap to enter a date.

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

Table of contents

PART I: PROJECT/PROGRAM INFORMATION.....	i
Acronyms and abbreviations.....	iv
Project/Programme Background and Context.....	1
A. Geography.....	1
B. Agriculture and food security.....	1
C. Climate.....	2
D. Impacts of climate change.....	8
E. Sector and community vulnerability to climate change.....	9
F. Climate change adaptation measures.....	10
G. Intervention area and target groups.....	10
H. Preliminary gender assessment.....	13
I. Project or program objectives.....	15
PART II: PROJECT / PROGRAMME JUSTIFICATION.....	18
A. Describe the project components,.....	18
B. Describe how the project/programme provides economic, social and environmental benefits,.....	25
C. Describe or provide an analysis of the cost-.....	26
D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies,.....	28
E. Describe how the project/programme meets relevant national technical standards,.....	31
F. Describe if there is duplication of project/programme with other funding sources.....	32
G. If applicable, describe the learning and knowledge management componen.....	35
H. Describe the consultative process.....	36
I. Provide justification for funding requested,.....	37
J. Describe how the sustainability of the project/programme outcomes has been taken into account.....	38
K. Provide an overview of the environmental and social impacts and risks.....	40
PART III: IMPLEMENTATION ARRANGEMENTS.....	43
A. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund.....	43
PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY.....	44
A. Record of endorsement on behalf of the government.....	44
B. Implementing Entity certification.....	44
Appendix 1. Mission agenda.....	45
Appendix 2. List of persons met.....	46
Community of Taweo (200 households).....	46
Community of Abaitou (200 households).....	46
Meeting with the Ministry of Agriculture.....	47
Appendix 3 List of institutions and people we met.....	50

LIST OF FIGURES

Figure 1 : GGW map in the Republic of Djibouti.....	1
Figure 2: Monthly climatology of mean minimum surface air temperature, mean average surface air temperature, mean maximum surface air temperature and precipitation 1991-2020; Djibouti.....	2
Figure 3: Trends in mean surface air temperature with significance of trend per decade 1951-2020; Djibouti.....	3
Figure 4: Annual trends in maximum number of consecutive dry days with significance of trend by decade; 1951-2020; Djibouti.....	3
Figure 5: Annual number of days with temperatures above 35°C.....	3
Figure 6: Change in distribution of mean surface air temperature 1951-2020; Djibouti.....	4
Figure 7: Annual rainfall trend with significance of trend by decade; 1951-2020; Djibouti.....	4
Figure 8: Annual trend in maximum number of consecutive rainy days - annual trends with significance of trend by decade; 1951-2020; Djibouti.....	4
Figure 9: Projected national mean temperature climatology for 2020-2039 and 2040-2059 (reference period 1995-2014) for SSP3-7.0.....	7
Figure 10: Predicted deviation from natural variability of mean surface air temperature, with trends; Djibouti.....	7
Figure 11 : Nationally Projected Average Largest 5-Day Cumulative Precipitation Anomaly 2040-2059 under SSP3-7.0 (Ref. Period 1995-2014).....	7
Figure 12: Projected Variability and Trends of Average Mean Surface Air Temperature across Seasonal Cycle, 2020-2100; Djibouti; SSP3-7 access-cm2_r1i1p1f1.....	8

LIST OF TABLES

Table 1: Extreme events (floods, drought and windstorms) in Djibouti between 1970 and 2020.....	5
Table 2: Climate Table for Arta.....	5
Table 3: Climate Table for Dikhil.....	6
Table 4: Climate Table for Tadjourah.....	6
Table 5: Vulnerability assessment of resources and sectors.....	9
Table 6: Main adaptation measures recommended for the agriculture and water sectors.....	10
Table 7: Project components and Outcomes.....	16
Table 8: Timetable.....	17
Table 9: Cost-effectiveness.....	27
Table 10: Correlation between project activities and NAPA priorities.....	29
Table 11: Correlation between project activities and priorities of the National Strategy on Climate Change.....	29
Table 12: Correlation between project activities and the priorities of the National Biodiversity Strategy and Action Plan.....	30
Table 13: List of current projects in the project area.....	33
Table 14: Adaptation measures, trade-off and complementary actions.....	39
Table 15: Environmental and social impacts and risks.....	40
Table 16: Alignment with the Adaptation Fund Results Framework.....	43

Acronyms and abbreviations

ADDS	Djibouti Social Development Agency
AfDB	African Development Bank
ANR	Assisted Natural Regeneration
APGMV	Pan-African Agency for the Great Green Wall
AU	African Union
CBD	United Nations Convention on Biological Diversity
CEN-SAD	Community of Sahel-Saharan States
CERD	Djibouti Study and Research Centre
COMPACT	Pact for Food and Agriculture
DAF	Department of Agriculture and Forestry
DGT	Major Works Department
DHR	Rural Hydraulics Department
DISED	Statistics and Demographic Studies Department
FAOSTAT	Food and Agriculture Organization Corporate Statistical Database
FFS	Farmer Field Schools
GDP	Gross Domestic Product
GGW	The Great Green Wall Initiative
GIS	Geographic Information System
ICT	Information and communication technologies
IGAs	Income generative activities
M&E	Monitoring & Evaluation
MAEPRH	Ministry of Agriculture, Water, Fisheries and Livestock, in charge of Halieutic Resources
MHUEAT	Ministry of Housing, Urban Planning, the Environment and Land use planning
MFF	Ministry for Women and the Family
NAPA	National Adaptation Programme of Action
NDC	Nationally Determined Contribution
NDP	National Development Plan
NTFP	Non-timber forest product
PGIRE	Integrated Water Resources Management Project
PNG	National Gender Policy
PNIASAN	National Programme for Agricultural Investment and Food and Nutritional Security
PROGRES	Water and soil management programme
SDSA	Djibouti Food Security Company
SECAP	Social, Environmental and Climate Evaluation Procedures
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund

Climate Change Adaptation Project in the Great Green Wall National Corridor

Project/Programme Background and Context

A. Geography

1. The Republic of Djibouti is located in the Horn of Africa, at the junction of the Red Sea and the Indian Ocean. With a surface area of 23,200 km², it shares 520 km of land borders with Eritrea, Ethiopia and Somalia, as well as 372 km of coastline along the Bab El Mandeb Strait, the Gulf of Tadjourah and the Gulf of Aden. The geographical landscape can be divided into three zones: the low-lying eastern coastal plain, the more mountainous northern interior and the plains and plateaus of the southern interior. In the north, in the Obock region, the coast is low and sandy, and extends into a vast, almost desert-like plain (junction of the Red Sea and the Indian Ocean). In the Tadjourah region, along the gulf, there is a large mountain range that includes the Goda massif (1750 m) with its daytime forest and the Mablās massif (1380 m), the only parts of the country with permanent vegetation cover. In the south of the country, there are plains: the Hanlé plain, the largest (35 km long by 20 km wide); further south, the Gobaad plain to the east of Dikhil; and the Gadagé plain, located in a depression parallel to the Hanlé plain, but further east.
2. The Great Green Wall corridor within which the project will be implemented spans four regions: Arta, Ali Sabieh, Dikhil and Tadjourah, as shown in the figure below.

Figure 1 : GGW map in the Republic of Djibouti



B. Agriculture and food security

3. The agricultural sector is underdeveloped, mainly due to the climate, unfavorable soil and hydrological conditions (lack of water and arable land, soil salinity), and the poor organization of farmers. The primary sector accounted for just 3% of GDP in 2020. Agriculture is essentially oasis-based, practiced along the wadis and based on irrigated market gardening combined with livestock farming. The total cultivated area reached 1,620 hectares for the 2019-2020 crop year, farmed by 2,081 farms, out of a total of 10,000 hectares of arable land. Half of the arable land is in the north, but the majority of crops are in the south, mainly in the districts of Ali-Sabieh, Dikhil and Djibouti¹. It is worth mentioning that livestock production accounts for about 75 per cent of agricultural GDP. It is extensively and semi-nomadically practiced by around 16 per cent of the population on public rangeland. Overall, food self-sufficiency is very low in Djibouti and, according to FAOSTAT, ranges from 1% to 6% depending on the product. Nevertheless, the agricultural sector is an important economic activity, providing employment for around 80% of the rural population, mainly through livestock farming.
4. The proportion of households with inadequate nutrition has increased from 43% in 2020 to 54% in 2022. The prevalence

¹ IGAD. 2018. Land Governance in IGAD Region. Djibouti Country Profile.

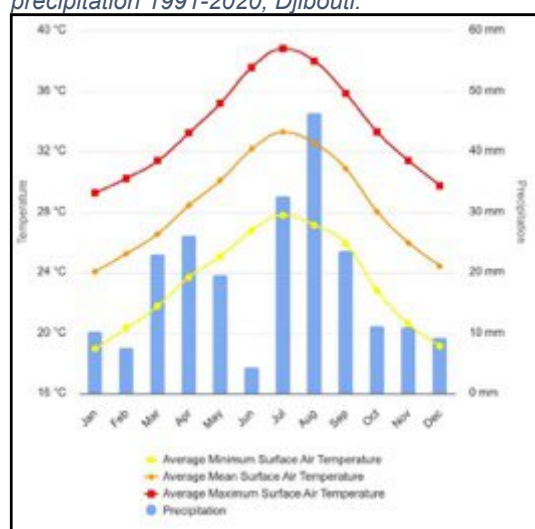
of undernourishment changed little over the 2016-2021 period, from 14% of the population in 2017 to 13.5% in 2021. While the level of food insecurity has been significantly reduced over the 2016-2021 period, this trend will be reversed from 2022 onwards, due to crises (war in Ukraine, situation in Ethiopia, prolonged droughts). The prevalence of food insecurity is estimated at 29% of the population in 2022². The proportion of children affected by different forms of malnutrition is very high; according to last estimates, 19 percent of children under five suffer from stunting, 11 percent from wasting, 52 percent from severe anemia, and 11 percent of children 5-19 years from overweight and obesity. Today, 32 per cent of girls and women of reproductive age in Djibouti are living with the debilitating effects of anaemia, with little improvement compared to the past³.

C. Climate

Historical climate trends

5. The Republic of Djibouti is one of the countries with a hot semi-arid climate. With the exception of the mountainous regions to the north of the Gulf of Tadjourah, high temperatures rarely fall below 22°C. Temperature variations are small. The year is divided into two seasons: the cool season, from October to April (average 25°C), with an easterly wind bringing some rain, which corresponds to a Mediterranean summer; the hot season, from May to September (average 35°C), when two dry winds blow: the Sabo from the southwest and the Khamsin from the northwest. The country is characterized by high temperatures and high evaporation all year round. The country is particularly affected by low and irregular precipitation. The following figure shows climatology of monthly mean minimum surface air temperature, mean maximum surface air temperature and precipitation over the period 1991-2020.

Figure 2: Monthly climatology of mean minimum surface air temperature, mean average surface air temperature, mean maximum surface air temperature and precipitation 1991-2020; Djibouti.



6. The wettest months are April, July and August, with a monthly average of 30 mm. January, June and December are the driest months, with average rainfall of 10 mm or less. Rainfall is largely regulated by the Intertropical Convergence Zone (ITCZ), and the climate is also sensitive to the effects of the El Niño Southern Oscillation (ENSO).

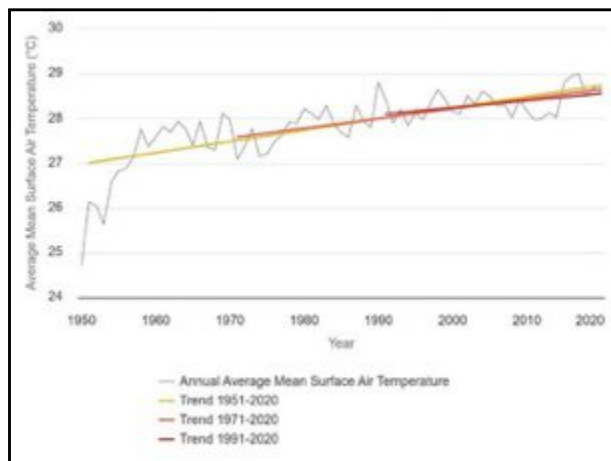
Temperatures

² FAOSTAT

³ Source: World Health Organization and UNICEF Global Database 2023

7. Between 1971 and 2020, Djibouti's mean annual temperature rose by 0.21°C per decade, with relatively small regional and seasonal differences, but a significant increase in the number of hot and humid days⁴. However, the most notable trend over the historical period 1971-2020 may be the statistically significant (>95%) increase of 4.34 days per decade with a heat index >35°C⁵.

Figure 3: Trends in mean surface air temperature with significance of trend per decade 1951-2020; Djibouti



8. Figure 4 shows a trend in mean temperature over the period 1951-2020, regardless of the decade bands considered. Over the period 1951-2020, the trend is an increase of 0.23°C per decade.

Figure 4: Annual trends in maximum number of consecutive dry days with significance of trend by decade; 1951-2020; Djibouti

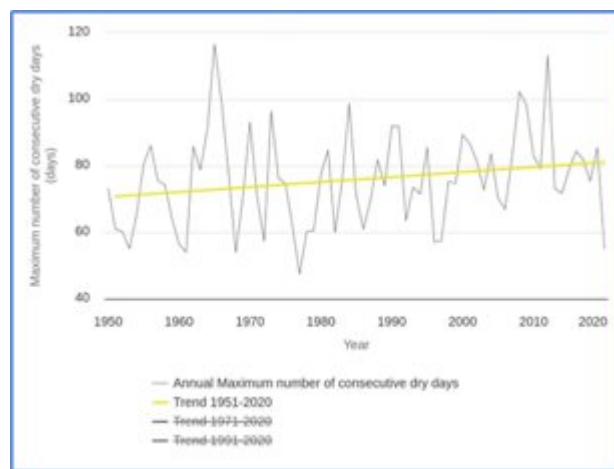
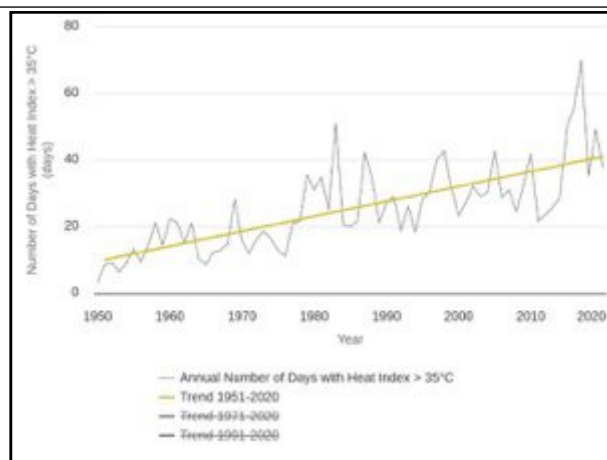


Figure 5: Annual number of days with temperatures above 35°C

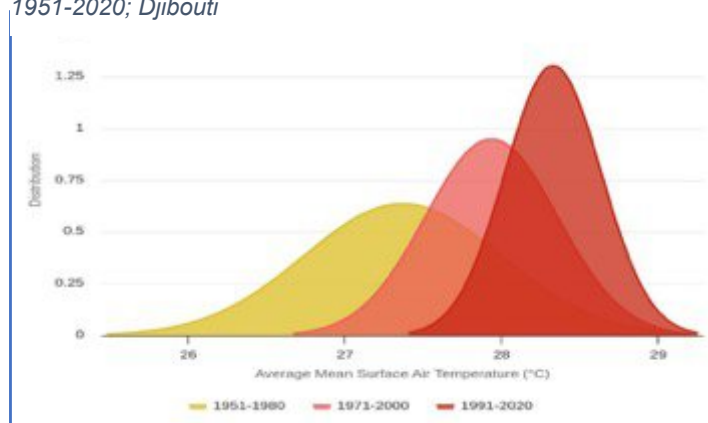


9. Similarly, the maximum number of consecutive dry days increased by an average of 1.74 days per decade from 1951 to 2020, while the number of days with a temperature > 35 increased by 4.15 days per decade.

⁴ Climate Risk Profile: Djibouti (2023): The World Bank Group.

⁵ Idem

Figure 6: Change in distribution of mean surface air temperature 1951-2020; Djibouti



10. To visualize possible changes in the distribution of climate and its variability, successive climatological periods can be compared through changes in the mean as well as the extent (width) of variability. Each bell-shaped distribution represents a 30-year climatological interval. This shows that, for Djibouti, years are becoming warmer and more intense temperatures are occurring more frequently.

Precipitation

Figure 7: Annual rainfall trend with significance of trend by decade; 1951-2020; Djibouti

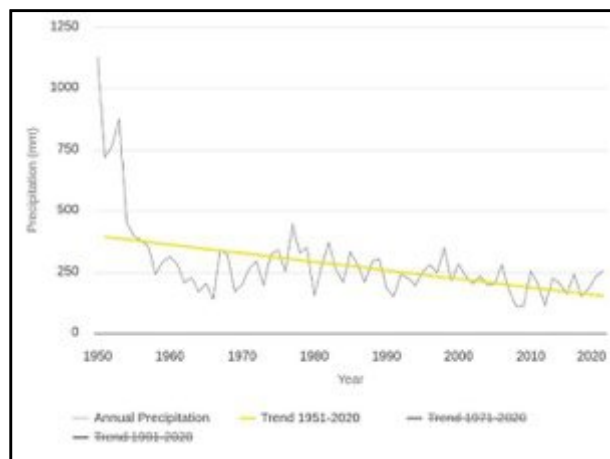
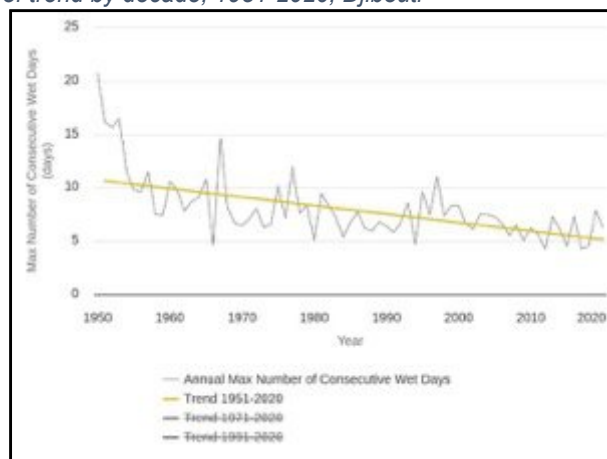


Figure 8: Annual trend in maximum number of consecutive rainy days - annual trends with significance of trend by decade; 1951-2020; Djibouti



11. Over the period 1951-2020, figure 9 shows that precipitation has tended to decrease at a rate of 23.47mm per decade. The number of consecutive rainy days (Figure 10) also decreased, by 0.66 days per decade. The following table shows the extreme events (floods, drought and windstorms) that occurred in Djibouti between 1970 and 2020. We note that a long period of drought is often followed by heavy rainfall and flooding⁶.

Table 1: Extreme events (floods, drought and windstorms) in Djibouti between 1970 and 2020

Type de catastrophe	Intensité (1)	Année	Nombre total de personnes touchées
Inondation	F	1977	91 000
Inondation	F	1978	106 000
Sécheresse	F	1980	14 500
Inondation	F	1981	102 000
Sécheresse	F	1984	80 000
Sécheresse	M	1988	30 000
Inondation	F	1989	150 300
Inondation	B	1993	20 000
Inondation	F	1994	120 000
Tempête de vent	B	1995	775
Sécheresse	F	1996	100 000
Sécheresse	F	1999	100 000
Sécheresse	F	2000	150 000
Sécheresse	F	2001	95 000
Inondation	F	2004	115 000
Inondation		2010	
Inondation	F	2013	
Inondation	F	2019	
Inondation	F	2020	

Climate trends in the project area

12. The Great Green Wall zone includes the regions of Arta, Dikhil and Tadjourah. Within the Great Green Wall zone, the Ali Sabieh region sees cooler minimum temperatures during the winter months (January), while the diverse topography of the Tadjourah region (from subtropical mountain climates to warmer climatic conditions) can mask more extreme local temperature variations.

Arta

13. Climatic conditions in Arta are characterized by arid, dry desert weather. Throughout the year, Arta experiences an almost total absence of precipitation. According to the Köppen-Geiger classification, the climate prevailing in this region is classified as BWh. The average temperature in Arta is recorded as 27.4°C, according to statistical data. Each year, Arta receives around 225 mm of precipitation.

Table 2: Climate Table for Arta

	January	February	March	April	May	June	July	August	September	October	November	December
Average temperature (°C)	22.1	22.9	24.7	26.7	29.8	32.7	32.9	31.9	31.1	27	24.3	22.6
Average minimum temperature (°C)	18.7	19.3	20.9	22.8	25.1	27.3	28.1	27.2	26.6	23	20.7	19.1
Maximum temperature (°C)	26.5	27.8	29.9	31.7	35.5	38.6	38.1	36.9	36.5	32.1	28.9	27.1
Precipitation (mm)	24	17	24	37	16	2	11	25	14	20	19	16
Humidity (%)	73%	69%	67%	68%	54%	34%	34%	41%	47%	62%	68%	70%

⁶ Idem

	January	February	March	April	May	June	July	August	September	October	November	December
Rainy days (days)	5	3	4	6	3	0	2	4	3	4	4	3
Hours of sunshine (h)	6.4	7.1	8.2	8.9	10.5	11.5	11.4	11.2	10.8	9.4	8.1	7.5

Data: 1991 - 2021 Average minimum temperature (°C), Maximum temperature (°C), Precipitation (mm), Humidity, Rainy days. Data: 1999 - 2019: Sun Hours

14. There is a notable variation in precipitation levels between the driest and wettest months, amounting to 35 mm. January was found to have the highest relative humidity, with a percentage of 72.84. On the other hand, July has the lowest relative humidity, with an approximate rate of 33.66. According to the data, April was observed as the month with the highest number of rainy days (7.53), while June recorded the lowest amount of precipitation during its duration (0.47).

Dikhil

Table 3: Climate Table for Dikhil

	January	February	March	April	May	June	July	August	September	October	November	December
Average temperature (°C)	24	25.1	27.5	29.7	32.4	34.2	33.6	32.5	33	29.1	26.2	24.3
Average minimum temperature (°C)	18.3	19.1	21.2	23.5	25.4	26.7	27.3	26.5	26.6	22.6	20.1	18.5
Maximum temperature (°C)	31	32.8	35.2	36.9	38.8	40.3	39.1	37.8	38.3	35.9	33.2	31.3
Precipitation (mm)	4	6	13	28	17	1	19	37	13	10	4	2
Humidity (%)	58%	52%	49%	50%	40%	27%	33%	40%	37%	45%	51%	55%
Rainy days (jrée)	1	1	2	4	2	0	3	6	2	2	1	0
Hours of sunshine (h)	8.9	9.3	9.9	10.3	11.1	11.5	11.4	11.2	10.9	10.3	9.7	9.4

Data: 1991 - 2021 Average minimum temperature (°C), Maximum temperature (°C), Precipitation (mm), Humidity, Rainy days. Data: 1999 - 2019: Sun Hours

15. Climatic conditions in this region are characterized by aridity and drought, similar to those of a desert. In the Dikhil region, rainfall is virtually non-existent throughout the year. This climate is considered BWh according to the Köppen-Geiger climate classification.

Tadjourah

Table 4: Climate Table for Tadjourah

	January	February	March	April	May	June	July	August	September	October	November	December
Average temperature (°C)	20.9	21.6	23.6	25.9	28.9	31.9	31.8	30.2	29.2	25.8	23.3	21.5
Average minimum temperature (°C)	18.1	18.4	20.1	22.2	24.6	26.5	26.9	25.7	25.1	22.3	20.2	18.6
Maximum temperature (°C)	24.6	25.7	28.1	30.2	33.7	37.4	37.5	35.5	34	29.9	27	25.2
Precipitation (mm)	54	35	37	34	18	3	15	37	25	35	42	41
Humidity (%)	78%	74%	68%	66%	56%	35%	39%	51%	59%	66%	72%	76%
Rainy days (jrée)	10	7	7	6	3	0	2	6	5	6	7	7
Hours of sunshine (h)	6.3	6.9	8.3	9.3	10.6	11.4	11.4	11.2	10.7	9.3	8.1	7.4

Data: 1991 - 2021 Average minimum temperature (°C), Maximum temperature (°C), Precipitation (mm), Humidity, Rainy days. Data: 1999 - 2019: Sun Hours

16. Between the driest and wettest months, rainfall varies by 51 mm. Seasonal temperature fluctuation is 11.0°C. The month with the highest relative humidity is January (35.24). The month with the lowest relative humidity is June (35%). The month with the highest precipitation is January (10 days), while the month with the lowest precipitation is June (0).

Future climate scenarios

17. The modelled climate data come from the CMIP6 project (Coupled Model Intercomparison Project, Phase 6), which forms the baseline data used to present global climate change projections in the Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC).
18. **Temperature.** SSP3-7.0 represents a higher emissions scenario and is considered a more realistic worst-case scenario in which warming reaches ~3.5-4°C by 2100. When considering "risk", it is more prudent to use higher scenarios so as

not to dangerously underestimate potential changes and risk conditions. During the months of May and July, the projected climatology for 2040-2059 of the average temperature across the country increases more than twice as much as the projected climatology for 2020-2039 compared to the reference period.

19. **Extreme temperature and heat:** Under SSP3-7.0, Djibouti's temperatures are expected to rise evenly, particularly inland, with an average of 30.19°C in 2050, a deviation of 1.29°C from the reference period. By mid-century, Djibouti's population is expected to experience an increased risk of extreme heat, but the pattern and rate of change will vary between coastal and inland areas, with the latter being more severely affected⁷.

Figure 9: Projected national mean temperature climatology for 2020-2039 and 2040-2059 (reference period 1995-2014) for SSP3-7.0

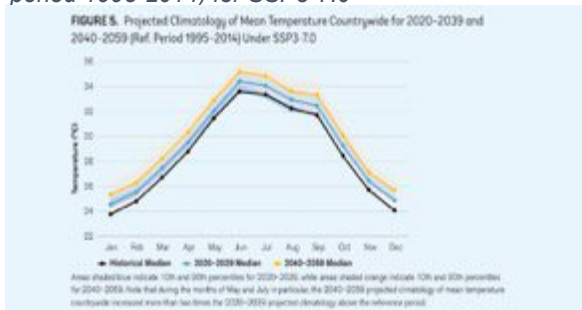
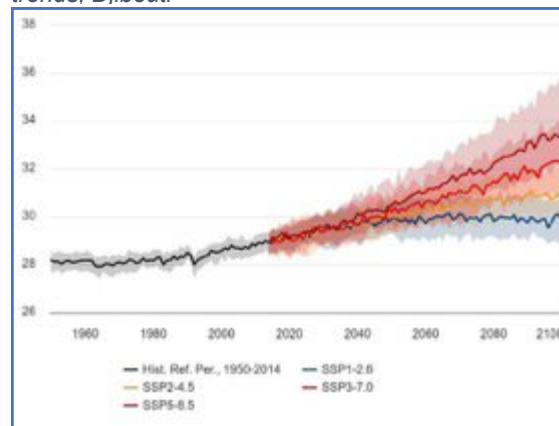


Figure 10: Predicted deviation from natural variability of mean surface air temperature, with trends; Djibouti



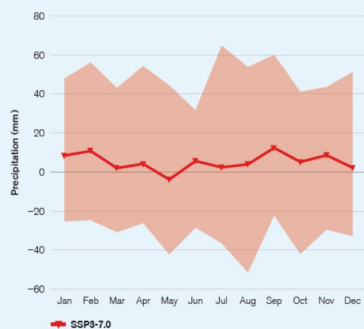
20. **Precipitations.** According to SSP3-7.0, the country reports annual mid-century increases, but divergent seasonal and regional variations with a wide range of uncertainties. Regarding the **extreme precipitation events**, around 2050, Djibouti is likely to experience more frequent extreme precipitation events, but there is still uncertainty as to the rates of change in future return periods at sub-national level. In mountainous regions, extreme precipitation events can have devastating effects on topsoil and vegetation recovery. A certain divergence in annual cumulative rainfall trends: the two scenarios RCP 4.5 and RCP 8.5 estimate an increase of 5% and 2% respectively by 2100. In contrast, the PRACAS project estimates a decrease in rainfall of around 4% by 2050.⁸ While regional differences in the frequency of extreme precipitation vary between scenarios, each frequency in the five regions experiences greater rates of change after mid-century. The increase in the frequency of extreme precipitation and associated flooding in Djibouti highlights future health and economic risks, particularly for critical infrastructure.

Figure 11 (Left) : Nationally Projected Average Largest 5-Day Cumulative Precipitation Anomaly 2040-2059 under SSP3-7.0 (Ref. Period 1995-2014)

⁷ World Bank. 2023. Climate Risk Country Profile; Djibouti

⁸ 3rd Communication to the UNFCCC

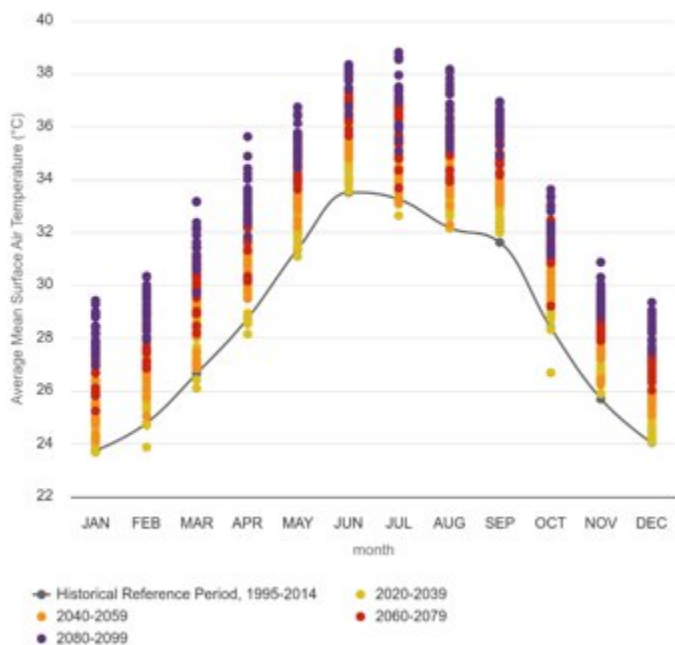
FIGURE 1 Nationally Projected Average Largest 5-Day Cumulative Precipitation Anomaly 2040–2059 Under SSP3-7.0 (Ref. Period 1995–2014)



The largest 5-day cumulative anomalies increase most during September, November, January, and February, while decreasing during the month of May. Note the wider range on the y-axis.

Figure 12 (Right): Projected Variability and Trends of Average Mean Surface Air Temperature across Seasonal Cycle, 2020–2100; Djibouti; SSP3-7 access-cm2_r1i1p1f1

Projected Variability and Trends of Average Mean Surface Air Temperature across Seasonal Cycle, 2020–2100; Djibouti; SSP3-7 access-cm2_r1i1p1f1



D. Impacts of climate change

21. The vast majority of Djibouti's rural population is highly sensitive to climate uncertainty. They live in deserts or marginal, infertile areas, often with highly erodible soils, low vegetation cover and limited water reserves, where food security is a major concern.
22. **Droughts** pose a serious challenge to already limited water supplies, frequently requiring emergency food and water aid to populations. Historical observations indicate that such aid efforts are likely to increase over time.
23. **Critical rainfall periods**, which feed the central plain grazing areas during the months of April to August, are expected

to decrease. In addition, winter rains (Hays-Dadaac), which occur between September and February, are expected to decrease on average, and significant changes are expected during the pasture growth period (September-October). The impact of these changes on livestock production could be significant⁹.

24. **Water infrastructures.** In highly seasonal regions, year-round water supply is essential for resource management and disaster safety. Extreme events that may occur over time as a result of climate change can limit the resilience of infrastructures if the initial conditions that prevailed when they were built are no longer met in the face of these extreme events. A new analysis of the infrastructure and management system may then be warranted.
25. **Livestock farming.** The impact of these changes on livestock production will be significant. Many groups that depend on winter grazing are already extremely vulnerable, and the traditional way of developing livestock farming will be jeopardized by recurrent droughts and insufficient water resources, leading to a shortage of natural pastures and a gradual degradation of rangelands due in particular to overgrazing and human pressure.
26. **Impacts on forest ecosystems.** Chronic poverty in rural areas puts pressure on natural resources and threatens biodiversity. Man is overexploiting the environment through overgrazing, logging and the spread of poor agricultural practices. In the Tadjourah region, uncontrolled logging and forest exploitation (Mont Goda) have created long-term environmental problems. The gradual sedentarization of nomads has only exacerbated this pressure¹⁰.
27. **Flooding** - High rainfall variability and intensity pose a major threat to pastoral areas in the south-west of the region, whose sandy soils are already vulnerable to episodic flooding caused by extreme rainfall. Damage to infrastructure caused by flooding can lead to essential water pumps and other distribution infrastructure becoming unusable, exacerbating water shortages.
28. **Intense weather events** will become increasingly frequent in Djibouti. All regions, with the exception of the northeastern coastal regions, are expected to be almost twice as likely to experience extreme events with cumulative rainfall over 5 days or a month and historical return periods of 100 years by mid-century under the SSP3-7.0 scenario¹¹. In November 2019, Djibouti experienced heavy rains that triggered flash flooding across the country: the equivalent of two years' rainfall was recorded in a single day; some 250,000 people were affected across the country, of whom 150,000 (including migrants and refugees) required immediate humanitarian assistance¹².
29. **Rising sea levels.** Flooding and erosion will increasingly threaten Djibouti's coastal zones, leading to significant coastal retreat by the end of the century. Sea level rise at national level is expected to increase by 0.22 m (0.15 m, 0.31 m) by 2050 and by 0.69 m (0.48 m, 0.95 m) by 2100 compared with the historical baseline¹³.

E. Sector and community vulnerability to climate change.

30. The vulnerability of the agriculture and livestock sub-sectors to the effects of climate change is high, due to the country's severe climatic conditions (low and irregular rainfall; - high and constant temperatures throughout the year; - strong and dry winds, to which are added anthropogenic pressures (overgrazing, deforestation) that make livestock breeders, farmers and the sedentary rural population equally vulnerable.
31. The table below shows the vulnerability to climate change of four key sectors: water resources, agriculture and forestry, livestock farming and coastal zones.

Table 5: Vulnerability assessment of resources and sectors

Sectors	High vulnerability
Water resources	Surface water Increased flood frequency (up to 4-5 major floods per year) Increasing scale of major floods Modification of runoff water regime
	Groundwater Reduced natural recharge of aquifers Reduction in groundwater resources (by 11 650,000 m ³ to 9,880,000 m ³ /year in 2050), leading to an increase in salinity.
Agriculture and forestry	Drought Agriculture

⁹ GFDRR. April 2011. Climate Risk and Adaptation Country Profile Djibouti.

¹⁰ 2nd National Communication to UNFCCC

¹¹ World Bank. 2023. Climate Risk Country Profile; Djibouti

¹² United Nations. December 2019. Djibouti Flash Update #3: Humanitarian Impact of the Floods | December 17, 2019

¹³ World Bank. 2023. Climate Risk Country Profile. Djibouti

	<p>Depletion of groundwater used for irrigation Increased salt content in soil and irrigation water Reduced yields Loss of agricultural land due to erosion or salinity</p> <p>Forest landscapes Loss of forest cover Progressive extinction of key endemic species Overgrazing of declining rangelands Increasing human pressure on forests for firewood and construction Invasion of <i>Prosopis</i> sp. which grows very rapidly under the increasing aridity, encroaching on cultivated land and competing with other local trees and shrubs (particularly in the coastal plain of Djibouti, Tadjourah and Hanlé Gobaad).</p> <p>Flooding Destruction of farms near wadis Siltation of wells Destruction of crops and infrastructure Multiplication of pests and insects (caterpillars, fungi, crickets, etc.) Anthropogenic pressure on forests for firewood and timber</p>
Breeding	<p>Degradation of rangelands Concentration of livestock around watering holes Decline in livestock productivity Low disease resistance in cattle</p>
Coastal zones	<p>Destruction of economic infrastructure (\$11.3 million in 2004) Destruction of habitats and biotopes Loss of life - 80 dead or missing (2004 floods)</p>

F. Climate change adaptation measures

32. To address the negative impacts of climate change, Djibouti has outlined the main adaptation measures in its National Adaptation Programme of Action (NAPA), which have been implemented through priority projects since 2006. The three national communications to the UNFCCC (2002, 2014 and 2021) have further developed the adaptation measures set out in the NAPA.

33. In summary, the NAPA recommends the following adaptation measures.

Table 6: Main adaptation measures recommended for the agriculture and water sectors

Sector	Recommendations
Agriculture	<p>Improve soil conservation initiatives, Change cultivation patterns, Introduce temperature-resistant varieties with low water requirements Develop and implement innovative techniques to save water and improve water resource management, Improve farmers' knowledge of the appropriate use of meteorological information in agriculture and activities to avoid the risks associated with climate change, Improve information on climate variability and seasonal climate forecasts to reduce production risks.</p>
Water	<p>Promote the development and management of surface water, Manage and protect hydrological and hydrogeological systems, Improve water resource management and investment in water monitoring and assessment systems, Promote participatory management of water points; Ensure equitable use of water resources in all sectors; Inform and educate the public about water conservation. Promoting integrated water resource management</p>

G. Intervention area and target groups

34. The project aims at rehabilitating approximately 30 000 ha of land, including areas under ANR, set aside rangeland, irrigated perimeters and reforestation, as described under Component 2. The area of intervention is the Great Green Wall National Corridor of Djibouti. The Great Green Wall Initiative (GGW), launched by the African Union (AU) in 2007, is a flagship program of the African Union in response to the growing threat of desertification. Initially envisaged as a long narrow strip of tree plantations, this Initiative has evolved into a mosaic of different land uses with the common goals of restoring degraded ecosystems, strengthening food security and the resilience of local communities, and promoting sustainable development. The Republic of Djibouti is a member of the Pan-African Agency for the Great Green Wall (APGMV), created in 2010 under the aegis of the African Union and CEN-SAD. The APGMV brings together

11 Sahelian countries, from Dakar to Djibouti.

35. In this context, the Republic of Djibouti drew up the "Strategy and action plan for the implementation of the Great Green Wall in Djibouti" in 2011. The strategy aims to "contribute to the fight against desert encroachment, develop degraded areas in an integrated manner with a view to sustainable management of natural resources, and combat poverty". In terms of materialization, the initially indicative map of the GGW spans the Republic of Djibouti over a total distance of 209 km and covers a total surface area estimated at 342826 ha. This choice of location took account of geomorphology, topography, rainfall, available water resources, soil resources and the presence of people who could be mobilized.
36. The initial GGW intervention zone in Djibouti comprises 3 regions: Dikhil, Ali-Sabieh and Arta; divided into 5 geographical units (Plateau of Dakka, Plains of Hanlé-Galafi, Dikhil-Okarre-Erreh Unit, Bara and foothills Unit, Holl-Holl-Djibouti Unit). 209 km long and 15 km wide, it occupies a total surface area estimated at 34,2826 ha. The population of this area (GGW) is estimated at 120,000, 65% of whom are rural (44% nomads and 21% sedentary) and 35% urban.
37. It should be noted, however, that the 2011 Strategy was updated in 2024. The new Strategy, which has been finalized, should be adopted in mid-June 2024. It includes an extension of the initial GGW area to the Tadjourah region, following the Government's recommendations.
38. The present project will have national coverage (Great Green Wall area), but will intervene in specific localities. The choice of intervention sites was based on four pre-established criteria agreed with the government, namely: (i) the possibility of mobilizing surface water; (ii) the existence of sufficient quality underground water resources (currently exploited or potentially exploitable within the limits of their renewal rate); (iii) the poverty index; (iv) population density or sedentarization dynamics; (v) the existence of agricultural potential and/or rangelands.
39. The localities in which the project will be implemented are located in 3 of the 4 regions covered by the GGW: (i) **Tadjourah region**: localities of Andaba and Magdoul; (ii) **Dikhil region**: localities of Cheikhetti2, Téweo, Abaitou, Gallamo 1 and Hanlé; (iii) **Arta region**: localities of Omar Jaaga and Kourtimaley. These areas are characterized by high poverty rates and sites where natural resources are often degraded: the majority of the selected localities are located in these poverty pockets.
40. The target number of beneficiaries will be around 24,000 people, from whom 30% will be women, a figure to be specified during the design phase. The beneficiaries are all the households living in the villages and surrounding camps in the targeted localities. The project will focus on small-scale producers, rural women and young people, in line with the priorities set out in Djibouti Vision 2035. All these households live in extreme conditions of precariousness and vulnerability to climatic hazards, even if there are disparities in poverty levels.
41. These findings were reinforced during interviews with local people and institutional players met during the mission, who all stressed: (i) inadequate facilities for mobilizing, managing and developing natural resources, particularly water and rangelands; (ii) boreholes that have broken down or water supplies that have deteriorated, leading to the abandonment of improved agricultural areas (ii) low productivity of agricultural activities (livestock and crops) and the abandonment of certain irrigated areas due to a lack of water resources; (iii) the shortage of plant protection products; (iv) the lack of jobs, particularly for young people; (v) the lack of financial and technical support to create income-generating activities, particularly for women and young people; (vi) the weak capacity of professional organisations in rural areas; and (vii) the weakness of support services for producers; (viii) the lack of roads to access some locations.
42. Families considered by the project can be divided into three socio-productive categories:
 - **Agro-pastoralists** who have been growing horticultural products for more than a decade and are looking to market part of their production. They still practice some extensive livestock farming, but are seeking to better integrate livestock and crops by growing fodder plants. The project will strengthen their capacities (technical and organizational) to improve this integration while increasing animal and crop production. To achieve this, the project will work closely with other ongoing projects to develop field schools and pilot plots belonging to experienced agro-pastoralists. The project will particularly support those who have not benefited from agricultural support in setting up and equipping their plots.
 - **Sedentary pastoralists**: former nomadic pastoralists who decided to settle down in order to gain access to basic services (education and health care). Many of them have lost a large proportion of their livestock (up to 90%), but continue to pursue their lifestyle as herders, using relatively close rangelands, with smaller herds that, in some cases, are not viable. They have established themselves in the agro-pastoral area and are therefore in the process of acquiring horticultural skills (as farm workers). Their access to water and land is mainly limited by the lack of means to invest in gardening (for young people and women).
 - **Semi-sedentary pastoralists**: pastoralists still practicing transhumance for 3-4 months a year and who have not yet acquired a practical knowledge of agriculture (having no examples in their direct environment). However, they

are seeking to ensure the nutritional security of their settled families. While protecting their pastoral activities through pastoral development and infrastructure, the project will support the establishment of small plots (through advice, development, supply of equipment) to improve their food security and nutrition.

43. It should be noted that the majority of the households in the camps surrounding the targeted villages in the Dikhil and Tadjourah regions are pastoralist communities originally from Ethiopia. They are Afars and belong to the same clan as the inhabitants of the host villages. Both communities, the Djiboutian population and the refugees, are governed by the same traditional rules and depend on the same traditional chief, the Aokal. These displaced persons rely heavily on community support and often utilize the resources of rural communities, which can lead to over-exploitation of available resources in certain areas. It is therefore essential to take these populations into account when targeting, so that infrastructure and activities can be sized according to the people who will actually have access to them.
44. The project will comply with the Adaptation Fund's Gender Policy. Identifying and characterizing vulnerable groups such as women and young people will enable the project's support to be identified, quantified and sized according to their specific needs. The quota system will also be used to ensure that young people and women are targeted. The targeting strategy thus aims to (i) ensure that young people and women, especially the most vulnerable, are the recipients of project support; (ii) establish gender equality at the community and professional organizations' level, through the use of innovative, participative and interactive methodologies such as GALS; (iii) promote agro-sylvo-pastoral and processing models favorable to young people and women.
45. While the overall aim of the project is to reach 30% of women, this percentage will however vary according to the kind of activities planned under the various components of the project. For instance, under Outcome 1.2 "Communities' capacity for sustainable water management strengthened", 30 % of the members of water infrastructure committees will be women (cf. §86); Regarding the output 2.1.2 "Agro-pastoralists trained in climate-resilient farming techniques and methods" the project targets 30% women and 40% young people (cf. §97); the Output 2.2.2: Sources of income and economic opportunities diversified, especially for women and young people" will benefit to 60% of women, and 50% of young people (cf. §103); 20% of women are expected benefiting of the output 3.1.2 "Restoration of sylvo-pastoral areas achieved" (cf. § 110); and 80% women and 30% of young people will benefit from output 3.2.2 "IGAs for the valorization of agroforestry products created" (cf. § 115).
46. To ensure inclusive targeting of beneficiaries, the project will conduct participatory assessments by adopting community targeting to identify the specific needs of vulnerable groups. Involving local leaders and associations will help support the community and enhance understanding of the project's objectives, thus directing efforts toward the most vulnerable populations. To ensure that the most vulnerable groups benefit from the project interventions, a range of inclusive strategies and tailored approaches will be embedded across the project's components. These strategies will specifically address potential barriers such as economic constraints, limited access to information, social marginalization, and gender inequalities:
 - ~ Planning workshops will be conducted at the village level with the active participation of vulnerable groups, including women, youth, the elderly, and low-income households. The participatory approach will ensure that these groups' specific needs and priorities are incorporated into the design and implementation phases.
 - ~ Community committees established for project oversight will include representatives from vulnerable groups to advocate for their interests in project decisions,
 - ~ Information on project activities and benefits will be communicated in local languages and adapted to various literacy levels, to make participation accessible to all,
 - ~ the project will provide targeted support and training for women on sustainable water management and climate-resilient agricultural practices. This approach builds on women's existing roles and strengthens,
 - ~ In communities where gender dynamics may prevent women from participating freely, the project will organize women-only sessions led by female trainers to foster a safe and supportive learning environment,
 - ~ Vulnerable groups, particularly youth and the elderly, will be offered specialized, hands-on training on climate-resilient practices that don't require advanced technical skills,
 - ~ The project will establish Farmer Field Schools (FFS), to guide participants through new agricultural techniques or water management practices. Vulnerable groups, particularly women and youth, will be offered specialized, hands-on training on climate-resilient practices that don't require advanced technical skills,
 - ~ Local organizations involved in the project implementation will receive training to identify and address the specific needs of vulnerable groups, ensuring that project benefits are accessible to all,
 - ~ To encourages inclusive and equitable use of project resources water points, irrigation, and storage facilities will be designed with safety in mind, ensuring that women and other vulnerable individuals can access resources without concerns about security or overcrowding,
 - ~ Local leaders and champions who belong to or have influence within vulnerable groups will be identified and

involved in outreach efforts, to help bridge social barriers, encouraging hesitant community members to participate. Indigenous and traditional knowledge will be respected and integrated into project activities where applicable, particularly in ecosystem restoration and water conservation methods, The M&E framework will include metrics to assess the participation of vulnerable groups. Data on participants will be disaggregated by gender, age, income level, and other relevant factors to monitor inclusivity and track the equitable distribution of benefits.

H. Preliminary gender assessment

47. An initial Gender Assessment was conducted during the preparation of this concept note. The conclusions of the assessment are mainstreamed into project activities, and will be reinforced by the full Gender Assessment to be conducted at full project proposal stage.
48. Djibouti's total population is estimated at 1.066 609 million in 2024 according to the last population census, with an annual demographic growth rate of 3.3%. 32% of the total population is under 15 years of age (50% of whom are girls) and 68% under 35 years old (50.6% of whom are women), while 10.2% is aged 55 years old and older (50.5% of whom are women). The median age is about 22.9 years old. Therefore, the population is predominantly young.
49. The traditional social organisation of the society is patriarchal and patrilineal, which is the basis of the subordinate status of women in relation to men within the family. The man embodies authority within the household and is responsible for its economic management. The woman is socially responsible for the household, taking care of the children and other family members. Gender stereotypes that perpetuate inequality are still prevalent in society. In project localities, regional gender dynamics are significantly influenced by cultural norms which restrict women's participation in various aspects of community life, including education, economic activities, and decision-making processes.
50. Gender dynamics and the role of women in community life vary significantly depending on the regions (North or South) and the livelihoods of the populations, whether they are nomadic (as in Tadjourah region) or sedentary (as in Dikhil region). In nomadic areas, where traditional social structures and mobility shape the division of tasks, women's roles in community decision-making may be more limited compared to sedentary communities, where they sometimes play a more prominent role in local agricultural or commercial activities. Female farmers, often faced with the challenges of water management and resource access, can exert substantial community influence through their role in food security and nutrition, while female pastoralists contribute to family economies by managing small livestock herds and selling dairy products. The project will consider these socio-economic and cultural specificities by proposing interventions tailored to the realities of each intervention area, aiming to strengthen women's involvement in community life while respecting local contexts and distinct needs.
51. **Education.** While there was an increase in numbers, the gender parity index reveals gender inequalities to the detriment of girls, irrespective of the level. In public education, it stagnated at around 46% at the primary and middle school levels creeping up from 43% to 46% at the secondary level. Girls are more likely to drop out of school than boys are. With a literacy rate of 48.2%¹⁴, women have no advantages in the labour market. This situation could last because of low school retention rate for girls, especially for girls from poor rural households.
52. **Poverty.** The population's overall poverty rate dropped by 5 points (from 40.8% in 2012 to 35.8% in 2017). This trend is observed in households headed by women (39.6% to 34.6%) and by men (41.1% to 36%). Over the same period, extreme poverty rates fell by 2.9 points in households headed by women (from 23.6% to 20.7%) and by 1.6 points in those headed by men (from 22.9% to 21.3%). In rural areas, the increase in the extreme poverty rate in households headed by men is 5 points (from 73.1% to 78.5%) while the rate for women-headed households is two points (from 76.4% to 78.4%). The different measures taken by Djibouti in favor of women to reduce poverty could explain this trend in favour of households headed by them (promotion of access by poor women to decent jobs, social safety nets, the establishment of nurseries and day-care centres, expansion of access to land housing and financing).
53. **Intersection vulnerability and barriers.** In rural Djibouti, the intersections of gender, age, disability, and socioeconomic status create distinct vulnerabilities and strengths, particularly for women. Young girls face barriers such as limited education, early marriage, and heavy domestic responsibilities, while elderly women often experience economic insecurity due to the absence of social safety nets, despite their significant social influence. Women in lower socioeconomic groups, especially those heading households, encounter heightened poverty and restricted decision-making power. However, many rural women develop leadership roles in community initiatives and engage in diverse livelihood strategies, demonstrating resilience and adaptability. Women's participation in project activities is further

¹⁴ EDAM 4-IS 2017

challenged by socio-cultural norms that prioritize traditional roles, such as housework, which consume time that could be spent on development activities.

To address these challenges, it is crucial to provide sustainable alternatives, such as improved access to water and enhanced cooking stove systems, enabling women to balance their responsibilities and participate more fully in community projects.

54. **Legal framework.** The 1948 Universal Declaration of Human Rights and the African Charter on Human and Peoples' Rights are integral parts of the Constitution. In addition, The Republic of Djibouti has also ratified or acceded to most of the international human rights conventions and incorporated them into the national legal framework: to this end, the Constitutional Act (2010) stipulates that " Treaties or agreements regularly ratified have, upon publication, a higher authority than that of the laws provided " (article 70).
55. The main international human rights instruments are the following: Convention on the Rights of the Child (2 December 1990); Convention on the Elimination of All Forms of Discrimination against Women (27 May 1998); Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (9 September 2002); International Covenant on Civil and Political Rights and the two Protocols thereto (9 September 2002); International Covenant on Economic, Social and Cultural Rights (2 September 2002); Rome Statute of the International Criminal Court (9 September 2002); Convention on the Rights of Persons with Disabilities and its Optional Protocol (3 January 2010); Convention on the Elimination of All Forms of Racial Discrimination (30 September 2011).
56. **At the national level** Djibouti various national laws are in place, notably the Code of Legal Protection of the Family (2002) sets the legal age for marriage at 18 years; the Code of Legal Protection of the Minors (2015), sets the law introducing compulsory education for children between the ages of 6 and 16 years; and the development of a National Strategy for Accelerating the Total Abandonment of FGM (2018-2022).
57. **Effective application of laws.** The equality of rights between all citizens is affirmed in Article 1 of the Constitution: "The State of Djibouti is a democratic, sovereign, single and indivisible Republic. It guarantees everyone equality before the law without distinction as to language, origin, race, sex or religion". However, in Djibouti's legal and judicial system, three sources of law co-exist: Islamic law, customary law (minor civil and sometimes criminal litigation such as rape) and civil law (all litigation) inherited from the Napoleonic Code¹⁵. This co-existence of different sources of law may be the source of contradictions. While the Civil Code is compliant overall with the provisions of international treaties, discrimination against women persists in the Family Code for example in the following cases: (i) a guardian's consent is required for women to validate the marriage (Art. 7), (ii) the power of the husband, family head, to whom women must owe obedience and show respect for the prerogatives (Art. 31), iii) the regulation granting male heirs twice the share of a female heir (Art.115 to 118, 120, 130, 142 and 158), or iv) the authorization of polygamy although the spouse may request a ruling from the court on the prejudice caused by a new marriage (Art. 22).
58. **Political framework.** Djibouti Vision 2035 is the long-term vision for Djibouti's economic and social development. It reiterates Djibouti's commitment to the 1995 Beijing Platform and to the post-2015 agendas, including the 2030 Agenda. Gender equality and the empowerment of all women and girls is a specific objective of it (SDG 5) and a driver of sustainable development. As a result, the Djibouti Vision 2035 retains the National Gender Policy (PNG 2011-2021) as the policy framework for gender. The PNG aims to "contribute to the achievement of gender equity and equality for boys and girls, men and women, in all areas of economic and social life".
59. **Employment.** Djibouti has one of the highest unemployment rates in the world, as service-oriented economic development has failed to create enough jobs for young people and women in particular. The proportion of informal jobs in non-agricultural employment is of 64.8% for men, 45.6% for women, giving a total percentage of informal jobs of 81.6% of the total percentage of jobs in the country. (ILO harmonized estimates)¹⁶. Between 2002 and 2017, the women's unemployment rate dropped from 68.6% to 63.4%. However, it remains higher than the male unemployment rate (54.6% to 38.7%)¹⁷ with a 10.7-point difference between the two rates to the detriment of women. Men and women have a 28-percentage point gap in labor force participation (2022)¹⁸. This led ILO Committee of Experts to "note with concern the persistence of a high level of poverty, unemployment and informality, especially among women and youth"¹⁹.

¹⁵ A/DB. July 2019. Djibouti Gender Profile: Gender, women's empowerment and poverty

¹⁶ <https://data.unwomen.org/country/djibouti>

¹⁷ MPFPF, National Gender Policy 2011-2021; EDAM4-IS 2017

¹⁸ World Bank gender equity Portal

¹⁹ ILO. 2022. Comments of the Committee of Experts (CEACR). C122 - *Employment Policy Convention, 1964 (No. 122)*

60. **Political participation.** The Djibouti legal framework made some progress regarding gender equality following proactive legislative measures. The introduction of the Quota Law (2002) provided that in legislative elections, political parties presenting candidate lists should include a proportion of each sex equivalent to at least 10% of the seats to be filled (Article 2). In 2008, a decree was implemented aimed at achieving proportional representation of at least 20% for both sexes in senior civil service posts. In January 2018, the Quota Act was amended to increase the quota of women elected to at least 25% of parliamentary seats to be held by women. As of February 2021, 26.2% of seats in parliament were held by women. The proportion of elected seats held by women in deliberative bodies of local government was of 28.9%.
61. **Gender Based Violence.** Official estimates for gender-based violence in Djibouti are scarce. The most common forms include domestic violence, female genital mutilation/cutting and, to a lesser extent, rape. Indeed, FGM remains the main type affecting girls/women in Djibouti, ahead of early marriages and other types of violence. The practice remains widespread in Djibouti with a prevalence rate among women aged 15 to 49 of 78.4%. The Ministry of Family and Woman carry out sensitisation campaigns to raise awareness of its harmful consequences. In addition, the adoption of legislative measures contributed to the decline. However, the prevalence rate remains high. A national survey on violence against women was carried out in 2019 by the national statistical office at the request of the Ministry for Women and the Family. The most important statistics derived from the survey data are the following: i) Nationally, the prevalence of female genital mutilation is 70.7 per cent, lower than in 2012, when the figure was 78.4 per cent; ii) The rate of women married under the age of 18, or early marriage rate, is 13.3 per cent overall, with a significant difference between urban and rural areas, where it is 10.3 per cent and 26.9 per cent, respectively. Since female genital mutilation is a major concern in Djibouti, the policy of eradicating all forms of female genital mutilation is part of the overall objective of combating all forms of gender violence. The national strategy to combat female genital mutilation came to an end in 2021 and the Ministry for Women and the Family began to evaluate it in November 2023. A new national strategy to combat female genital mutilation for the period from 2024 to 2029 will be produced in 2024
62. **Agriculture and gender.** Although, culturally, women do not work the land, they may own small farms where they employ male labour. They are often found working in horticulture. They face problems of yield, transport, marketing and access to water. When it comes to livestock farming, men and women have distinct roles. Men own and market the large livestock (camels and cattle). Women own the small livestock (sheep and goats). They market the milk from the family herd and can sell the small goats they own. Women and men have also different roles and responsibilities in the area of water management. Women and girls are heavily involved in managing water for domestic use, and men and boys are more concerned with water for irrigation²⁰. The burden of collecting water is a particular example of the situation of women and the heavy workload they have to endure. In several of the villages we visited (in the Ouakil area), women carry water in 20-litre drums from underground cisterns. The average daily water consumption per household is 80 litres. The women closest to the cistern draw 40 litres twice a day. The women furthest away take 80 litres at a time. The water is transported by donkey or by hand for the women closest to the water point. They are often helped by children. In terms of time, women spend between 2 and 6 hours a day on this task. With climate change, droughts are becoming more recurrent and intense, reducing drinking water resources and prompting the introduction of restrictive measures. As a result, the water drawn from the cisterns is only used for human consumption. Once a week, the women go off to wash the household laundry in localities where water is more readily available, often 15 km from the home. They devote a whole day to this task with severe consequences that limit their engagement in community and household activities.
63. At household level, female-headed households are more likely to resort to traditional wells or water chores (rivers, streams, rainwater, underground cisterns, etc.) while those headed by men are more likely to use paid water sources. These situations put a strain on the women's time budget, as it is an exclusively female task, irrespective of the sex of the head of the household²¹.

I. Project or program objectives

List the main objectives of the project/programme.

64. **The overall objective of the project** is to sustainably improve the resilience to climate change and food security and nutrition of poor rural households.
65. **The objective of the project** is to strengthen ecosystem resilience and communities' capacity to adapt to climate change through sustainable land management and agro-sylvo-pastoral development in the GW National Corridor.

²⁰ A/DB. 2020. Djibouti - Country Gender Profile

²¹ Ibid

Project/program components and funding

Table 7: Project components and Outcomes

Project/Program Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
Component 1 Improving sustainable access to water resources (USD 2,400,000) 24%	Output 1.1.1 Hydrogeological/electromagnetic and feasibility studies carried out	Outcome 1.1 Climate-resilient infrastructure built and operational	2 000 000
	Output 1.1.2 Defective hydraulic infrastructures rehabilitated		
	Output 1.1.3 New climate-resilient hydraulic infrastructures built		
	Output 1.2.1 Raising community awareness on water infrastructure management	Outcome 1.2 Community capacity for sustainable water management strengthened	400 000
	Output 1.2.2 Communities organized and equipped for gender-sensitive community management of hydraulic infrastructures		
Component 2 Promoting climate-resilient agriculture and improving food security and nutrition for local populations (USD 2,000,000) 20%	Output 2.1.1 Agro-pastoral areas managed in a climate-resilient manner	Outcome 2.1 The resilience of agro-pastoral systems is restored and strengthened	1 400 000
	Output 2.1.2 Agro-pastoralists trained in climate-resilient farming techniques and methods		
	Output 2.2.1 Increased input procurement and marketing capacity	Outcome 2.2 The autonomy of agricultural cooperatives is developed	600 000
	Output 2.2.2 Sources of income and economic opportunities diversified, especially for women and young people, with enhanced individual know-how in nutrition and food security.		
Component 3 Restoration of sylvo-pastoral ecosystems in the GGW Corridor (USD 2,300,000) 23%	Output 3.1.1 Feasibility studies carried out	Outcome 3.1 Restoration of sylvo-pastoral ecosystems in the GMV corridor	1 800 000
	Output 3.1.2 Restoration of sylvo-pastoral areas achieved		
	Output 3.2.1 Socio-economic studies on the value of sylvo-pastoral products carried out	Outcome 3.2 Sylvo-pastoral products valued	500 000
	Output 3.2.2 IGAs for the valorization of agroforestry products created		

Component 4 Knowledge management, institutional capacity building and monitoring-evaluation in the GGW area (USD 1,638,318) 16,4%	Output 4.1.1 Knowledge Management ensured	Outcome 4.1 Knowledge Management and M&E	800 000
	Output 4.1.2 Monitoring and evaluation of GGW implementation		
	Output 4.2.1 GGW management enhanced	Outcome 4.2 Institutional support to GGW implementation	838 318
	Output 4.2.2 GGW integrated into the National Development Plan		
	Total cost of components		
Project Execution cost			875 166
Total Project Cost			9 213 484
Project Cycle Management Fee charged by the Implementing Entity			783 952
Amount of Financing Requested			9 997 436

Schedule :

Table 8: Timetable

Milestones	Expected Dates
Start of Project/Programme Implementation	March 2026
Mid-term Review (if planned)	March 2029
Project/Program Closing	February 2032
Terminal Evaluation	August 2032

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience..

66. The project would include the following components and Outcomes:

Component 1: Improving sustainable access to water resources

67. In Djibouti's arid climate, groundwater is the only available resource, but it is showing signs of degradation due to the combined effect of climate change hazards (lack of rainfall and seawater intrusion) and population growth²². Rainfall is irregular in time and space, generating only ephemeral surface runoff (average annual rainfall does not exceed 150 mm). However, during major rainfall events, several million cubic meters of water flow into the sea, when it could be used to meet the water needs of the population. Under these conditions, the mobilization of surface water is of paramount importance and is a government priority in development plans.

68. Under **Component 1, Improving sustainable access to water resources**, the project will work with the DHR and other relevant structures in the Ministry of Agriculture to assess the situation regarding the mobilization of underground and surface water resources in the project area, within the Great Green Wall corridor. The project will draw up a list of hydraulic infrastructures to be rehabilitated to make them climate-resistant, as well as the list of new surface water retention infrastructures to be built. Prior to this, the project will carry out the necessary hydrogeological and technical studies.

69. Surface waters are formed by temporary rivers, the wadis, which flow mainly into the endoreic inland plains or get lost at sea. In general, they are little used (5%), the rest being lost by runoff (2.5%) and evaporation (92.5%). In rural areas, water is generally exploited by shallow wells that capture underground streams in alluvial aquifers. If surface water is of paramount importance in the face of the inevitable and incessant degradation of groundwater, it is also catastrophic with floods that destroy homes, road infrastructure and agricultural perimeter, because of the country's torrential rainfall patterns.

70. Aquifer recharge is mainly based on the infiltration of flood water into wadis. Only 5% of the volume infiltrates and contributes to groundwater recharge²³. Two continuous aquifers exist in Djibouti, one with Lake Assal as the base level, the other between Djibouti city and Loyada. Elsewhere, there are discontinuous and alluvial aquifers. About 95% of water needs are met by groundwater resources.

71. The use of groundwater for irrigation poses problems of excessive salinity, with the exception of waters in the northwest of the country. On the other hand, it is possible to use water from underground flows in wadis with large watersheds and regular floods. Groundwater production is currently estimated at almost 29 million cubic meters per year²⁴.

72. Given the general deterioration in groundwater resources, the project foresees the construction of 3 boreholes, one per region, in accordance with the DHR's planning and the National Strategy for the Mobilization of Water Resources, where there are no other solutions to meet the essential needs of local populations.

73. In some regions of Djibouti, there are still aquifers that would enable groundwater to be mobilized on a sustainable basis to meet the vital needs of the beneficiary populations. These boreholes will therefore depend on hydrogeological studies carried out using the electromagnetic method, which should guarantee a better assessment of the water table and its renewal, and the setting up of a mechanism for the sustainable management of this resource.

Outcome 1.1: Climate-resilient infrastructure built and operational

Output 1.1.1 Hydrogeological/electromagnetic and feasibility studies carried out

74. The various national development strategies recognize the need to drill for drinking water in certain regions, but hydro geophysical studies using the electromagnetic method must be carried out beforehand to ensure that the resources can be exploited sustainably and do not affect the overall balance of the groundwater.

75. These studies will be carried out for each of the 3 new deep boreholes planned (one per region) and for the wells. These studies will be implemented in the form of calls for tender, in close consultation with the national institutions directly concerned, DHR and CERD. The project will give priority to the mobilization of surface water, but the structures must

²² 3rd National Communication to the UNFCCC

²³ <https://www.fao.org/aquastat/en/countries-and-basins/country-profiles/country/DJI>

²⁴ 2nd National Communication to the UNFCCC.

be properly dimensioned to take account the climate impact, particularly with the increase in torrential floods which damage the structures. Indeed, technical studies will be essential for the design of surface water reservoirs in the Great Green Wall area, since climate change is increasing the frequency and intensity of floods. The project will systematically carry out technical, environmental and social studies. The project provides for technical, environmental and social studies to be carried out systematically prior to the construction of any hydraulic infrastructure.

76. The list and nature of the various hydraulic infrastructures to be built will be defined during project design. Environmental and social impact assessment studies are also planned, in accordance with national regulations, the Adaptation Fund Environmental and Social Policy principles, as well as with IFAD's SECAP.

Output 1.1.2: Defective hydraulic infrastructures rehabilitated

77. Many hydraulic infrastructures are defective, due to a lack of maintenance, a shortage of technicians, high repair costs for users, and a lack of user involvement in the management of these infrastructures. This has led to the abandonment of many previously developed hydraulic infrastructures. The following root causes can also be underlined:

- ~ Lack of a long-term water management policy at the level of the Ministry of Agriculture, despite the fact that this body is responsible for drawing up and implementing water management policy. As a result, under pressure from local demand, there has been a proliferation of boreholes with no prior technical or scientific studies to ascertain sustainable access to the resource;
- ~ The DHR was not technically and staff-wise equipped to maintain all the hydraulic boreholes under its responsibility. Moreover, the DHR's departments were too centralized, and were the only ones empowered to intervene in the event of a breakdown;
- ~ In terms of information, there was no exhaustive database on boreholes and water points in the country. It should also be noted that only the Djibouti City region had been the subject of a scientific assessment of the aquifer's capacities.

78. The solutions adopted and implemented to date by the Ministry are as follow:

- ~ The Ministry of Agriculture has developed a long-term strategy;
- ~ The DHR has strengthened its technical capacities and decentralized its services to the regional level (action in progress, with the support of the IFAD PGIRE project financed by the Adaptation Fund);
- ~ Collaboration with scientific institutions has been institutionalized, with CERD in particular, for carrying out hydro-geological studies prior to the selection of drilling and well creation sites.

79. In close collaboration with the Rural Hydraulics Department (DHR) and the Major Works Department (DGT) of the Ministry of Agriculture, the project will carry out a survey of defective hydraulic infrastructures in the project area (wells, boreholes and surface water reservoirs) and will assess the cost of rehabilitating these defective infrastructures and upgrading them to make them climate resilient. In particular, the final design mission will assess the technical and financial feasibility of rehabilitating the Kourtimalei dam (Arta), and the Gallamo (Dikhil) and Omar Djagaa (Arta) boreholes.

Output 1.1.3: New climate-resilient hydraulic infrastructure built

80. Following on from the actions set out in 1.1.2, the project will build new wells and surface water reservoirs, and new solar-powered boreholes, with the necessary associated piping.
81. In relation to the new agropastoral perimeters planned under component 2, the project will carry out hydro geophysical and pedological studies, taking into account the anticipated effects of climate change, in order to identify suitable locations for the establishment of agro-pastoral plots and associated boreholes in the selected regions. The exact location and nature of the infrastructure will be defined during the design phase. In line with national policy, the works carried out, in particular the boreholes/wells/reservoirs, will be transferred to the DHR and DGT to ensure their maintenance and durability (the Ministry of Agriculture holds the maintenance budget for rural hydraulic works).
82. The infrastructure built will be climate-proofed to withstand the effects of flash floods. Specifically, the design of such new hydraulic infrastructure will aim at reinforcing their stability with reinforced protection downstream and a higher safety coefficient. For irrigated perimeters, hydraulic facilities will provide protection against flooding and water erosion. The climate-proofing will be coupled with training of local committees to ensure timely curative and preventive

maintenance.

83. The mission has identified the need to build underground cisterns at Andaba (Tadjourah), Teweó, Cheickeitti 2 and Gallamo (Dikhil), as well as the need to build 4 tanks of 150m³ at Teweó, Cheikhetti 2 (Dikhil). These requirements will be validated during the design mission.

Outcome 1.2: Communities' capacity for sustainable water management strengthened

84. This will be reflected in the project's sustained efforts to strengthen the technical organization of communities, so that they can take ownership of water and hydraulic structure management, master the techniques of rational resource management and ensure the maintenance of equipment and infrastructure. To this end, targeted awareness-raising actions will be carried out, taking gender into account²⁵

Output 1.2.1: Raising community awareness on water infrastructure management

85. By effectively raising rural communities' awareness of water infrastructure management, the project will promote better management of water resources, strengthen communities' resilience to climate change challenges, and contribute to sustainable development and improved living conditions in the Great Green Wall area. To this end, the project will support the Regional Councils in playing the role assigned to them in the National Strategy for Participatory Management of Rural Drinking Water Points (DHR, 2017). This will involve the Regional Councils participating in the design, monitoring and implementation of rural water projects, while local associations developing long terms actions to raise users' awareness of their rights (equitable and sustainable access to water), supporting water committees in carrying out awareness campaigns at local level, using appropriate communication media and adapting awareness messages to local languages to ensure maximum comprehension. Information sessions in the villages will inform residents about the importance of managing water infrastructures, paying maintenance fees, and involving women.

Output 1.2.2: Communities organized and equipped for gender-sensitive community management of hydraulic infrastructures

86. One of the causes for mismanagement of water resources and water infrastructure is the lack of local communities' involvement. To remedy this shortcoming, the Government adopted in 2017 the National Strategy for Participatory Management of Drinking Water Points in Rural Areas in Djibouti. The present project will fall within this framework; it will define a set of actions to strengthen/develop the establishment of community committees to oversee activities related to water management and ensure equitable and sustainable use of resources, as envisaged by the Strategy. It will encourage the active participation of local communities in the planning, implementation and monitoring of water management projects, promoting participatory decision-making and community governance. It will facilitate the registration of water committees (8 water committees envisaged) and the establishment of management contracts as foreseen in the Government's strategy. The project will provide practical training to community committee members on water management techniques adapted to the specific use (drinking water, water for animals and irrigation water), payment for water services by users, and scheduling of water infrastructures maintenance.
87. The project will integrate a gender perspective into water resource management. It will ensure that women and men have equal opportunities to participate in water management committees and decision-making processes, actively encouraging women's representation and ensuring an inclusive environment. In this sense, the project will replicate the experience of previous water projects where a minimum quota of 30% women on committees was applied.
88. Gender analyses will be carried out to understand the specific roles, needs and constraints of women and men in water management, in order to design tailored interventions that meet the needs of all community members. The project will ensure equitable access to water resources, taking into account women's domestic responsibilities and economic activities, and ensuring that they have access to water for their daily needs.

Component 2: Promoting climate-resilient agriculture and improving food security and nutrition for local populations

89. Component 2 **Promoting climate-resilient agriculture and improving food security and nutrition for local populations** is in line with the objectives of the National Programme for Agricultural Investment and Food and Nutritional Security (PNIASAN) and the Pact for Food and Agriculture (COMPACT) by helping to improve food self-sufficiency for products adapted to its ecology, which are water-efficient and reduce imports of fresh produce²⁶. The project is based on lessons learned from the development of agro-pastoral perimeters since 2005. The State supported the establishment of equipped agro-pastoral perimeters for the benefit of vulnerable households impacted by the effects of

²⁵ At least 30% of member committees will be women.

²⁶ 3rd National Communication to the UNFCCC

drought. "However, the majority of these schemes failed to deliver the expected results, due to a lack of ownership, insufficient supervision and the unavailability of suitable seeds"²⁷. These factors are taken into account in the establishment of climate-resilient agro-pastoral perimeters (Outcome 2.1), as well as in the development of the autonomy of agricultural cooperatives (Outcome 2.2).

Outcome 2.1: The resilience of agro-pastoral systems is restored and strengthened.

90. With virtually no rainfall in February 2022, combined with a lack of rainfall over most of the country in 2021, the deterioration in the condition of plant crops across the country has worsened. It is imperative to equip farming communities with the means, tools and capacities to strengthen their resilience in the face of climate change.

Output 2.1.1: Agro-pastoral areas managed in a climate-resilient manner

91. 91 As a first step, the project will delimit the new perimeters and secure the land tenure. Law N°171/AN/91/2e L establishing and organizing the public domain classifies all property on Djiboutian territory as part of the public domain. In the case of development projects, the Ministry concerned involves the authorities of the regions concerned (prefects and regional councils, customary chiefs of the beneficiary populations) from the formulation phase onwards. While the final decision on land allocation rests with the regional administrative authorities, local communities are informed and consulted. In the context of the present project, the procedure for securing land tenure for the plots to be developed will be spelled out during the design phase.

92. 92. Plots to be rehabilitated will be restored (from clearing to soil improvement work prior to planting crops). A development plan for the agro-pastoral perimeters will be drawn up, including an environmental management plan. The project will introduce drought-resistant crops adapted to the local climate, to reduce dependence on climate-sensitive crops. To this end, a soil profile will be drawn up for each of the intervention sites identified, in order to select appropriate species for cultivation in the agropastoral plots.

93. For rational and more efficient management of available water, drip irrigation systems will be installed (where clogging caused by salinity and turbidity of water doesn't lead to premature defect of the equipment), with adequately dimensioned solar pumping equipment, to complement the construction of surface water and rainwater retention infrastructures planned under component 1. To reduce evapotranspiration from the soil and conserve moisture, a mulching system will be introduced.

93. The mission has identified perimeters to be rehabilitated in the communes of Omar Djaga and Kourtimalei (Arta), and in Cheikhetti (Dikhil), which will need to be validated by the design mission. This mission will also assess the possibility of developing 3 new perimeters of 10 hectares each at Teweo, Cheikhetti 2 and Gallamo (Dikhil).

Output 2.1.2: Agro-pastoralists trained in climate-resilient farming techniques and methods

94. By providing agro-pastoralists with tailored, practical training in climate-resilient farming techniques and methods, it is possible to strengthen their ability to adapt to growing environmental challenges, improve their food security and livelihoods, and contribute to the resilience of rural communities as a whole. As a first step, the project will undertake participatory assessments to understand existing farming practices, the challenges faced and the traditional knowledge of agro-pastoralists. This will enable training to be tailored to the specific needs of each community.

95. To this end, the project will set up Farmer Field Schools (FFS), one per agricultural perimeter, or demonstration farms (with identified leaders), to transfer to farmers knowledge of agricultural techniques adapted to arid conditions and climate change. Field schools will be organized in conjunction with existing cooperatives. FFS offer collective, hands-on learning, enabling local populations to improve their critical analysis and decision-making skills. The activities proposed are carried out directly in the irrigated perimeter, notably in the form of experimentation aimed at solving problems and correspond to a particular local situation. This could include methods such as palm grove management, choice of crops in association, irrigation and water conservation, soil fertility management, use of improved seeds, nursery preparation, and integrated pest management practices. All these practices contribute to improving agricultural productivity and the resilience of production systems based on crop diversification and agroforestry. FFS was historically introduced in Djibouti in 2018 by the FAO as part of the project 'Renforcement de la Productivité des Productions Végétales et Animales à Djibouti - Re.Pro.VA', implemented in the 5 regions of Djibouti (Arta, Ali-Sabieh, Dikhil, Tadjourah and Obock). In particular, it has enabled the training of expertise at regional level, and the FFS facilitators have subsequently joined the agriculture sub-directorates or set up their own businesses. The project will therefore be able to draw on local expertise when implementing this component. In this context, the project plans to strengthen the existing FFS in Abaitou and Cheikhetti2 (Dikhil).

²⁷ Idem

96. The project will also raise agropastoralists' awareness of climate risks and natural disasters, and support the creation of agropastoral cooperatives, which are better able to implement adaptation measures and risk management strategies, such as drawing up contingency plans, diversifying sources of income and setting up early warning systems.
97. FFS will be extended to pastoralists and will build their capacity in sustainable grazing management, restoration of degraded land, biodiversity protection and conservation of natural habitats, in order to promote sustainable land use and better adaptation to climate change.

This activity will target women and young people to ensure that they are better equipped to implement adaptation measures, ensuring that women represent 30% of the total participants and 40% of the total participants are youth.

Outcome 2.2: The autonomy of agricultural cooperatives is developed

98. The autonomy of agricultural cooperatives will be supported by strengthening their capacity to acquire inputs, store agricultural produce and market products, and by diversifying their income, particularly for women and young people, including activities to enhance individual know-how in nutrition and food security.

Output 2.2.1: Increased input procurement and marketing capacity

99. The project will strengthen the capacity of agro-pastoralist cooperatives to acquire and sell agricultural inputs and equipment, improve members' access to quality inputs at affordable prices, boost agricultural productivity and strengthen the resilience of rural communities.
100. Training/awareness-raising activities will be carried out for cooperatives on cooperative management, stock management and the marketing of agricultural inputs and equipment, as well as on the importance of cooperation and group purchasing to obtain advantageous prices.
101. The training will also cover the development of business plans and facilitate cooperatives' access to the financing and resources needed for the initial acquisition of agricultural inputs and equipment. It will encourage cooperatives to prioritize the quality and durability of agricultural inputs and equipment offered to their members by promoting the use of sustainable agricultural practices. To facilitate marketing, cooperatives will be equipped with solar-powered cold rooms.

Output 2.2.2: Sources of income and economic opportunities diversified, especially for women and young people

102. Adding value to agroforestry products (particularly palm groves) and high-potential local species can be an important source of income for rural communities. The project will promote the creation of income-generating activities, mainly benefiting women's and youth cooperatives²⁸ and groups, such as :
 - ~ Cultivate agroforestry products and local species with high value-added potential, such as balanites (*Balanites aegyptiaca*), doum palm (*Hyphaene thebaica*), date palm (*Phoenix dactylifera* L.), or Moringa (*Moringa stenopetala*). These crops can be used to produce fruit, edible leaves, essential oils, cosmetics and nutritional supplements.
 - ~ Develop the production of honey and other beekeeping products such as beeswax, propolis and other by-products, by exploiting the floral resources of arid zones and implementing sustainable hive management practices.
 - ~ Support food and craft processing by setting up food processing units to transform agricultural and forestry products into value-added products such as jams, dried products, natural cosmetics and craft products.
 - ~ Strengthen the goat dairy industry, from the reinforcement of goat breeding to the production of by-products, for better food and nutritional security and income generation, particularly for women.
 - ~ Train charcoal producers to process the biomass from the invasive *Prosopis* sp. into charcoal briquettes with high energy yield, as an alternative to the cutting of native acacia trees.
 - ~ Support the manufacture and sale of improved stoves by women leaders, drawing on the lessons learned from cooperation between MEDD and UNHCR in this field, in order to meet household energy needs and combat wood cutting through low wood/charcoal consumption and the use of dead wood only,
 - ~ Create complementary, para-agricultural income-generating activities such as: maintenance of agricultural equipment and infrastructure (e.g. electromechanical maintenance, solar panel repair); eco-tourism, handicrafts and trade in local products, to reduce exclusive dependence on agriculture and livestock farming.

²⁸ 60% of women and 50 % of young targeted

- Enhance individual awareness and know-how of food and nutrition security
103. The project will recruit a community mobilization consultant to work closely with ADDS on the various value chains to be developed. The activity will involve women and youth, ensuring that 60% of the overall participants are women and 50% youth.
104. By exploring these income-generating activities, rural communities will not only be able to diversify their sources of income, but also enhance the value of local natural resources in a sustainable way, thus contributing to economic development and environmental preservation. Furthermore, the income pathways will be leveraged to improve the nutritional status of household members by promoting nutrition awareness and healthy dietary choices.

Component 3: Restoration of sylvo-pastoral ecosystems in the GGW Corridor

105. This component will cover the emblematic activities of the Great Green Wall that are common to all member countries of the Great Green Wall initiative: combating land degradation (Outcome 3.1) and improving the living conditions of populations in arid zones through the valorization of sylvo-pastoral products (Outcome 3.2).

Outcome 3. 1 Degraded land restored and developed

Output 3.1.1: Feasibility studies carried out

106. The project will catalog practices indigenous to the communities and introduced by development partners to restore and manage degraded lands in sylvo-pastoral ecosystems in the GGW area. The study will describe the practices and their results in terms of local community resilience and environmental sustainability, as well as their replication by the populations concerned at GGW scale. These studies will focus on:
- A detailed assessment of sylvo-pastoral practices and their impact on the current state of sylvo-pastoral ecosystems in the GGW area will be carried out. The study will identify indigenous and project-induced practices and their impacts on plant and animal species, soil conditions, land degradation, biomass productivity and fauna and flora biodiversity. The study will analyze the main environmental pressures, such as drought, deforestation, desertification, soil erosion and overgrazing, on the sustainability of pastoral developments, and assess their replication by the populations concerned. This assessment will also include an analysis of the economic, environmental and social viability of the various options for restoring and developing degraded land.
 - Identification of native plant species resilient to the region's dry and arid conditions, with particular emphasis on species adapted to drought, heat and poor soils. This study and the collection of germplasm from these species will enable the creation of a pastoretum at the Djibouti Food Security Company (SDSA) or a gene bank at CERD.
 - Training technicians and pastoralists in the collection, selection and propagation of seeds of plant species adapted to the region, with an emphasis on genetic diversity, disease resistance and drought tolerance. In 2024, the SDSA is in the process of organizing such training courses.
107. The project will also collaborate with research institutions such as CERD, on sustainable land management techniques and efficient agroforestry systems, and on best practices and adaptive technologies for dryland sylvo-pastoral ecosystems, including the testing of different varieties of market garden produce and forage species, in conjunction with seed importers and the SDSA.

Output 3.1.2 Restoration of sylvo-pastoral areas achieved

108. Under this component, the project will create nurseries for the production of native species, for the benefit of women and young people. To this end, the project will support the organization of women and young people in the form of cooperatives (by strengthening their technical and organizational capacities), and will supply them with inputs. To restore plant cover and biodiversity, the native plant species selected will have to be resilient to climate change, adapted to drought and able to tolerate extreme temperatures. Nurseries will be located close to the areas to be reforested to avoid plant losses due to transport (one nursery per region). Pre-selected sites for nursery development are Cheikhetti and Gallamo (Dikhil), to be confirmed during the design mission.
109. The project will encourage assisted natural regeneration (ANR) in appropriate areas, in order to restore degraded ecosystems and improve the resilience of local communities to drought. Assisted natural regeneration has many benefits, as it contributes to increasing biodiversity, maintaining and/or restoring soil fertility, and broadening the range of products and services provided by trees. ANR produces biomass that can be used as energy wood or wood fodder, and makes a significant contribution to human and animal nutrition and to the local economy. With this in mind, the project will encourage sustainable grazing practices that preserve soil health and allow natural vegetation regeneration: rotational grazing, fencing, etc. Subject to validation by the design mission, it is planned to carry out ANR actions on 50

ha in the Tadjourah region, in Andaba and Magdoul, and 50 ha in the Dikhil region, in Teweo and Cheikhetti.

110. The sustainability of these actions will depend on the involvement of local communities in the planning and implementation of adaptation measures, with an emphasis on education and raising awareness of the challenges of climate change. The restoration of sylo-pastoral areas will involve women as 20% of the total beneficiaries.

Outcome 3.2: Sylvo-pastoral products valued

Output 3.2.1: Socio-economic studies on the value of sylvo-pastoral products carried out

111. With the aim of promoting economically and environmentally viable income-generating activities, the project will carry out a socio-economic study on the development, in the project area, of endogenous species with high economic potential. This study will identify plant species, in particular NTFPs and medicinal plants with interesting economic potential and will assess their economic potential in terms of market value, demand on the local, regional or international market, and their potential use in various economic sectors (agriculture, agri-food, pharmaceuticals, cosmetics, etc.).
112. The study will also assess the socio-economic and environmental impact of the use of these species on local populations, particularly in terms of jobs created and income generated, and will analyze current practices in the use of these species by local communities, as well as opportunities for improving and developing these practices.
113. The study will identify potential obstacles to the development of these species (regulatory, technical, logistical barriers, etc.), as well as the levers that could be activated to promote their sustainable economic exploitation.

Output 3.2.2: IGAs for the valorization of agroforestry products created

114. While a baseload extraction of firewood for self-consumption by rural household is necessary and inevitable, wood and charcoal from native species that is sold to urban markets (where alternative heat sources are available) should be prevented at all cost. Income Generating Activities that offer a more profitable and less time-consuming alternative to wood collection and charcoal made from native species is therefore essential to alleviate anthropic pressure on the ecosystems and to restore the landscape biocapacity that supports the livelihoods, habitat and resilience of rural communities. Building on the studies set out in 3.2.1, the project will create IGAs for the production, processing and marketing of NTFPs and the use of selected medicinal plants, for the benefit of women and young people. The project will promote the creation of women's groups for these IGAs. Technical training will be provided to women and young people in NTFP and medicinal plant production, processing and marketing methods (training in sustainable collection, product processing, quality and hygiene standards, business management, etc.). The traditional knowledge of local communities on the use of NTFPs and medicinal plants will be valorized and integrated into training and IGA development activities.
115. The project will facilitate access to necessary resources such as land, water and processing equipment, and will support the establishment of processing and marketing infrastructures tailored to the needs of the IGAs. In addition, institutional support in the form of advice, technical assistance and monitoring will be provided to ensure the success of the IGAs. 80% of the IGA holders will be women and 30% youth.

Component 4: Knowledge management, institutional capacity building and monitoring-evaluation in the GGW area

116. Component 4 aims to reinforce the sustainability of actions through the implementation of a knowledge management strategy, and the institutional strengthening of the monitoring-evaluation of the Great Green Wall implementation in Djibouti.

Subcomponent 4.1 Knowledge management and M&E

Output 4.1.1 Knowledge management ensured

117. As a first step, the project plans to develop a knowledge management strategy that will enable the identification of the knowledge needs of the stakeholders involved in the project, the mapping of existing knowledge relevant to the project (capitalizing on existing knowledge management systems and processes), and the production and dissemination of knowledge, including traditional knowledge.
118. The knowledge management strategy will take advantage of the establishment of Farmer Field Schools (FFS) to collect and disseminate documentation on best practices, create databases on specific agricultural problems, and disseminate information on new techniques and technologies, as well as promoting mechanisms for collaboration between farmers.
119. Under this component, the project will finance applied research by civil society organizations (such as optimization

trials for different mixture of ligant and charcoal residues, improved biomass pyrolysis yield in a low-tech rural context, comparative thermal performance and user-friendliness of improved stoves etc.) and develop and implement a communication plan, with the production of knowledge dissemination tools tailored to target groups.

Output 4.1.2: Monitoring and evaluation of GGW implementation

120. The M&E system to be put in place will be the M&E tool for Djibouti's Great Green Wall, which aims to combat desertification, restore degraded ecosystems, strengthen the resilience of local communities and promote sustainable development.
121. The first activity will involve the creation and deployment of a web-based Geographic Information System (GIS), to be designed during the detailed project formulation phase. The geo-referenced monitoring-evaluation system to be set up will be designed as a decision-support system integrating biophysical and socio-economic data from the GGW corridor, based on existing national and international databases. It will be implemented in close partnership with relevant research institutions such as CERD.
122. This system will make it possible to monitor and assess changes in the state of natural resources, particularly land degradation and biodiversity. It will support decision-making on the one hand by rural communities themselves (about resource allocation, income stream diversification, strategic seasonal reduction of herd size etc.), and by national authorities and territorial planning services on the other hand, by measuring the impact of activities undertaken by the project and, from a scaling-up perspective, the impact of initiatives throughout the Great Green Wall area. Evaluation results will help to adjust and improve the Great Green Wall program over time.

Outcome 4.2: Institutional support to GGW implementation

Output 4.2.1: GGW management enhanced

123. The project will strengthen the technical and material capacities of the GGW Sub-Directorate to enable it to play its role in coordinating and monitoring-evaluating the implementation of the GGW in Djibouti.
124. In terms of coordination, the Ministry for Environment and Sustainable Development (MEDD) will officially set up the National Alliance for the GGW, which will be a platform for exchanges bringing together the various state and civil society players involved in GGW implementation. The project will support the MEDD, and in particular the GGW Sub-Directorate, in coordinating and running the National Alliance. (2 meetings per year).
125. At the regional level, the project will strengthen the capacities of regional institutions, such as the Regional Councils, in the context of decentralization and for the integration of project activities into Regional Development Plans.

Output 4.2.2: GGW integrated into the National Development Plan

126. The National Development Plan (NDP) is the five-year declination of the Djibouti Vision 2035. In the NDP 2020-2024, the Great Green Wall is mentioned among the challenges, in reference to the fight against desertification. However, it does not appear as a priority program in the priority axes of the five-year plan. The project will support the analysis of sectoral and national strategic frameworks with a view to ensuring the visibility of the GGW in development planning frameworks.

B. Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

127. The project will promote the establishment of a sustainable natural resource and economic asset base for rural populations, making them more resilient in the face of climate change and environmental degradation. With this objective in mind, and in addition to the Environmental and Social Policy and Gender Policy of the Adaptation Fund, which is the reference for this project, IFAD, as the project's implementing agency, has defined the Social, Environmental and Climate Evaluation Procedures (SECAP)²⁹ that frame all the projects it executes in the fields of poverty reduction and sustainable agriculture. The SECAP includes environmental, social and climate due diligence, procedures for mainstreaming IFAD priorities, country collaboration and stakeholder engagement.
128. The project will provide significant economic benefits, transforming livelihood systems to sustainably improve the quality of life of targeted communities, particularly women and young people. Component 1 will enable local populations to benefit from rehabilitated or new hydraulic infrastructures adapted to the effects of climate change, a vital asset for

²⁹ <https://www.ifad.org/en/-/social-environmental-and-climate-assessment-procedures>

the development of productive agricultural activities. In terms of rehabilitation the project will assess, at the design phase, the technical and financial feasibility of rehabilitating the Kourtimalei dam (Arta), and the Gallamo (Dikhil) and Omar Djagaa (Arta) boreholes. The structures will be properly dimensioned to take account the climate impact. The project will build new wells and surface water reservoirs, and new solar-powered boreholes, with the necessary associated piping. The mission has identified the need to build underground cisterns at Andaba (Tadjourah), Teweo, Cheickeitti 2 and Gallamo (Dikhil), as well as the need to build 4 tanks of 150m³ at Teweo, Cheikhetti 2 (Dikhil). These requirements will be validated during the design mission. They will be provided with the equipment and tools needed for sustainable and rational management of water resources for drinking, animal watering and irrigation. Component 2 provides for the rehabilitation/development of irrigated perimeters to ensure sustainable production and increased income for farmers. The mission has identified perimeters to be rehabilitated in the communes of Omar Djaga and Kourtimalei (Arta), and in Cheikhetti (Dikhil), which will need to be validated by the design mission. The design mission will also assess the possibility of developing 3 new perimeters of 10 hectares each at Teweo, Cheikhetti 2 and Gallamo (Dikhil). Outcome 2.2 directly targets the creation of income-generating activities for women and young people, to improve their economic situation in a sustainable way. The economic activities to be supported will focus on the production and processing of agricultural products as well as the creation of complementary, para-agricultural income-generating activities (maintenance of agricultural equipment and infrastructure; eco-tourism, handicrafts and trade in local products). In Component 3, the creation of 3 nurseries will create stable jobs in the 3 regions where they will be set up. Under Subcomponent 3.2, the project will promote the valorization of sylvo-pastoral products by encouraging the creation of women's groups to carry out income-generating activities relating to the production, processing and marketing of non-timber forest products, and the valorization of medicinal plants.

129. **On the social front**, the project's gender approach should be highlighted, as this will help to improve women's place in the production process, thereby enhancing their social status within the community and strengthening their autonomy. The project will promote social inclusion and community involvement, by actively involving vulnerable groups such as women and young people. **Component 1** will strengthen the Communities' capacity for sustainable water management so that they can take ownership of water and hydraulic structure management, with the objective of getting communities organized and equipped for gender-sensitive community management of hydraulic infrastructures. To this end the project will facilitate the registration of 8 water committees in the project area, ensuring that women and men have equal opportunities to participate in water management committees and decision-making processes. The project will also ensure equitable access to water resources, taking into account women's domestic responsibilities and economic activities, and ensuring that they have access to water for their daily needs. Through **Component 2** the project will support the autonomy of agricultural cooperatives by strengthening their capacity to acquire inputs, store agricultural produce and market products, and by diversifying their income, particularly for women and young people. Under **Component 3**, the project will create 3 nurseries, for the benefit of women and young people, for the production of native species to contribute to the restoration of sylvo-pastoral areas. The project will in addition support the organization of women and young people in the form of cooperatives, by strengthening their technical and organizational capacities, and will supply them with inputs.

130. **The environmental benefits** expected from the project cover the activities of all components. The project aims to achieve sustainable management of water resources, under Component 1, by carrying out hydrogeological and technical studies prior to any exploitation or drilling, or building surface water reservoirs. It should be noted that some surface water retention areas will enable groundwater to be replenished, to the benefit of natural resources. La réhabilitation des sites agricoles et des zones sylvopastorales prévue dans les composants 2 et 3 auront par ailleurs un impact direct sur l'amélioration des ressources naturelles et la biodiversité. Dans ce cadre la mise en place des FFS permettra de diffuser les techniques d'adaptation au changement climatique, de conservation des eaux et des sols, de gestion rationnelle des ressources en eau, ainsi que les techniques de sélection d'espèces indigènes adaptées au climat et à l'environnement. The restoration of sylvo-pastoral ecosystems in the GGW Corridor, provided for under Component 3, will ensure the preservation and enhancement of biodiversity, notably through the 3 nurseries for indigenous species, and the development of ANR. Component 4 will enable the state of the environment to be monitored and assessed through the implementation of a Geographic Information System focusing on the provision of the data required to assess the impact of the project on natural resources in the project area.

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

131. The Great Green Wall climate change adaptation project aims to capitalize on ongoing initiatives in the region to achieve the program's broader objectives. Initially focused on reforestation, the project now concentrates on integrated development and climate resilience to enhance food security and nutrition for vulnerable rural communities. To strengthen resilience to climate change and improve food security, the project will draw on various components:

Table 9: Cost-effectiveness

Without the project	Project benefices
Component 1: Improving sustainable access to water resources	
<ul style="list-style-type: none"> In Djibouti's arid climate, groundwater is the only available resource, but it is showing signs of degradation due to the combined effect of climate change hazards and population growth. Due to lack of maintenance, and lack of user involvement in the management of water infrastructures many previously developed hydraulic infrastructures have been abandoned In the meantime, the need for potable water is increasing due to population growth. There is no exhaustive, scientific assessment of groundwater resources, leading to over-exploitation in some regions of the country; 	<ul style="list-style-type: none"> Hydrogeological studies will be carried out to ensure that groundwater resources can be used sustainably. Following an analysis and a technical and financial assessment of the abandoned hydraulic structures, the project will enable a number of them to be renovated and made climate-resilient. New water infrastructure will be built, giving priority to the mobilization of surface water. Local communities will be involved in the management and maintenance of hydraulic structures, through the strengthening of their technical and organisational capacities, contributing to the sustainable management of the water resources The gender approach will be promoted to ensure the full participation of women in the institutional mechanisms for water resource management.
Component 2: Promoting climate-resilient agriculture and improving food security and nutrition for local populations	
<ul style="list-style-type: none"> Many equipped agro-pastoral perimeters have been abandoned, due to recurrent drought, lack of water, inadequate supervision and the unavailability of suitable seeds. In the absence of alternative economic activities the incidence of poverty and hunger is increasing Many of these populations migrate to the urban areas 	<ul style="list-style-type: none"> The project will rehabilitate perimeters in the communes of Omar Djaga and Kourtimalei (Arta), and in Cheikhetti (Dikhil), and will assess the possibility of developing new perimeters at Teweo, Cheikhetti 2 and Gallamo (Dikhil). The quantitative objective is the rehabilitation of a total of 25 ha of agro-pastoral perimeters. Agro-pastoralists will be trained in climate-resilient farming techniques and methods, thanks to the implementation of Farmer Field Schools (FFS) The project will introduce drought-resistant crops adapted to the local climate, to reduce dependence on climate-sensitive crops. Drip irrigation systems will be installed, with solar pumping equipment Sources of income and economic opportunities will be created, especially for women and young people Individual awareness and capacities on nutrition will be enhanced especially for women and young people All these actions will enhance the community's ability to adapt to growing environmental challenges and improve their food security and livelihoods
Component 3: Restoration of sylvo-pastoral ecosystems in the GGW Corridor	
<ul style="list-style-type: none"> Sylvo Pastoral lands are under stress due to climate change, drought, and anthropic pressures. This situation is forcing pastoralists to move further and further away to graze their herds In the absence of food for their animals, pastoralists migrate to the urban areas 20 700 ha of pasturelands restored through grazing bans and Assisted Natural Regeneration, 9275 ha of land under water and soil conservation, and 25 ha Managed/irrigated perimeters 	<p>The project will :</p> <ul style="list-style-type: none"> Support the improvement of vegetation cover on degraded land in sylvo-pastoral ecosystems over an area of around 29 975 ha in the GMV zone, including land under soil and water conservation (9275 ha) and areas under ANR and grazing bans (20 700 ha). Encourage Assisted Natural Regeneration (ANR) in appropriate areas, in order to restore degraded ecosystems and improve the resilience of local communities to drought. it is planned to carry out ANR actions in the Tadjourah region (Andaba and Magdoul), and in the Dikhil region (Teweo and Cheikhetti). Create 3 nurseries for the production of native species, for the benefit of women and young people; Pre-selected sites for nursery development are Cheikhetti and Gallamo (Dikhil), to be confirmed during the design mission. Support the organization of women and young people in the form of cooperatives Create IGAs for the production, processing and marketing of NTFPs

	and the use of selected medicinal plants, for the benefit of women and young people <ul style="list-style-type: none"> • Valorize traditional knowledge of local communities on the use of NTFPs and medicinal plants
Component 4: Knowledge management, institutional capacity building and monitoring-evaluation in the GGW area	
<ul style="list-style-type: none"> • No regular data collection on the biophysical and social evolution of the GGW area • No baseline for measuring the impact of development projects and programmes • Insufficient human and technical capacity at regional and national level. 	The project will: <ul style="list-style-type: none"> • Support the institutional strengthening of the monitoring-evaluation of the Great Green Wall implementation in Djibouti, through the creation and deployment of a web-based Geographic Information System (GIS), • Strengthen the capacity of regional Councils for the integration of project activities into Regional Development Plans. • Strengthen the capacity of the Ministry of Environment with regard to M&E • Support the Integration of the GGW into the National Development Plan as a priority initiative to combat desertification, preserve biodiversity and adapt to climate change

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.

132. **Djibouti Vision 2035** is the formulation of a long-term vision to make Djibouti an emerging country by 2035. It is set out in five-year development plans, including the current National Development Plan (NDP) 2020-2024. In relation to Vision 2035, the project is in line with the priority axis "Diversified and competitive economy (Promotion of diversified growth)" and above all with the cross-cutting themes of: (i) Promoting the status of women and reducing gender inequalities, (ii) Strengthening youth policy, and (iii) Optimizing the use of natural resources and preserving the environment.

133. **The National Development Plan (NDP) 2020-2024** is built around three interdependent strategic axes: inclusion, connectivity and institutions, reinforced by cross-cutting themes. The project will contribute to poverty reduction, a specific action of the NDP for the consolidation of human capital, and will fall within 3 of the priority areas of the 2020-2024 Action Plan of the Ministry of Environment and Sustainable Development: (i) Combating climate change; (ii) Protecting the natural heritage and its biodiversity; and (iii) Strengthening institutional, planning and monitoring-evaluation capacities.

134. At regional level Djibouti developed **Regional Development Plans** for the period 2021-2025. These regional plans target four strategic objectives:

- ~ SO 1: Promote economic development strategies based on local potential and resources, while ensuring that the local environment is protected.
- ~ SO 2: Implement spatial planning that respects the Regional Town and Country Planning Scheme, while improving accessibility, mobility and intra-regional transport to ensure territorial cohesion.
- ~ SO 3: Establish effective and transparent local governance that attracts universal support
- ~ SO 4: Ensure social development and well-being through the creation of a high-quality living environment

The project will essentially contribute to the achievement of the above Strategic Objective 1 above, for the sector '*Economic development*', and to the achievement of the expected outcome '*Increased agricultural and livestock production & Improved access to drinking water in sufficient quantity and quality*'. With regard to the Regional Development Plans of Arta, Dikhil and Tadjourah, the project's activities should contribute to achieving the expected effect of SO1, namely: '*Increased agricultural yields through improved cultivation techniques and access to irrigation water*'.

135. The project is also in line with national climate change adaptation strategies. It fully meets the climate change adaptation solutions formulated in the **National Adaptation Program of Action (NAPA)** in the following areas indicated in the below table.

Table 10: Correlation between project activities and NAPA priorities

	NAPA priorities	Project related outcomes/outputs
Water resources	Promote appropriate surface water development and management actions Developing clean drainage technologies	Outcome 1.1 Climate-resilient infrastructure built and operational Outcome 1.2 Community capacity for sustainable water management strengthened
Agriculture	Introduction of adapted forage species to make up for the food deficit caused by recurrent droughts	Outcome 2.1 The resilience of agro-pastoral systems is restored and strengthened Output 2.1.1 Agro-pastoral areas managed in a climate-resilient manner Outcome 2.2 The autonomy of agricultural cooperatives is developed Output 3.2.2 IGAs for the valorization of agroforestry products created (including the creation of 3 regional nurseries)
	Development of regional nurseries for the demonstration and extension of improved adapted cropping methods	
	Promoting the diversification of economic resources to strengthen the adaptive capacities of rural communities;	Output 2.2.1 Increased input procurement and marketing capacity Output 2.2.2 Sources of income and economic opportunities diversified, especially for women and young people Output 3.2.2 IGAs for the valorization of agroforestry products created
Livestock	Multiplying seedbeds of drought-resistant, salt-tolerant species of good forage quality	Output 3.1.2 Restoration of sylvo-pastoral areas achieved (including the creation of 3 nurseries for the production of native species, for the benefit of women and young people)
	Promoting the development of forage reserves in areas with degraded soils and endoreic plains	Output 2.1.2 Agro-pastoralists trained in climate-resilient farming techniques and methods
Forestry	Promoting the development of set-aside in the forest areas of Day and Mabila, coupled with the introduction of improved stoves.	Output 3.1.2 Restoration of sylvo-pastoral areas achieved

136. In 2017, a National Strategy on Climate Change (SNCC) was adopted to enhance coherence between climate change actions and existing national frameworks (NDC and SCAPE), and to address climate change impacts in the various socio-economic sectors of the country. The table below highlights how the project is coherent with the different priorities of the Strategy

Table 11: Correlation between project activities and priorities of the National Strategy on Climate Change

National priorities of the Strategy	Relevant Project Components/Outcomes/Outputs
1. Ensure access to water for all	Outcome 1.1: Climate-resilient infrastructure built and operational Output 1.1.1 Hydrogeological/electromagnetic and feasibility studies carried out Output 1.1.2: Defective hydraulic infrastructures rehabilitated Output 1.1.3: New climate-resilient hydraulic infrastructure built
2. Promote best practices in agriculture, forestry, fisheries and tourism and eliminate harmful practices	Outcome 1.2: Communities' capacity for sustainable water management strengthened Output 1.2.1: Raising community awareness on water infrastructure management. Output 1.2.2: Communities organized and equipped for gender-sensitive community management of hydraulic infrastructures Component 2: Promoting climate-resilient agriculture and improving food security and nutrition for local populations Outcome 2.1: The resilience of agro-pastoral systems is restored and strengthened. Output 2.1.1: Agro-pastoral areas managed in a climate-resilient manner Output 2.1.2: Agro-pastoralists trained in climate-resilient farming techniques and methods
3. Reduce vulnerability to the effects of climate change and increase the resilience of the most exposed socio-economic or geographical sectors	Outcome 2.2: The autonomy of agricultural cooperatives is developed Output 2.2.1: Increased input procurement and marketing capacity Output 2.2.2: Sources of income and economic opportunities diversified, especially for women and young people

	Output 3.2.2: IGAs for the valorization of agroforestry products created
4. Protect and enhance ecosystems and maintain the services they provide	Component 3: Restoration of sylvo-pastoral ecosystems in the GGW Corridor This component will cover the emblematic activities of the Great Green Wall that are common to all member countries of the Great Green Wall Initiative: combating land degradation (<i>Outcome 3.1</i>) and improving the living conditions of populations in arid zones through the valorization of sylvo-pastoral products (<i>Outcome 3.2</i>).
5. Ensure the development of sustainable and resilient cities in a context of climate change	N.C
6. Ensure the resilience and sustainability of the country's key strategic infrastructures	The project will notably contribute to ensure the resilience of the hydraulic infrastructure within the project area.

By its very objectives, the project of adaptation to climate change in the national corridor of the Great Green Wall directly responds to 4 out of the 5 objectives of adaptation to climate change outlined in the NAPA and included in the Strategy for 2035. These are (1) reducing vulnerability to drought, through all project components; (2) developing access to water, mainly through Component 1 related to sustainable access to water resources; (3) protecting biodiversity, mainly through Component 3 on the restoration of agro-sylvo-pastoral ecosystems in the GGW Corridor ; and (4) strengthening the resilience of rural populations, through capacity building, both technical and organizational, and the creation of income-generating activities, particularly for women and young people.

137. As part of the **Nationally Determined Contribution (NDC)**, the project will contribute to mitigation measures relating to reforestation with the development of agro-sylvo-pastoral practices, as well as adaptation measures linked to improving access to water, by rehabilitating water supply systems.

138. The Republic of Djibouti is also a Party to the **United Nations Convention to Combat Desertification (UNCCD)**. In 2000, it adopted its National Action Programme to Combat Desertification (NAP), the key instrument for implementing the Convention. The NAP has two general objectives: i) combating desertification and ii) combating poverty. The present project meets these two objectives by covering actions for the mobilization and integrated management of water resources, the fight against land degradation, and the restoration of sylvo-pastoral ecosystems. The fight against poverty, which is closely linked to the above, will be reflected in the rehabilitation of agricultural perimeters, capacity-building for local communities, and the creation of income-generating activities for the benefit of women and young people in particular. In addition, the project will contribute to Djibouti's voluntary goal of land degradation neutrality by 2030 (target 15.3 of the Sustainable Development Goals)³⁰.

139. Within the framework of the **United Nations Convention on Biological Diversity (CBD)** Djibouti adopted the National Biodiversity Strategy and Action Plan in 2017. This document defines the areas of intervention to achieve the objectives of the CBD, namely the conservation of biological diversity, the sustainable use of biological diversity and the fair and equitable sharing of benefits arising from the utilization of genetic resources. The following table shows the correlation between the present project and the Strategy's priorities.

Table 12: Correlation between project activities and the priorities of the National Biodiversity Strategy and Action Plan

Strategy Focus	Objectives shared with the project	Relevant Project Components/Outcomes/Outputs
Axis I: Curative and emergency treatments	Potential conservation: fencing	Outcome 2.1 Resilience of agro-pastoral systems strengthened
	Ex situ revegetation	Outcome 3.1 Degraded land restored and developed
Axis II: Preventive treatment	Increase water resources	Outcome 1.1 Climate-resilient infrastructure built and operational Outcome 1.2 Capacities of communities to manage water sustainably strengthened Outcome 2.1 Resilience of agro-pastoral systems strengthened

³⁰ ODD 15.3: "By 2030, combat desertification, rehabilitate degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world".

	Promoting sustainable breeding	Outcome 3.1 Degraded land restored and developed
Axis III: Support for positive dynamics and post-project management	Help the emergence of credible CSOs as development partners Organizing sustainable support for project sustainability	Output 1.2.2 Communities organized, trained and equipped for gender-sensitive community management of water infrastructure Output 2.1.2 Agro-pastoralists trained in the techniques and methods of intelligent agriculture. Output 2.1.3 Climate risk management integrated into community planning and management of agro-pastoral areas Output 4.2.2 Knowledge about GW generated and disseminated
Axis IV: Changing mindsets	Informing and raising awareness among stakeholders with an impact on biodiversity Training stakeholders in biodiversity issues	Output 1.2.1 Communities made aware of water infrastructure management Output 2.1.2 Agro-pastoralists trained in smart farming techniques and methods
Axis V: Integration and adaptation	Develop data production and circulation	Output 4.2.1 GW GIS implemented
Transverse Programs : Sustainability	Communicating best practices	Output 3.1.3 Water and soil conservation and sustainable grazing management practices promoted Output 4.2.2 Knowledge about GW produced and disseminated

140. Cross-cutting and gender-specific activities are in line with Djibouti government policies and strategies. The **National Gender Policy 2011-2021** has identified the effective integration of gender into development interventions in all sectors of activity as a priority. Five strategic orientations (SO) are recommended. The present project falls mainly within the scope of: SO3 Equitable promotion of women's and men's potential within the economy and their access to economic resources; SO4 *Strengthening the equitable exercise of women's and men's rights and their participation in economic and political management and decision-making bodies*; and SO5 *Strengthening national institutional capacities for implementing the National Gender Policy*.
141. IGAs as well as plot development activities, agricultural training and technical advice will contribute to the gender strategy and policies developed by the Ministry for Women and the Family, the Djibouti Social Development Agency (ADDs), promoting the economic empowerment of women and men to enable them to have equitable access to natural resources and project benefits;
142. Strengthening women's organizational capacities, through women's groups or cooperatives, will enable them to accede to decision-making positions in community and professional organizations, helping to create women leaders capable of advocating equality and equity in the context of sustainable development.
143. The institutional strengthening of MEDD structures, in component 4 of the project, will include capacity building for the implementation of the National Gender Policy.
144. In relation to the Sustainable Development Goals, the project will contribute to the following SDGs: SDG1: No poverty; SDG 2: Zero hunger; SDG 5: Gender equality; SDG 6: Clean water and sanitation; SDG 8: Decent work and economic growth; SDG 10: Reduced inequalities; SDG 12: Sustainable consumption and production; SDG 13: Measures to combat climate change; SDG 15: Life on earth.

E. Describe 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.

145. With regard to national technical standards and environmental and social policy, the project complies with applicable national and international law, in particular the Environmental Code (law no. 51/AN/09/6 of July 1, 2009) and the relevant decrees issued in application of law no. 93/AN/95/3rd L of April 4, 1996 on the Water Code.
146. **The Environment Code.** The most important legal text concerning environmental policy in Djibouti is Law no. 51/AN/09/6 L on the Environmental Code. In Chapter VII - "Environmental integration mechanisms", the law defines the content of an Environmental and Social Impact Assessment (ESIA), which must essentially include:

- ~ An analysis of the basic environmental conditions of the project site;
- ~ A description of the project;
 - The project's environmental impacts and measures to eliminate, reduce or mitigate negative impacts on the environment and public health;
- ~ An estimate of the cost of implementing the measures;
- ~ An environmental management plan;
- ~ The conclusions of the public hearing.

147. Two implementing decrees directly concern the project's activities:

- ~ **Decree no. 2000-0032/PR/MAEM**, issued in application of Law no. 93/AN/95/3rd L of April 4, 1996 on the water code, relating to declaration, authorization and concession procedures. According to this decree, the withdrawal and use of water (underground or surface) from the public hydraulic domain for non-domestic purposes by any installation or work must be declared to the water agency if the withdrawal capacity exceeds one (1) cubic meter per hour, whether underground or surface water. No work may be carried out in or over a watercourse, whether or not it modifies its flow regime, nor may water be diverted or withdrawn from the public domain at a rate of more than 10 cubic meters per hour, particularly in the case of groundwater, in any way whatsoever and for any purpose whatsoever, by temporarily or definitively withdrawing them from their course or their deposit, may be carried out without an authorization granted by decision of the Commissioner of the Republic taken after investigation and after the opinion of the technical services, following an application.
- ~ **Decree no. 2001-029/PR/MHUEAT**, on environmental impact assessment procedures. These procedures require an environmental impact assessment, including an environmental and social management plan (ESMP), for all activities likely to have negative effects on the environment. The environmental impact assessment, including the environmental and social management plan, is mandatory for the granting of an environmental permit by the Ministry of Environment. The environmental impact assessment procedure includes at least: i) an analysis of the initial state of the site and its environment, ii) a description of the project, iii) a study of the changes that the project is likely to bring about and the measures envisaged to eliminate, reduce or compensate for the negative environmental and health impacts of the activity, iv) the cost of these measures before, during and after project completion, v) the preparation of an environmental management plan, vi) a public hearing.

148. **Decree no. 2004-0065/PR/MHUEAT** on the protection of biodiversity defines endemic or endangered plant and animal species in Djibouti. According to this text, the removal or uprooting of endemic or endangered plant species is prohibited. Similarly, the removal of trees without prior authorization from the MHUEAT is prohibited.

149. **The Water Code.** Law n° 93/AN/95/3e L on the Water Code aims to : (i) guarantee the preservation of groundwater, as well as the conservation and free flow of water; (ii) ensure the supply of drinking water to the population and protect against any pollution of water quality, particularly groundwater; (iii) develop water as an economic resource and satisfy or reconcile the requirements of agriculture, industry, energy production and all other legally exercised human activities; (iv) combat wastage and overexploitation and (5) prevent the harmful effects of water. The decree promulgated under the Water Code is the **Decree n°2000-0033/PR/MAEM** on the protection perimeters of water catchments intended for human consumption. According to this decree, in order to guarantee the safety of drinking water supplies, the preservation of surface or underground water quality is ensured by the establishment of immediate and close protection perimeters around water catchments intended for human consumption. These perimeters are defined and delimited in accordance with the present decree. In addition to the immediate protection perimeter, a close protection perimeter, defined at least as a square of 200 meters side, centered on the catchment site, can be instituted by the same act declaring public utility.

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

150. The project is designed to support the implementation of Djibouti's Great Green Wall. The updated GW Strategy defines 6 priority areas of action³¹ to meet the country's specific needs. These are as follows:

Axis 1: Integrated Water Resource Management:

- ~ Implement integrated water resource management strategies to ensure sustainable access to drinking water.
- ~ Promote water-efficient farming practices and raise awareness of the importance of water conservation.
- ~ Strengthen water point management committees

Axis 2: Food security and sustainable livelihoods:

³¹ MEDD. January 2024. Guidance Note on the IGGW's priorities.

- ~ Promote sustainable agricultural practices to boost food security and nutrition for local populations.
- ~ Encourage crop diversification and the development of agricultural value chains to improve community livelihoods.
- ~ Strengthen and create nurseries

Axis 3: Restoration of degraded land:

- ~ Undertake initiatives to restore degraded land using sustainable techniques such as assisted natural regeneration, sustainable soil management and the planting of adapted species.
- ~ Carry out reforestation campaigns by introducing drought-resistant plant species adapted to local conditions.
- ~ Raise local communities' awareness of land degradation issues and actively involve them in restoration activities.
- ~ Provide training in best land management practices.
- ~ Implement sustainable grazing management practices, including herd rotation, setting limits to prevent overgrazing and implementing soil conservation measures.

Axis 4: Strengthening Community Resilience:

- ~ Implement education and awareness programs to strengthen community resilience to climate change.
- ~ Facilitate community access to basic social services such as education, health and housing.

Area 5: Regional and international cooperation:

- ~ Encourage regional cooperation to share best practices, knowledge and resources.
- ~ Collaborate with international partners to mobilize funding and technical expertise.

Area 6: Monitoring and evaluation:

- ~ Set up a monitoring and evaluation system to measure the impact of Great Green Wall initiatives.
- ~ Use evaluation results to adjust and improve programs over time.

151. This project is in line with all the Strategy's priorities. Component 1 of the project will contribute to the integrated management of water resources (priority axis 1); Component 2 focuses on Food Security and Sustainable Livelihoods (priority axis 2) and strengthening community resilience (priority axis 4); Component 3 of the project focuses specifically on the restoration of sylvo-pastoral ecosystems, and responds to Axis 3 of the Strategy for the Restoration of Degraded Lands; Component 4 aims, as provided for in Axis 6 Monitoring & Evaluation, to set up a monitoring and evaluation system to measure the impact of Great Green Wall initiatives. In this respect, it is important to emphasize that the present project is the first to directly support the implementation of the GGW in Djibouti.

152. In relation to other ongoing initiatives, the proposed project will ensure alignment with ongoing and planned initiatives concerning access to water and climate resilience in Djibouti, in order to reinforce complementarity. To this end, several projects have been identified and are detailed in the table below. For projects implemented in the same target areas, the MEDD will ensure coordination to build synergies in implementation. The UN RCO will be further consulted on a regular basis to ensure complementarity between the implementing agencies.

Table 13: List of current projects in the project area

Basic information about the project	Project objective	Alignment with the proposed project
<p><i>Sustainable management of water resources, rangelands and agro-pastoral perimeters in the Cheikhetti Wadi watershed, Djibouti</i></p> <p>16.2 million USD</p> <p>2020-2025</p> <p>UNDP, GEF</p>	<p>The aim of the GEF project is to develop an integrated model for the restoration of agro-pastoral ecosystem services in the Cheikhetti Wadi watershed in order to reduce land and water degradation, improve self-sufficiency in basic needs for vulnerable rural communities and create the conditions for project replication. The Project has three components:</p> <ul style="list-style-type: none"> ~ Strengthen existing governance structures to improve land and water management in the Cheikhetti Wadi watershed (this will include improving the active participation of agro-pastoralists and herders in multi-stakeholder management committees); ~ Land reclamation and aquifer replenishment in the watershed; 	<p><u>No risk of duplication, as the project will have completed by the time the Adapt-GMV will be launched.</u></p> <p>The GEF project has been designed to improve water and land resource management through sustainable mobilization of water resources, rehabilitation of abandoned agro-pastoral perimeters, and training of agro-pastoralists in climate change adaptation techniques. The present project will build on the results obtained by the Cheikhetti project to adapt interventions to other sites in the GGW corridor. The lessons learned from this experience will feed into the knowledge management and communication strategy set out in component 4 of the project.</p>

	Undertake a targeted pilot project or demonstration of best practices for sustainable land management in the watershed	
<i>Soil and water management program (PROGRES)</i> 18 million USD 2016-2024 IFAD	<p>The development objective is to sustainably improve rural households' access to water and local resources, as well as their resilience to climate change. It aims to achieve this by strengthening best practices in surface water mobilization and environmental and climate risk management. This will be achieved by :</p> <ul style="list-style-type: none"> ~ Expansion and integration of hydraulic structures into the network, and regeneration of vegetation. ~ Promote exchanges and social organization to improve living conditions in rural areas. ~ Develop innovative activities to increase pasture productivity. 	<p><u>No risk of duplication, as the project has completed in September 2024.</u></p> <p>Complementarity between the PROGRES project and the proposed project will be ensured by mapping completed interventions in common targeted areas to avoid duplication of efforts. The proposed project will improve access to water where current infrastructure does not meet the needs of communities in the face of climate change and will include the expansion of the network established by the IFAD project. Best practices and lessons learned from the IFAD project on surface water mobilization and assisted natural regeneration in the Djiboutian context will be integrated into the proposed project design and implementation strategy. Similarly, the current project will address the gaps identified at completion for PROGRES, integrating the trainings of local committees for basic infrastructure maintenance at community level, the correct climate-proofing of hydraulic infrastructure to withstand the effects of flash floods, and the implementation of the GALS methodology to ensure that women's voices are strengthened at community level.</p>
<i>Integrated Water Resources Management Project (PGIRE)</i> 4.2 million USD 2021-2027 FIDA	<p>The IWRMP aims to improve the living conditions of poor rural households and strengthen their resilience to climate change in rural areas over the long term. The development objective is to improve rural households' sustainable access to water and pasture resources, their resilience to climate change, their food and nutrition security, and the improvement of incomes, particularly for women and young people.</p>	<p><u>No risk of duplication</u></p> <p>There is an alignment between IFAD's objectives and those of the proposed project to improve the climate resilience of rural communities through sustainable access to water. The proposed project will build on IFAD project interventions to support the achievement of these objectives. In order to avoid the risk of duplication and enhance synergies, the Adapt-GMV project will coordinate with the PGIRE project to capitalize on lessons learned and map completed and ongoing interventions. The project will address the gaps identified during recent supervision missions, specifically the need to integrate trainings for cooperatives and farmers in climate-smart agriculture, with a focus on water-saving practices.</p>
<i>Sustainable management of water resources and grazing lands for improved climate resilience of rural communities in Djibouti</i> 21 million USD (concept note approved in 2023) UNDP	<p>The aim of the project is to strengthen the climate change resilience of rural communities to ensure food, water and livelihood security by improving access to water through water resource management and infrastructure, improved institutional capacity and climate risk preparedness.</p>	<p><u>No risk of duplication</u></p> <p>In the regions shared by the two projects, Dikhil and Tadjourah, coordination will be necessary, under the responsibility of the MEDD, to ensure complementarity in the location/implementation of hydraulic infrastructures, in the selection of sites to be restored and the reinforcement of institutional capacities.</p>

<p><i>Conserving Biodiversity and Restoring Ecosystem Functions in and around the Day Forest National Protected Area</i></p> <p>3.2 million USD</p> <p>2024- 2028</p> <p>UNDP</p>	<p>The project aims to protect and restore biodiversity, forests and ecosystem functions and enhance the livelihoods of vulnerable communities in the degraded mountain landscapes in Djibouti.</p>	<p><u>No risk of duplication as the projects covers different target areas.</u></p> <p>The project will operate in the Day and Mabla Forests protected areas, outside the areas covered by this project in support of the GMV. However, under the coordination of the MEDD, there will be consultation and exchanges on methods for restoring biodiversity and enhancing ecosystem functions with a view to creating income-generating activities for vulnerable communities.</p>
<p><i>Planning and implementing Ecosystem based Adaptation (EbA) in Djibouti's Dikhil and Tadjourah regions</i></p> <p>8.925million USD</p> <p>2022-2026</p> <p>UNEP</p>	<p>The Project Objective is to increase the capacity of local communities in the Gobaad Plain and Tadjourah Ville to adapt to climate change</p>	<p><u>No risk of duplication</u></p> <p>Exchanges of experience could be organized with the UNEP-supported project, particularly in the areas of ecosystem-based adaptation solutions implemented by UNEP to restore wadi banks, the establishment of drought-resistant agro-pastoral plots, wooded plots for the sustainable production of firewood, fodder and construction materials, and drought-resistant agricultural practices. The projects will collaborate to ensure that no duplication of interventions will happen in the common targeted areas.</p>

153. It is also to be noted that the project is aligned with IFAD country strategic objectives.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

154. To promote systematic learning and dissemination of this knowledge, the project will develop a learning and knowledge management strategy as part of Component 4, which will define how to promote effective and efficient project operations, as well as how the project's innovative approaches and activities will be documented and shared vis-à-vis project beneficiaries and externally.

155. This strategy will build on the Farmer Field Schools provided for in Component 2, for the internal component, The learning and knowledge management system will promote the collection, sharing and use of knowledge related to project activities between project components, at the level of the entire Great Green Wall area, and beyond, at the national level.

156. Further details of the project's approach to learning and knowledge management will be specified during the development of the full proposal, following further consultations with key stakeholders and community members in the target localities. The nature of the products and the contribution of information and communication technologies (ICT) will be defined during project design, to facilitate access to information, data sharing and communication between stakeholders. Online platforms, mobile applications or the use of social networks may be considered to facilitate continuous learning and collaboration between agropastoralists.

157. The project will also benefit of the fact that Djibouti is founder member of the Pan African Great Green Wall ((<https://www.grandemurailleverte.org/images/ENG-DPIP.pdf>), whose main objectives are to restore land and preserve biodiversity in the face of climate change, to contribute to the sustainable development and stability of the region by increasing the climate resilience of its populations, strengthening social cohesion and creating economic and income-generating opportunities, particularly for women and young people, at local, national and regional levels. To this end, the Pan-African Agency adopted a 2021-2030 priority investment plan including a knowledge management investment plan.

158. The strategic objective of the Knowledge Management Plan is to Improve access to best practices and information on GGW monitoring as part of the integrated natural resource management, climate change and disasters. To this end the Pan African Programme will strengthen the GGW Focal Points at the national level in order to have a multistakeholder knowledge management strategy and approach. It will particularly:

~ Set up and strengthen the operationalization of a Regional Platform for Partnership and Scientific, Technical and

Financial Cooperation (PPSTFC), and its expansion to all other stakeholders.

Promote knowledge management and capacity building through the creation of a knowledge management platform that will play a unifying role by synergizing the various African centers working on similar topics and by building bridges between international sources.

159. As part of knowledge sharing for the benefit of producers and other actors in the field, the Pan African Agency support, in each country, the creation of at least one information, education and training center on best practices for adaptation/mitigation to climate change. This center will serve as a framework for raising the awareness of different groups of actors: local authorities such as municipal councilors and mayors, departmental and regional councilors, professional agricultural and livestock organizations, and schoolchildren in rural areas.

160. The knowledge generated by the project will be further captured by the IFAD's GGW Regional Support Programme that aims to facilitate cross-learning across GGW countries.

H. 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.

The list of institutions and people met is presented in Appendix 2. Appendix 3 details findings of the preliminary interviews with communities.

161. The mission used a **participatory approach** based on consultation and dialogue with all partners. In this regard, the mission organized meetings and interviews at several levels: local, regional and national. **Semi-structured interviews (SSIs)** were conducted at the level of the villages visited, with men, women and youth in separate or mixed meetings,

162. Due to times constraints, it has not been possible to organise **interviews with focus groups (IFGs)** based on a set of more specific questions around a theme was (income-generating activities for women and youth, health of children and women, livestock husbandry techniques, irrigated crops, marketing, etc.) and this will be organized during the full design phase.

163. **At national level**, a first series of meetings took place in Djibouti City at the Ministry for Environment and Sustainable Development (MEDD), with the Secretary General of the MEDD, Designated National Authority of the Adaptation Fund, and with the Environment Directorate and the Sub-Directorate of the Great Green Wall, the Sustainable Development Directorate, the Planning, Monitoring-Evaluation and Communication Directorate. The mission then held a series of meetings with various departments of the Ministry of Agriculture, Water, Fisheries and Livestock, in charge of Halieutic Resources (MAEPRH): Major Works Department (DGT), Rural Hydraulics Department (DHR), Department of Agriculture and Forestry (DAF), as well as with the teams of two IFAD-supported projects in the potential intervention zone of the present project: PROGRES and PGIRE. The mission also held discussions with the Djibouti Study and Research Centre (CERD) and with the Ministry of Finance, External Financing.

164. **At regional level** the mission held was able to meet with the Prefects and Presidents of the Regional Councils, or their representatives, as follow:

~ Arta: Meetings with the Prefect, the Chair and the Vice-Chair of the Regional Council,

~ Dikhil: Meetings with the Prefect,

~ Tadjourah: Meeting with the Prefect representative and the Chair of the Regional Council.

165. The current decentralization policy gives the regions special prerogatives in the management of natural resources and the fight against poverty, as set out in the Regional Development Plans. It was hoped that the future project would take account of the decentralization policy to help the regions assume their role in regional development.

~ At local level the mission visited camps and villages in all the concerned areas, namely:

~ Arta region: Visit to the Omar Djagga and Kourtimalei agricultural perimeters and meetings with producer groups;

~ Dikhil region: Visit to the Bondara, Cheikhetti 1, Cheikhetti 2 and Kontali, Hanlé, Gallamo and Abaitou agricultural perimeters;

166. **Tadjourah region:** Visit to the Magdoul Forest area and meeting with the Magdoul local community; Visit to the Andaba forest area and meeting with the Andaba local community.

167. In all regions, the communities we met were unanimous in identifying access to water as a major and essential problem. More specifically, communities pointed to the issue of defected boreholes or deteriorated water supplies, leading to the abandonment of developed agricultural perimeters. These breakdowns are often minor and could have

been taken care of by the communities if maintenance and follow-up had been available. This situation has resulted in the abandonment of some developed perimeters, due to a lack of water resources. The abandonment of plots is also due, according to the people we spoke to, to the low productivity of farming activities, the limited theoretical and practical knowledge of the farmers, especially those who have just set up, the use of seeds that are not adapted to drought conditions, the absence of phytosanitary products, and the limited means available to protect crops against heat and rodents.

168. Meetings with youth groups highlighted the issue of youth unemployment. The low productive capacity of agricultural perimeters has an impact on local economic activity, and consequently on employment levels. Indeed, improved yields can lead to a shift away from survival farming and generate agricultural surpluses that can be sold abroad, thus enabling the emergence of local processing activities that could benefit young people.
169. Meetings with women's groups have highlighted the low representation of women in deliberative and decision-making bodies at community level, but also the tremendous potential they represent for diversifying activities. Some women have been able to organize themselves into groups and develop a number of craft activities. During our interviews, they also demonstrated an in-depth knowledge of the medicinal virtues of certain plants. They use them in the traditional way, but are unable to make economic use of them due to a lack of resources and technical support. But, overall, the women are not organized and lack the autonomy and resources to get out of their situation.
170. An essential part of drawing up the final proposal will involve a series of activities devoted specifically to consulting the main stakeholders in the implementation area (small family producers grouped into producer associations by activity and geographical area; local authorities belonging to the municipalities of each of the districts; leaders of communities; women farmers' associations, etc.). This process will make it possible not only to identify the actions best suited to the needs of each of the groups identified, but also to create the channels and modalities for their active participation in the project's development.

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

171. Djibouti is one of the country's most sensitive to climate change, and despite the efforts made by the public authorities to mitigate the adverse effects of recurrent droughts and frequent, rapid and intense flooding, the progressive degradation of the soil and the continuing loss of vegetation cover are now recognized as a real threat to the environment. Anthropogenic action is also accentuating the effects of climate change. It is against this backdrop that the Government of Djibouti has implemented the Great Green Wall Initiative, the aim of which is to "help combat the advance of the desert, develop degraded areas in an integrated way with a view to sustainable management of natural resources, and combat poverty".
172. Assessments converge on the imperative need to mobilize water resources as much as possible, giving priority to the retention of surface water, and to restore and increase agricultural perimeters in view of the growing needs of the population, and to combat poverty. The fight against poverty will only be effective if the Government can offer decent jobs and promote income-generating activities that enable communities to diversify and increase their incomes. In the current situation, without intervention, water resources will be insufficient to supply rural populations and develop agriculture. It is to be expected that the communities concerned, for want of resources, will migrate to the towns.
173. Component 1 of the project proposes an integrated approach to:
 - Contribute, on the one hand, to the sustainable mobilization of water resources, on the basis of hydrogeological and technical studies on water resources that can be mobilized in the context of climate change in Djibouti (surface water and groundwater), in close cooperation with the Rural Hydraulics Department, responsible for implementing the national policy on rural hydraulic resources, and scientific and research and development institutions in the field, such as CERD. The project envisages the construction of climate-resilient infrastructure to ensure access to water in areas where precipitation is scarce and projected to decline, coupled with erratic rainfall patterns. The design of hydraulic structures on the water courses will incorporate the reinforcement of their stability with regard to exceptional floods (high safety coefficient, reinforcement of protection downstream of the structures, etc.).
 - Create/strengthen Community Water and Pasture management committees, on the other hand, by providing support to improve their efficiency and strengthen their capacity to finance and implement regular and urgent maintenance of water infrastructures at local level. The training of the Water and Pasture Management Committees will include the prevention and remedial maintenance of the infrastructure, as well as use of a support system to monitor the structural condition of the infrastructure. Under Component 2 the resilience of agropastoral systems is promoted through the establishment of irrigated perimeters that promote climate-resilient agriculture adapting to erratic rainfall patterns and increasing temperatures, contributing to a widespread soil degradation. To this end the project will establish Farmer Field

Schools (FFS) to train agro-pastoralists in climate-resilient farming techniques and methods. In terms of adaptation additionality, the agro-sylvo-pastoral interventions are directly designed to mitigate the impacts of climate change, such as irregular rainfall and desertification, which threaten the livelihoods of small-scale farmers in Djibouti. The project's interventions will be viable even in the absence of further funding, with long-term plans for income generation through sustainable agriculture and ecosystem services, following the model used in the Dryland Sustainable Landscapes Program. The hydraulic facilities associated with the irrigated areas will be of such dimensions as to protect them against flooding and water erosion (situations observed in several irrigated areas in Djibouti).

Drawing on lessons learned from past experience, the project will encourage assisted natural regeneration (ANR) and reforestation in appropriate areas, in order to restore degraded ecosystems and improve the resilience of local communities to drought. This intervention will support the long-term resilience of pastoral systems to recurrent droughts. The project plans to act particularly on three important factors: (i) reforestation through the creation of nurseries for the production of endogenous species adapted to drought, and the provision of assisted natural regeneration (ANR) in adapted areas. To this end the project foresees the creation of 3 regional nurseries; (2) building the resilience capacities of communities by training and encouraging them in sustainable rangeland practices that preserve soil health and allow natural regeneration of vegetation (rotational grazing, fencing....); (iii) the promotion of economically and environmentally viable income-generating activities through the valorization of agroforestry products, making it possible both to reduce anthropic pressure on pastoral resources and to diversify the income of communities, particularly women and young people.

Under components 2 and 3, IGAs will be promoted to diversify the sources of income of the targeted populations, reducing their reliance on livestock keeping.

174. As the project is gender- and youth-sensitive, it will benefit to 24,000 persons, including 30% of women and at least 30% of young people.

175. The project has no co-financing. All the activities planned, as well as the project's financial structure and implementation strategy are based on the unique use of the Adaptation Fund resources.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.

The sustainability of the project has been taken into account in the design of the various components and will be further explored during the design phase.

176. **Component 1: Improving sustainable access to water resources.** To ensure the sustainability of its hydraulic structures, the project calls for prior technical studies and environmental and social impact assessments to ensure that the water retention structures are sized in line with the outlook for climate change. Hydro geophysical studies, using electromagnetic methods, will also have to verify the capacity for sustainable use of groundwater without compromising the equilibrium of the water table concerned. The project is part of an integrated water resource management approach that requires the involvement of local stakeholders at every stage of the process. Awareness-raising and training activities will be required to ensure that local communities, organized into water resource management committees, participate in the management of hydraulic structures, in close collaboration with the public services responsible for rural hydraulics. The ongoing decentralization of the Rural Hydraulics Department (DHR) will facilitate the role of water user associations in the maintenance of hydraulic equipment and infrastructure. It has to be noted, regarding the sustainability of the activities, that all the hydraulic infrastructures, rehabilitated or created, supported by the project, will be under the responsibility of the DHR after the completion of the project. To this end DHR will contribute, during the project implementation, to the identification and assessment of all the infrastructures to be considered under the project, and will include them in its national plan. All the post project activities related to water management and maintenance will be under the responsibility of the DHR, in line with the national policy and the DHR missions.

177. **Component 2: Promoting climate-resilient agriculture and improving food security and nutrition for local populations.** The sustainability of actions will be based on strengthening the resilience of agro-pastoral systems and agro-pastoralists to the effects of climate change. With regard to the sustainability of agropastoral system management, the project plans to introduce rational water management techniques, notably drip irrigation, the use of solar energy for water pumping, and the introduction of drought-resistant crops adapted to the local climate, to reduce dependence on climate-sensitive crops. To this end, a soil profile will be drawn up for each of the intervention sites identified, in order to select the appropriate species for cultivation in the agropastoral plots. Through the Farmer Field Schools (FFS), the project will invest in strengthening the technical capacities of agropastoralists, and in supporting the autonomy of the

cooperatives that will be created or strengthened. The project will also raise agro-pastoralists' awareness of climate risks and natural disasters, and train them to implement adaptation measures and risk management strategies, such as drawing up emergency plans, diversifying sources of income and setting up early warning systems.

178. The sustainability of the project will also be based on strengthening cooperatives and adding value to local products, in order to improve income from agriculture and diversify the sources of income for rural populations. The project will promote income-generating activities for women and young people, and support them in setting up and running their own groups, associations or cooperatives.

179. **Component 3: Restoration and sustainable management of natural resources in the GGW corridor.** To ensure the sustainability of the actions envisaged, the project will carry out a detailed preliminary assessment of the current state of sylvo-pastoral ecosystems in the GGW area, identifying the degradation factors. On this basis, the project will evaluate various sustainable restoration options (use of native plant species resilient to the region's dry and arid conditions; collection, selection and propagation of seeds of plant species adapted to the region, use of Assisted Natural Regeneration (ANR), etc.). It will also assess the socio-economic and environmental impact of the development of these species on local populations, particularly in terms of jobs created and income generated, and analyze current practices in the development of these species by local communities, as well as opportunities for improving and developing these practices. On this basis, the project will create IGAs for the production, processing and commercialization of NTFPs and the valorization of selected medicinal plants, for the benefit of women and young people. The project will promote the creation of women's groups for these IGAs. Technical training will be provided to women and young people on methods for producing, processing and marketing NTFPs and medicinal plants. The traditional knowledge of local communities on the use of NTFPs and medicinal plants will be valorized and integrated into training and IGA development activities. These are the main sustainability factors identified at this stage.

180. The project will be implemented in three regions across Djibouti and the project activities will be integrated in the relevant regional development plans. In this regard, the design phase will take care of involving all the relevant regional institutions, such as the Prefect and the Regional Council, to assess the full integration of the project activities in to the relevant development plans and the capacity of the relevant regional and local institutions to support the continuity of the project activities after its completion. The project will provide, as needed, a technical support to this end.

181. The below table provide detailed information on the adaptation measures promoted by the project and, for each component, the trade-off between the short and long term, as well as the complementary actions that the project will carry out to ensure sustainable management of natural resources in the context of adaptation to climate change.

Table 14: Adaptation measures, trade-off and complementary actions

Adaptation measures promoted by component	Trade-offs	Complementary actions
Under component 1, the project envisages the construction of climate-resilient infrastructure to ensure access to water in areas where precipitation is scarce and projected to decline, coupled with erratic rainfall patterns.	The construction of wells allows to exploit groundwater resources that guarantee access to water for household needs. This intervention is fundamental for short-term climate resilience, providing relief to households located in areas with limited rainfall and without access to a reliable water source. This also allows to reduce the time women spend to collect water, which usually involves long daily walks. However, the long-term resilience of communities might be compromised if underground water is overexploited.	The project will support well construction only in areas where feasibility studies have confirmed that the aquifer is not overexploited. Concurrently, water point management committees will be established and trained to ensure responsible water use within the aquifer's capacity. Furthermore, recharge dams and water harvesting structures will be rehabilitated to provide communities with storage for surface water and to promote aquifer infiltration.
Under component 2, the resilience of agropastoral systems is promoted through the establishment of irrigated perimeters that promote climate-resilient agriculture, adapting to erratic rainfall patterns and increasing temperatures, contributing to a widespread soil degradation.	The promotion of irrigated perimeters cultivated with climate-smart practices contributes to the short-term resilience of the communities, who will benefit from the agricultural production for a diversified diet and increased income. However, the improper storage or lack of marketing channels could compromise the long-term viability of the activity and therefore affect the resilience of communities.	The project will support the training of cooperatives working in the irrigated perimeters, strengthening their knowledge in terms of storing and marketing agricultural products. Solar-powered cool room will be built to ensure a longer conservation of the produce.
Under component 3, the project will	The restoration of sylvo-pastoral	On the short term, the project will support

encourage assisted natural regeneration (ANR) and reforestation in appropriate areas, in order to restore degraded ecosystems and improve the resilience of local communities to drought.	ecosystems contributes to the long-term resilience of communities by increasing biodiversity, maintaining and/or restoring soil fertility, and broadening the range of products and services provided by trees. To ensure the sustainability of restoration outcomes, the project will encourage sustainable grazing practices that preserve soil health and allow natural vegetation regeneration, such as rotational grazing and fencing. However, the short-term resilience of communities will be temporarily reduced, as the restoration process limits access to the targeted sites.	pastoralist communities with income-generating opportunities linked to sylvo pastoral products. The project will promote the creation of women's groups for these IGAs and technical training will be provided in NTFP and medicinal plant production, processing and marketing methods (training in sustainable collection, product processing, quality and hygiene standards, business management, etc.).
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182. Overall Trade-offs- Balancing Immediate Needs with Long-term Sustainability:

- ~ **Immediate Relief:** The adaptation measures promoted in Components 1 and 2 provide short-term benefits in terms of water access and agricultural productivity, which are crucial for the short-term resilience of communities, affected by drought, increasing temperatures, and soil erosion.
- ~ **Long-term Sustainability:** The measures proposed under Component 3 focus on long-term ecological health and resilience, which is essential for sustaining community livelihoods and ecosystem services over time.
- ~ **Integrated Approach:** An integrated approach that combines immediate relief with sustainable practices is at the core of the project. For example, ensuring that water extraction for agricultural purposes is balanced with aquifer recharge and promoting sustainable grazing practices alongside ecosystem restoration allow to achieve both short-term and long-term resilience.

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

Table 15: Environmental and social impacts and risks

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>	Low/no risk	The Concept Note has been developed to be in compliance with the legal frameworks of Djibouti. Relevant national, regional and district authorities have been/will continue to be consulted during proposal development to ensure compliance with all relevant laws. The project will comply with all national relevant laws, regulations and technical standards. In the absence of national standards, the project will apply internationally recognized standards.
<i>Access and Equity</i>	Low/moderate risk	The CN has been designed so that no activity will interfere with access to basic services or exacerbate existing inequities. The project will ensure that any activity with communities targets vulnerable groups such as women and youth. This is already explicitly the case under result 1.2.2, where communities will be organized, trained and equipped for community management of water infrastructures, taking into account the gender dimension. Under Output 2.2.1, the project will strengthen job creation capacities, particularly for women and young people. Under Output 3.1.1 tree nurseries for the production of indigenous species will be created, particularly to the benefit of women and young people. The project will put in place adequate measures to ensure equitable access to

		activities and assets by women, youth and vulnerable groups in project areas. In- depth consultations with communities and stakeholders will be conducted throughout proposal development and project implementation to ensure access and equity in line with the AF's ESP, and based on the full gender assessment to be carried out during the full design phase.
<i>Marginalized and Vulnerable Groups</i>	Low/no risk	The project has been designed to empower marginalized and vulnerable groups to make decisions on concrete adaptation actions, valuing their traditional and local knowledge, through the community adaptation planning process. Marginalized and vulnerable groups - especially women - will be consulted during the proposal development process to ensure that their identified threats, priorities and mitigation measures are reflected, while adequate mitigation measures are adopted in the project's ESMP, based on the prior full gender assessment to be carried out during the design phase.
<i>Human Rights</i>	Low/no risk	This project affirms the rights of all people and does not violate any pillar of human rights. The project will ensure respect for international and national labour laws and codes, as stated in both AF and IFAD policies.
<i>Gender Equality and Women's Empowerment</i>	Low risk/ moderate risk	<p>The project will fully mainstream gender and will ensure that women and men and female and male youth equitably engage in and benefit from project activities such trainings and capacity building, income generating activities or community water infrastructure management. A Gender Assessment will be conducted during the full proposal development, together with a project's gender mainstreaming strategy as a central element of the exit strategy.</p> <p>During the gender assessment as well as during the further design and implementation of the project, women and women's groups will be intensively consulted. The Gender Assessment recommendations will be integrated into the ESMP and will inform project implementation.</p>
<i>Core Labour Rights</i>	Low/moderate risk	The project will fully comply with relevant labour laws guided by the ILO labour standards. The ESMP which will be elaborated during the design phase will refer explicitly to the obligation for the contractors to comply with the requirements relating to the safety of workers in accordance with ILO Convention No. 62 insofar as they are applicable to the project. The Contractors should give priority to hiring labour from the surrounding areas to avoid the need for temporary workers' camps.
<i>Indigenous Peoples</i>	No risk	There are no indigenous peoples in the target area
<i>Involuntary Resettlement</i>	Low/no risk	The project is not expected to lead to involuntary resettlement, neither in physical nor economic terms.
<i>Protection of Natural Habitats</i>	Low/no risk	<p>The Djalelo nature area is a legally protected area close to one of the project target village (Omarjaga). Large, semi-permanent surface waterbodies in other villages may also be considered as a valuable natural habitat for local and migrating species. As the project aims at restoring and expanding natural habitat, the overall risk of project-induced negative impact is low.</p> <p>During the full project design IFAD will carry out a SECAP and ESA that will identify and exclude protected areas, ensuring that the project will not directly or indirectly impact negatively protected areas or high value conservation areas.</p>
<i>Conservation of Biological Diversity</i>	No risk	The activities of this project will not adversely impact the conservation of biological diversity. During the full project design IFAD will carry out a SECAP and ESA that will ensure that the project will not directly or indirectly impact negatively biological diversity.
<i>Climate Change</i>	Low risk	The entire project is designed to reduce beneficiaries' exposure and vulnerability to the effects of climate change and increase their resilience. The project will not generate any significant emissions of greenhouse gases or

		reduce carbon sink capacity
<i>Pollution Prevention and Resource Efficiency</i>	No risk	<p>The project will not promote any drivers of climate change (emission of carbon dioxide gas from the use of fossil fuel and from changes in land use, methane and nitrous oxide emissions from agriculture, emission of hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, other halocarbons, aerosols, and ozone).</p> <p>Project activities will be aligned on priorities defined in the NAPA as well as the INDCs. The ESA will have to assess the alignment of project activities on the NAPA.</p>
<i>Public Health</i>	No risk	No adverse impact on public health related issues is envisaged. The ESA will have to assess that there is no adverse impact on public Health.
<i>Physical and Cultural Heritage</i>	Low/no risk	The full design will clearly identify the sites where the project will be implemented. Assess will be made and any mitigation measure required will be taken
<i>Lands and Soil Conservation</i>	No risk	<p>The project will promote sustainable land management practices at territorial and farm level. Project activities will not pose risks to land and soil conservation, but rather will be specifically designed to address land degradation and promote sustainable land management and erosion control. Afforestation and agroforestry activities will additionally support protection and enhancement of lands and soil.</p> <p>The project will promote soil and water conservation management practices through the Farmer Field Schools, aiming at restoring degraded land and improving ecosystem-based services. All activities are of small-scale (managed at individual, household, or community level)</p>

PART III: IMPLEMENTATION ARRANGEMENTS

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

Table 16: Alignment with the Adaptation Fund Results Framework

Project Outcome	Project Outcome Indicator	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Component 1. Improving sustainable access to water resources				
Outcome 1.1 Climate-resilient infrastructure built and operational		Outcome 4 Increased adaptive capacity within relevant development sector services and infrastructure assets	Indicator 4.2 Physical infrastructure improved to withstand climate change and variability-induced stress	2 000 000
Component 2. Promoting climate-resilient agriculture and improving food security for local populations				
Outcome 2.2 The autonomy of agricultural cooperatives is developed		Outcome 6 Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	Indicator 6.2 Percentage of targeted population with sustained climate-resilient alternative livelihoods	600 000
Component 3. Restoration of sylvo-pastoral ecosystems in the GGW Corridor				
Outcome 3.1 Degraded land restored and developed		Outcome 5 Increased ecosystem resilience in response to climate change and variability-induced stress	Indicator 5.1 Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress	1 800 000
Component 4. Knowledge management, institutional capacity building and monitoring-evaluation in the GGW area				
Outcome 4.2 Institutional support to GGW implementation		Outcome 7 Improved policies and regulations that promote and enforce resilience measures	Indicator 7 Climate change priorities are integrated into national development strategy	838 318
Project Output	Project Output Indicator	Fund Output	Fund Output Indicator	Grant Amount (USD)
Component 1. Improving sustainable access to water resources				
Output 1.1.2 Defective hydraulic infrastructures rehabilitated	No. of physical assets strengthened	Output 4 Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	Indicator 4.1.2 No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	900 000
Component 2 Promoting climate-resilient agriculture and improving food security and nutrition for local populations				
Output 2.2.2 Sources of income and economic opportunities		Output 6 Targeted individual and community	Indicator 6.2.1 Type of income sources for households	400 000

diversified, especially for women and young people		livelihood strategies strengthened in relation to climate change impacts, including variability	generated under climate change scenario	
Component 3. Restoration of sylvo-pastoral ecosystems in the GGW Corridor				
Output 3.1.2 Restoration of sylvo-pastoral areas achieved		Output 5 Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	Indicator 5.1 No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	1 650 000
Component 4. Knowledge management, institutional capacity building and monitoring-evaluation in the GGW area				
Output 4.2.2 GGW integrated into the National Development Plan		Output 7 Improved integration of climate-resilience strategies into country development plans	Indicator 7.2 No. of targeted development strategies with incorporated climate change priorities enforced	80 000

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

A. Record of endorsement on behalf of the government

Mr Dini Abdallah Omar, Secrétaire General du ministère de l'Environnement et du Développement Durable of Djibouti	Date: 07/17/2024
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<p>REPUBLIQUE DE DJIBOUTI UNITE – ÉGALITE – PAIX</p> <p>MINISTÈRE DE L'ENVIRONNEMENT ET DU DÉVELOPPEMENT DURABLE</p> <p>LE SECRÉTAIRE GENERAL</p> <p>N° 406 Djibouti, le</p> <p>11 7 JUL 2024</p>		<p>جمهورية جيبوتي الوحدة - المساواة - السلام</p> <p>وزارة البيئة والتنمية المستدامة</p> <p>الأمين العام</p> <p>رقم جيبوتي في</p>
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***To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for the Climate Change Adaptation Project in the Great Green Wall National Corridor

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

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the International Fund for Agricultural Development (IFAD) and executed by the Ministry of Environment and Sustainable Development of Djibouti.

Sincerely,


Dini Abdallah Omar



+253 21-35-00-06 +253 21-35-16-18 mhuecabinet@gmail.com BP 11 هاتف 350006 - فاكس 351618 - ص. 11

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 (.....list here.....) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/program in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/program.

Implementing Entity coordinator:	email: p.guedez@ifad.org
 Pierre-Yves GUEDEZ Lead Multilateral Climate & Environmental Funds (AF, GCF, GEF)	
Mr Juan Carlos Mendoza Casadiegos, Director, Environment, Climate, Gender and Social Inclusion Division	
Date: 25 November 2024	e-mail: juancarlos.mendoza@ifad.org
Project contact person:	e-mail: w.nasr@ifad.org
Mr Walid Nasr, Regional Lead Environment and Climate Specialist	
Ms Rasha Omar, Country Director for Somalia	e-mail: r.omar@ifad.org

Appendix 1. Mission agenda

Agenda of the GGW Adaptation Fund Project formulation mission from March 18 to 28, 2024

17-03-2024		Mission arrival in Djibouti
18-03-2024	09:00 - 09:30	Ministry of Environment and Sustainable Development
	10:00 - 11:30	Environment Department
	11:30 - 12:00	Sustainable Development Department
	12:30 - 13:00	Planning, Monitoring and Evaluation Department and the Archive
	14:00 - 15:00	CERD
19-03-2024	9 :00 - 9 :30	General Secretary of the Ministry of Agriculture (MAHEP-RH)
	10:00 - 10:30	Director of the Department of Agriculture and Forest
	11:00 - 11:30	Rural Hydraulic Department
	11:30 - 12:00	Major Projects Department
	13:00 - 13:30	Coordinators of the PGIRE and PROGRES projects (to discuss complementarity in the Bondara, Hanle, Madgoul and Andaba areas)
	14:00 - 14:30	Representatives of the French Ministry of External Finance (DFE)



Revised PFG Submission Form¹ (additions in red)

Project Formulation Grant (PFG)

Submission Date: 01/12/2024

Adaptation Fund Project ID:

Country/ies: République de Djibouti

Title of Project/Programme: Climate Change Adaptation in the Great Green Wall Corridor (Adapt-GMV)

Type of IE (NIE/RIE/MIE): MIE

Implementing Entity: International Fund for Agricultural Development (IFAD)

Executing Entity/ies: Ministry of Environment and Sustainable Development of Djibouti (MEDD)

A. Project Preparation Timeframe

Start date of PFG	June 2025
Completion date of PFG	May 2026

B. Proposed Project Preparation Activities (\$)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US\$ Amount	Budget note²
Gender and Environmental and Social risk analyses and formulation of Environmental and Social Management Plan and Gender Action Plan. This document is required as part of the submission of the full proposal.	Environmental and Social Management Plan and Gender Action Plan formulated.	20 000	Consultancy fees: 13000 USD Travel costs: 7000 USD
Consultancies and contracts to develop program	Full proposal of the ADAPT-GMV	25 000	Consultancy fees: 25 000 USD
Consultancies and	Report of the feasibility	80 000	Feasibility study for

¹ As presented in AFB/PPRC.33/40 Annex 1.

² The proposal should include a detailed budget with budget notes indicating the break-down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

contracts to develop program and/or project options. Two types of studies: a) feasibility study for the rehabilitation of water infrastructure; b) feasibility study for the establishment of new irrigated schemes. The availability of these feasibility studies would greatly help in the effective start-up of the project as it would have the required feasibility and bidding documents to launch the procurement of key civil works immediately after the project is approved by the AF EB.	study for the rehabilitation of the Kourtimalei dam (Arta), and the Gallamo (Dikhil) and Omar Djagaa (Arta) boreholes which will include a) plan for sustainable water management ; b) technical specifications and bidding document for the rehabilitation of the boreholes Report of the feasibility study for the development of 3 new irrigated schemes of 10 hectares each at Tewe, Cheikhetti 2 and Gallamo (all in Dikhil region) including plan for climate resilient agricultural practices.		water infrastructure: 25 000 USD Feasibility study for 3 irrigated schemes: 55 000 USD
IE Fees (8.5% of total)	-	10 625	
Total Project Formulation Grant		135 625	

Please describe below each of the PFG activities and provide justifications for their need and for the amount of funding required:

The PFG activities requested for the ADAPT-GMV will support the formulation of the full proposal at different levels, ensuring that the Executing Entity will be provided with a complete package to fast-track implementation. The activities proposed are detailed below:

1.1 Gender and Environmental and Social risk analyses and formulation of Environmental and Social Management Plan and Gender Action Plan

The Adaptation Fund requires a robust and evidence-based gender and environmental and social risk analysis, based on the list of identified sites for project interventions. Moreover, the review of the project concept note raised a number of issues about gender that IFAD and MEDD sought to address at this stage. For the full proposal, IFAD and MEDD would like to carry out thorough data collection and analysis for gender as well as for the assessment of environmental and social risks. The risk analysis will inform the formulation of a robust Environmental and Social Management Plan and Gender Action Plan. IFAD will hire two international consultants for this assignment, a gender specialist and an environmental specialist who will work jointly. The cost of 20 000 USD includes consultancy fees for 15 days as well as fieldwork costs (DSA, rental of vehicle) for one week. The report should be available by May 2026.

1.2 Consultancies and contracts to develop program

IFAD is requesting additional funds to top up the budget it allocates for the design of Adaptation Fund projects. The fund will be used to address the issues the Adaptation Fund raised during the review of the project concept note and that revolve around hydrology and volume of groundwater, cost benefit analysis, knowledge management. IFAD would hire 3 consultants (national and international) to improve the quality of the full proposal. The cost would be 25 000 USD covering consultancy fees. No travel costs will be required as the consultancies will focus on systematizing available information. The consultancies would be completed in time for the submission of the full proposal in May 2026.

1.3 Consultancies and contracts to develop program

Given that the ADAP-GMV sites have been identified, it is suggested to carry out the related feasibility studies to ensure that all environmental and social risks are identified and therefore excluding the possibility of USPs. This activity will further ensure that the EE is provided with all the necessary information and documents to fast-track implementation of key activities. In case this proposal is accepted, the feasibility studies for these sites would be removed from the full proposal and the project budget. There will be two types of feasibility studies:

Two types of studies will be carried out: a) feasibility study for the rehabilitation of water infrastructure; b) feasibility study for the establishment of new irrigated schemes.

2.1 The feasibility study for the rehabilitation of the water infrastructure.

The feasibility study of water infrastructure will cover the rehabilitation of the Kourtimalei dam (Arta region), and the Gallamo borehole (Dikhil region) and Omar Djagaa borehole (Arta). The feasibility study will analyze the technical defects and examine the management arrangements for the water infrastructure and its maintenance. The outputs of the feasibility study will be a thorough analysis of the defects and appropriate technical and management solution; bid document with the technical specifications of the water infrastructure; a plan for sustainable water management. The MEDD as lead agency for the project will carry out the procurement after the full proposal is approved. It is estimated that the cost of such feasibility study would be 25 000 USD and the assignment would be executed by a qualified firm operating in Djibouti. The procurement would be carried out by IFAD. The report of the feasibility study would be submitted in December 2025.

2.2 The feasibility study for the establishment of new irrigated schemes.

The project concept note identified sites for the establishment of 3 new irrigation schemes for a total area of 10 hectares each at Teweo, Cheikhetti 2 and Gallamo (all in Dikhil region). The feasibility study would include analysis of water availability for irrigation, water quality, soil type and nutrients, land tenure arrangements and socio-economic profile of potential beneficiaries, as well as optimal crop mix based on the main livelihoods of the beneficiary and water quality and quantity. The outputs of the feasibility study of the new irrigated scheme are the validation of the creation of new irrigation schemes in proposed locations, coupled with a sustainable irrigation plan and climate resilient crop mix, cost benefit analysis, targeting of eligible households including women, and arrangements for land tenure security. The cost of the study is estimated at 55 000 USD and the assignment would be executed by a qualified firm operating in Djibouti. The procurement would be carried out by IFAD. The report of the feasibility study would be submitted in March 2026.

For LLA Projects only:

If requesting additional funding for LLA projects to enable devolving decision making to the local level, please specify the activities that would directly serve to enable devolving decision making to the lowest appropriate level and enable local actors to make informed decisions on how adaptation actions are defined, prioritized, designed, and implemented:

Please provide justifications for their need and for the amount of additional funding required:

C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Pierre Yves Guedez			Walid Nasr		w.nasr@ifad.org

20-03-2024	07:00 - 08 :30	Departure to Arta
	09:00 - 09:30	Meeting with the Prefect
	10:00 - 10: 30	Meeting with the President of the Regional Council
	11:00 - 12:30	Visit of Omar Djagga and Kourtimalei agricultural perimeters
	14:00 - 14:30	Visit to Hamboucto and Doudoubalala agricultural perimeter (Ali-Sabieh)
21-03-2024	07:30 - 08:30	Departure to Dikhil
	09:00 - 09:30	Meeting with the Prefect
	10:00 - 10:30	Meeting with the President of the Regional Council of Dikhil
	11:00 - 13:00	Visit to Bondara and Cheikhetti 2 perimeters
	14:00 - 15:00	Visit to Cheikhetti 1 and Kontali perimeters
22-03-2024	09:00 - 10:30	Visit to Hanlé's agricultural perimeter
	11:00 - 13:00	Visit to Gallamo and Abaitou
	14:00 - 15:00	Back to Dikhil
23-03-2024	08:00 - 11:30	Departure for Tadjourah
	12:00 - 13:30	Visit of the Magdoul forest and meeting with the local community
	14:00 - 15:00	Visit to the Andaba Forest and the local community
24-03-2024	09:00 - 10:00	Meeting with the Prefect of Tadjourah
	11:00 - 12:00	Meeting with the President of the Regional Council
	13:00 - 14:00	Departure for Djibouti
25-03-2024	08:00 - 11:30	Discussion with MEDD on the project concept to be submitted to the Adaptation Fund
26-03-2024	09:00 to 09:30	Meeting with ADDS representatives
	10:00 - 11:00	Meeting with FAO representatives
	11:00 - 12 :00	Meeting with UNDP representatives
27-03-2024		Finalization of the aide-memoire
28-03-2024	10:00 - 12:00	Discussion of aide-memoire with Ministry of Environment, Agriculture, Finance and CERD

Appendix 2. List of persons met Community of Taweo (200 households)

Date & heure / [Traduire]:

Consultation/ [Traduire]

Village Taweo-chinch
(200 familles)

Lieu/ [Traduire]:

#	Prénom et nom / [Traduire]	Age / [Traduire]	Genre / [Traduire]	Profession / [Traduire]	Institution / [Traduire]	Contact (e-mail ou téléphone) / [Traduire]	Signature / [Traduire]
1	Mohamed Ali Okieh	1 /	M	Pasteur	782468		77378755
2	Mahamoud Mohamed	/	M	Pasteur	-		
3	Mahamoud Houssein	/	M	Pasteur	-		
4	Elmi Ali Okieh	/	M	Pasteur	-		
5	Hassan Aden Boudeh	/		/	/		
6	Omar Osman Alkhalaf	/	M	/	77727800		
7	Marion Abdallah Saligh	/	F	x	7779388		7779382
8	Katoun Roumin		F	x	7778610		
9							
10	village Andaba (300 familles)						
11							
12	Issa Mohamed Harou	60 ans	M	Pasteur	Andaba		
13							
14							

Date & heure / [Traduire]:

Consultation/ [Traduire]

Village Abaitou (200 familles) dont 100 familles productrices

Lieu/ [Traduire]:

#	Prénom et nom / [Traduire]	Age / [Traduire]	Genre / [Traduire]	Profession / [Traduire]	Institution / [Traduire]	Contact (e-mail ou téléphone) / [Traduire]	Signature / [Traduire]
1	Mohamed Ali Guellab	1958	M	Agropasteur	Abaitou	77873082	
2	Habib Mohamed Ali	2000	M	Formateur AG	Abaitou	77308393	
3	Bouho Mohamed Kamil	1979	F	Sec. Général	Abaitou	77626592	
4	Faustina Kamil Hassan	1994	F	Membre ASS	Abaitou		
5	Roumin Saïd Ali	1977	F	Tresorier AG	Abaitou	77446447	
6	Kadija Hassan Ned	1974	F	Présidente	Abaitou	77096870	
7	Gallano						
8							
9	Abdelkader						
10	Guedho Houssein Guedho	1976	M	chef de village	Gallano	77823082	
11	Mohamed Idr	1980	M	chef de village adjoint	Gallano	77703484	
12	Mohamed Gohar	1993	M	Membre	/		
13	Sibani Ali	1974	F	Responsable	Gallano	77 /	
14	Marion Lote	1984	F	Membre	/	/	

Association
des
femmes
agricoles
Abaitou

150
Gallano
+90
(Dakka
Gallano)

Community of Abaitou (200 households)

Community of Kourtimaleh (40 households)

Date & heure / [Traduire]:

Consultation/ [Traduire]

Lieu/ [Traduire]:

#	Prénom et nom / [Traduire]	Age / [Traduire]	Genre / [Traduire]	Profession / [Traduire]	Institution / [Traduire]	Contact (e-mail ou téléphone) / [Traduire]	Signature / [Traduire]
1	Hassan Elmi	1982	M	Agropasteur	Omar Djegou	77 198710	
2	Houssain Guirreh	1974	M	Agropasteur	Omar Djegou	77 246777	
3	Fatouma Djama	1960	F	/	/	77 250325	
4	Fg Kourtimala	(20)					
5							
6	Fajal Ahmed dour	1988	M	agropasteur	Kourtimala	77578152	
7	Fawah Guedi	1975	M	agropasteur	Kourtimala	77061770	
8	Mohamed ABDI	1992	M	pasteur	Kourtimala	77881785	
9	ABDI Ali wis	1992	M	agropasteur	/	77189208	
10							
11	Chirkhetti	2		(120 familles + 35 familles réfugiées)			
12	Mohamed Doudou	1979	M	Agropasteur	Chirkhetti	77865624	
13	Saida Assouh	1984	F	/	/	77109542	
14	Fatouma Ahmed	1984	F	/	/	77078346	

Meeting with the Ministry of Agriculture

Date & heure / [Traduire]:

Consultation/ [Traduire]

Lieu/ [Traduire]:

Réunion Avec le Ministère de l'Agriculture.

#	Prénom et nom / [Traduire]	Age / [Traduire]	Genre / [Traduire]	Profession / [Traduire]	Institution / [Traduire]	Contact (e-mail ou téléphone) / [Traduire]	Signature / [Traduire]
1	Noureddin ELMI ROBEA	37 ans	M	Ingenieur	MAEPF-RH	77545831	
2	ABDULLAH ALKOURTALAH	39	M	Ingenieur	ENVIR	77051181	
3	Abdoulkader Doudou	56	M	Agronome		77818730	
4	Hassan Mousa	39	M	Ing S/E	Envira	74639605	
5	Mohamed Abdelli	37	M	Agronome	MAEPF-RH	77809520	
6	Youssef Bouatini	.	M	Consultant	FIDA		
7	Tajouyeh Mohamed		M	Consultant	FIDA	77812421	
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Appendix 3: Preliminary interviews with communities

Tadjourah region

Andaba, in the Tadjourah region, has a population of 300 households and is made up of sedentary pastoralists engaged in extensive cattle rearing of goats and camels.

Access to the area is made inaccessible by a stony track, and access to water is extremely difficult due to the lack of sufficient water storage facilities.

To overcome these constraints, interviews with community leaders revealed a desire to develop an agricultural perimeter in order to improve the resilience of the population and diversify sources of income, as well as providing additional food for livestock.

There was also a request for community development to build the capacity of women and young people in particular, so that they can develop income-generating activities.

Finally, a bee-keeping activity is underway with the PGIRE project (Ministry of Agriculture).

The community of Magdoul, located in the Tadjourah region, has a population of 300 households and is made up of sedentary pastoralists who live exclusively from extensive livestock farming, mainly goats and camels.

As in the case of Andaba, the site is isolated due to its difficult access over a stony track, and it also has to contend with a shortage of water as a result of a broken borehole and inadequate water retention infrastructure.

In discussions with community leaders, they expressed the need to repair the borehole, develop an agricultural perimeter to complement livestock farming activities, and receive support in terms of feed supplements for their livestock.

Dikhil region

The community of Cheickaiti, in the Dikhil region, with a population of 153 households, is mainly made up of sedentary pastoralists dependent on extensive livestock farming.

There is some agricultural activity, mainly on private land, although the agricultural land belonging to the locality is hardly exploited due to the limited availability of water.

There is also some poultry farming.

The community leaders expressed the need for a well (10 m deep), a soil study to extend the agricultural area with the necessary water supply, and the possibility of a geo-physical study to make a borehole available.

Finally, they expressed the need for the development of income-generating activities, especially in the dairy, goat and camel sectors, as well as the promotion of beekeeping.

The community of Téweo, in the Dikhil region, with a population of 200 households, is made up of sedentary pastoralists who live exclusively from extensive livestock rearing. They would like to have degraded areas restored (grazing bans, ANR and reforestation) in order to perpetuate their livestock farming activities.

This locality has two (2) cement wells that are not equipped and an unused agricultural perimeter of one (1) hectare, due to insufficient water.

Interviews with the community revealed a demand for equipment for the well, an extension of the perimeter to 5 ha, the development of IGAs to diversify sources of income, and the restoration of degraded areas.

The community of Abaaitou, in the Dikhil region, has a population of 56 households and an agricultural area of 2 ha, with a strong presence of women in the sector, as well as a craft activity in the exploitation of doum palm.

The locality also has a borehole, albeit a small one.

A special meeting was held with the Abaïtou Farming Women's Association. Discussions with the community revealed a demand for support for women's organisations, not only in agri-farming activities, but also in the creation of income-generating activities to empower women, and in areas such as medicinal plants, of which women have traditional knowledge. They expressed the wish to be able to use farmer Mohamed Ali Guelleh's perimeter as a pilot farm for new sedentary pastoralists before they embark on agricultural activities, as well as the extension of the agricultural perimeter to 5 ha.

The community of Gallamo, in the Dikhil region, has a population of 150 households and is made up of sedentary pastoralists who live exclusively from extensive livestock rearing.

The community has a thermal borehole that is no longer operational due to the deterioration of its equipment, as well as a 150-

metre solar borehole.

The community would like to establish an agricultural perimeter to improve their resilience, as well as two (2) cemented wells, the possibility of reforestation with balanités, and community capacity building.

Hanlé, in the Dikhil region, has a population of 400 households and 124 households in the surrounding areas. It is made up of sedentary pastoralists who live off extensive goat and camel farming.

Arta Region

The community of Omar Jagaa, in the Arta region, consists of 40 households of sedentary pastoralists.

The community is equipped with a solar-powered borehole, which is non-functional due to equipment failure, and 2 tanks with a capacity of 150 m³.

The community would like to have the borehole repaired, and to develop IGAs to diversify sources of income, as well as promoting poultry farming, the dairy sector and date palms.

The community of Kourtoumaleh, located in the Arta region, consists of 40 households and is mainly made up of sedentary pastoralists.

The community has a working borehole 2 km away, but the water supply is defective.

Discussions with the community revealed a need to repair the pipes so that water could be made available to develop the agricultural area.

They also expressed a desire to rehabilitate the mini-dairy.

Ali Sabieh Region

The village of Hol Hol, located in the Ali Sabieh region, comprises 400 households of sedentary pastoralists engaged in extensive goat and camel farming, as well as handicraft activities.

Discussions with community leaders revealed the need to develop an area for agriculture to complement livestock farming activities, as well as the construction of a water reservoir and water tanks to prevent water shortages.

They also called for reforestation to be carried out in the locality, as well as the development of activities to exploit balanites and acacia trees.

The community of Da'asbio, located in the Ali Sabieh region, consists of 100 households of sedentary pastoralists engaged in extensive goat and camel farming, coupled with handicrafts.

Interviews with community leaders revealed the need to develop an agricultural perimeter, coupled with livestock activities, as well as the construction of a water reservoir and underground cisterns.

They also called for reforestation to be carried out in the locality, as well as the development of activities to exploit balanités and acacias.

Appendix 3 List of institutions and people we met

Ministry of the Environment and Sustainable Development

Mr Dini Abdallah Omar, General Secretary;

Mr Idriss Ismail Nour, Director of the Environment;

Ms Bilane Hassan Ismail, Director of Sustainable Development;

Mr Ahmed Abdallah Mohamed, Director of Planning, Monitoring, Evaluation and Communication.

Ministry of Agriculture,

Mr Moktar Mahamoud Houssein, Director of Major Works;

Mr Mouktar Mahamoud Waberi, Director of Agriculture and Forestry;

Mr Baragoita Said, PROGRES coordinator;

Mr Ibrahim Houmed, PGIRE Coordinator;

Mr Nourradin Elmi Robleh, Agricultural Engineer, MAEPRH;

Mr Abdoukader Doualeh, Agro-forestry Advisor, MENFI;

Mr Mohamed Abdillahi Hassan, Agronomist, MAEPRH.

Djibouti Center for Studies and Research (CERD)

Dr. Jalluddin Mohamed, General Manager;

Mr Abdourahman Daher, Director of the Institute of Life Sciences.

External financing

Mr Ali Mohamed Gadileh, Director.

Arta region

Mr Hassan Dabaleh, Prefect ;

Mr Elmi Bouh Gouddeh, President of the Regional Council ;

Mrs Filsan Elmi Hassan, Vice-President of the Regional Council.

Dikhil region

Mr Hassan Abdi Robleh, Prefect.

Tadjourah region

Mr Habib Djilani Bourhane, 1^{er} Deputy Prefect;

M Hassan Houssein Omar, President of the Regional Council ;

Mr. Francois Fougère, from the program "Appui à la Décentralisation et aux Initiatives Locales (ADIL)".

FAO

Mrs Ricarda Mondry, Resident Representative;

Mr Abdoukader Ismail, Program Manager.