ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY:

Country/Region: Côte d'Ivoire
Project Title: Strengthening access to drinking water for rural communities in the central zone of Côte d'Ivoire to reduce their vulnerability to the effects of climate change
Thematic Focal Area: Water Management
Implementing Entity: Interprofessional Fund for Agricultural Research and Consulting (FIRCA)
Executing Entities: National Climate Change Program (PNCC) of Ministry of the Environment, Sustainable Development and Ecological Transition (MINEDDTE)
AF Project ID: AF00000418
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): 10,000,000
Reviewer and contact person: Angelica Ospina
Co-reviewer(s): Timileyin Tobi Oyebade
IE Contact Person:

Technical Summary	The project "Strengthening access to drinking water for rural communities in the central zone of Côte d'Ivoire to reduce their vulnerability to the effects of climate change" aims to strengthen access to drinking water for rural communities in the central part of Côte d'Ivoire to reduce their vulnerabilities to the effects of climate change. The project involves improving drinking water production and distribution infrastructure for rural communities, strengthening the sustainability of access to drinking water, and knowledge sharing. This will be done through the three components below: Component 1: Strengthening the capacity of rural communities to access drinking water (USD 7,416,977) Component 2: Strengthening the sustainability of access to drinking water for rural communities made vulnerable by climate change (USD 700,000) Component 3: Sharing knowledge to promote learning about sustainable drinking water supply and management practices in a context of water resource scarcity due to climate change (USD 300,000) Requested financing overview: Project/Programme Execution Cost: USD 799,613 Total Project/Programme Cost: USD 9,216,590

	Implementing Fee: USD 783,410 Financing Requested: USD 10,000,000 The initial technical review raises a few issues such as the need for more details on the project beneficiaries, project activities, the consultations process, and coordination with other relevant interventions in the project area, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.
Date:	January 30, 2025

Review Criteria	Questions	First Technical Review January 30, 2025	Responses
Country Eligibility	1. Is the country party to the Kyoto Protocol, or the Paris Agreement?	**Yes.**	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	**Yes.** Côte d'Ivoire is highly exposed to climate change due to rising temperatures, sea levels and changes in rainfall patterns. Over the period 1960-2010, temperatures increased by 1.6°C across the entire Ivorian territory. The current trend observed in Côte d'Ivoire is expected to worsen overall. Temperatures will continue to rise; projections show an increase of about 1.3°C by 2030, 1.8°C by 2050 and 2.1°C by 2070, compared to 1960. The observations of current trends indicate that the country will likely face continuous change in seasonal rainfall patterns, temperature, and exposure to drought.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund	**Yes.** As per the endorsement letter dated 09 January 2025.	

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	endorsed the project/programme?		
	2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?	**Yes.** The total length of the proposal, including annexes, is 45 pages.	
	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?	**Yes, but further details are needed.** This project will involve the installation of distribution networks to transport water from boreholes to the end beneficiaries in densely populated localities, as well as measures to preserve the water tables supplying water to vulnerable communities, and the optimization of water management in beneficiary localities, which are impacted by climate change-induced drought and variability. Additional details can be provided on the scope of the proposed adaptation actions, specifically. **CR1:** As part of the background of the project, kindly consider adding further details about the different water uses that prevail in the targeted project area, including livelihood uses and the impact of climate change on local sustenance. **CR2**: Please clarify the analysis related to the third column in Table 2, page 8, regarding in the reference to "population increase that requires an *increase in suitable work*". Please clarify the link	**Response CR 1** Additional details have been provided regarding the various uses of water prevailing in the project area, on page 11 **Response CR 2** The title of the third column refers rather to appropriate hydraulic equipment than to adapted work.

		between this and the proposed adaptation actions. **CR3**: In case that this information was gathered during the May 2024 scoping mission, kindly provide further detail on the technical specifications and number of equipment to be provided under Component 1, as part of part II.A. If this information was not collected, please	Localities with populations ranging from 100 to 3,999 inhabitants are covered under the project. For populations between 100 and 1,000, Human-Powered Pumps (HPP) are suitable. For populations between 1,000 and 3,999, Improved Village Water Supply Systems (IVWSS) are more appropriate. Beyond 4,000 inhabitants, urban water systems are responsible for coverage. In certain localities, the thresholds used (population-to-equipment ratio) at the time of installation have been exceeded due to population growth. It is therefore necessary to increase the number of appropriate facilities in these areas. The translation has accordingly been refined, and the provided explanations have been incorporated into the concept note on page 8. **Response CR3** The components of each system were outlined in the concept note on page 14.

		confirm that it will be available at fully developed proposal stage. **CR4**: 1. Kindly provide further details about the feasibility studies that are planned as part of Product 1.1, Component 1. 2. Please remember that the Environmental and Social Policy implies that all activities are identified to the level where adequate and comprehensive environmental and social risk assessment is possible by the time of submission of a proposal. Project activities that have not been formulated at the time of submission of a proposal to the extent that their environmental and social risks can be identified in line with the ESP are considered Unidentified Sub-Projects (USPs). Please consult the USP guidance at Guidance Document for Project/Programme with	However, the technical specifications will be detailed during the formulation of the full proposal. **Response CR4** The feasibility studies planned under Product 1.1, Component 1, consist of technical feasibility assessments relating to Preliminary Design Studies (APS) and Detailed Design Studies (APD). A comprehensive evaluation of all activities to be implemented is envisaged as part of the full proposal, in accordance with the Environmental and Social Policy of the Adaptation Fund.

		Unidentified Sub-Projects (English, French and Spanish). **CR5:** Please describe in part II.A how the design of the proposed hard investments (e.g., water distribution points and supply networks etc.) will be adequate to face the climate change-related threats identified in the proposal. In other words, kindly describe how these investments will be made resilient to the impacts of climate change. **CR6**: 1. Output 2.1. is focused on the implementation of measures to preserve groundwater. Kindly clarify which activities will be funded by the project as part of the 'promotion of	**Response CR5** To enhance the resilience of investments to the impacts of climate change, a multi-faceted strategy will be implemented: • The selection of implementation sites will be based on geophysical studies to identify the most suitable areas, particularly to avoid risks such as flooding, erosion, and contamination during the rainy season ; • Particular emphasis will be placed on the use of materials that are resistant to the climatic conditions of the targeted regions, especially high temperatures and prolonged dry seasons. **Response CR6** The activities to be financed by the project under the "promotion of reforestation" will include: • The identification and characterization of groundwater recharge areas,

		reforestation' and 'awareness raising' on phytosanitary practices. 2. Please clarify how the approach proposed for Output 2.1. will integrate climate change considerations, including challenges of water quality, and how it links to the	• Awareness-raising among local communities on the importance of reforestation in enhancing groundwater recharge, • The procurement of seeds and cuttings of tree species adapted to local conditions and conducive to water infiltration, • The organization of tree-planting activities with the active involvement of local communities. As part of the "awareness-raising" on phytosanitary practices, the activities will consist of community sensitization campaigns through meetings and the dissemination of messages in local languages via community radio stations, focusing on best practices for pesticide use and the protection of groundwater from contamination. The proposed approach will ensure the sustainability of the adaptation measures implemented under Component 1. Indeed, tree planting on groundwater recharge areas will enhance water infiltration, reduce erosion, and stabilize soils. This intervention is a direct response to the consequences of climate hazards, such as increased evaporation, intense runoff resulting from soil drying and compaction, and declining productivity of aquifers meant to supply

		activities proposed as part of Component 1.	boreholes. Furthermore, awareness campaigns will promote the rational use of pesticides by local communities, especially since prolonged droughts may lead to a higher concentration of pollutants in water reserves.
		CR7: Activities related to monitoring and evaluation should either be covered by the Implementing Entity fee and/or the Execution Costs. As a result, please remove M&E activities from the description of Component 3 output 3.1.	**Response CR7** Observation taken into account in the description of output 3.1 of Component 3 on page 16
		CR8: The amount of financing requested is mainly focused on Component 1 (74%). While the emphasis on concrete (i.e., visible and tangible) intervention measures under C1 is clear, kindly explain if the amount for Component 2 (0,7%) will be sufficient to ensure the important aspects of Operation and Maintenance (O&M) of the infrastructure that will be rehabilitated and built, as well as to optimize local water governance, which are crucial to ensure sustainability.	**Response CR8** The activities to be undertaken under Component 2 will require significant involvement from the beneficiary communities for their implementation. Indeed, the execution of measures to preserve groundwater reserves will see the contribution of communities through the management of nurseries for selected tree species and their planting in recharge areas. Likewise, apart from social services (schools and health centers), users of the installed water access equipment and

			infrastructure will be required to pay a fee of 50 FCFA, equivalent to 0.1 USD, for 25 liters of water. The funds thus collected will be used to cover the maintenance services of the infrastructure and equipment, as well as the operational costs of the management committees established. Accordingly, the amounts allocated to Component 2 will primarily serve to (i) procure cuttings or seeds of trees for reforestation, (ii) engage service providers for the training of committees and sensitization of rural communities, and (iii) provide training and equipment for local repair artisans. This explains the comparatively modest budget allocated to Component 2. Nevertheless, the amount assigned to the activities of this component may be revised during the preparation of the full proposal to take into account the final design of the project.
	4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including	**Yes.** Project activities will benefit population in the regions of Bélier, Gbêkê, Iffou, Marahoué and N'Zi. Details are needed on the number of direct beneficiaries.	

	gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	**CR9:** 1. Please indicate the total number of direct and indirect beneficiaries in the targeted project area. 2. Please explain the process and associated criteria for the selection of beneficiaries.	**Response CR9** The data collected during field surveys reveal that 206 villages in the project area lack access to clean drinking water. Based on the population of the 18 villages visited (ranging from 200 to 1,500 inhabitants), the total affected population can be estimated between 41,200 and 309,000 people. The final number of villages to be included, along with the resulting number of direct beneficiaries, will be determined during the development of the full project proposal. This section has been added to the concept note on page 8. The selection process for beneficiary villages or localities will be based on databases maintained by the Regional Directorates in charge of Water, Sanitation, and Hygiene (WASH). These databases provide an exhaustive list of all villages within the project area in terms of drinking water supply infrastructure (number, operational status, and coverage of population needs). To carry out this entire process, a committee will be established using participatory and inclusive approaches. This committee will comprise :

			• Representatives of the administration (Prefect, Sub-Prefect, Regional Directorates of Water, Sanitation, and Hygiene, Regional Directorates of the Environment) • Representatives of the regional councils concerned by the project • Representatives of local communities (traditional leadership, youth representatives, women's groups or associations). Based on the criteria defined below, the committee will select the beneficiary villages. The detailed process will be finalized at the full proposal stage. The selection criteria will consider the level of vulnerability among populations in the project areas. Accordingly, these criteria will primarily focus on: 1. Drinking Water Coverage Rate in Localities: Identifying villages where access to drinking water is nearly non-existent and where vulnerability levels are highest. The greater the deficit, the higher the priority of the village. 2. Distance and Accessibility to a Drinking Water Source: Assessing the distance between the village and the nearest

		CR10: Kindly clarify if the economic impacts of the project include other aspects beyond the benefits linked to time savings by women from improved access to water points.	drinking water source. The longer (or more difficult) the journey, the more urgent the need. 3. Population Size: Villages with a large number of inhabitants exhibiting high vulnerability levels may receive priority support to maximize impact. However, the population size should range between 100 and 4,000 per locality. Additional specific criteria, where applicable, may be defined based on local realities in each beneficiary region of the project. This section has been added to the concept note on page 8. **Response CR10** The economic impacts of the project, beyond time savings, may include: • Reduced healthcare costs (lower household expenditures on treating waterborne diseases); • Fewer water-related illnesses (decreased frequency of visits to health centers, improved productivity in daily activities); • Opportunities for economic diversification (particularly in trade) facilitated by access to clean water (development of small businesses that generate

		CAR1: Please include in part II.B a preliminary gender analysis to determine the different needs, capabilities, roles and knowledge resources of women and men, and identify how changing gender dynamics might drive lasting change. Please refer to the Guidance document for Implementing Entities on compliance with the AF Gender Policy, if necessary.	employment, optimization of operations in small processing units (such as attiéké production, red palm oil extraction, etc. leading to increased income). **Response CAR1** See updated Section II.B on page 17. The initial gender analysis conducted as part of this project reveals that the burden of household water supply in the targeted regions falls predominantly on women and youth. Consequently, the scarcity or shortage of drinking water (exacerbated by climate change) heightens the vulnerability of this social group, which is increasingly exposed to its adverse effects. These impacts include an increased workload (such as having to travel longer distances to reach a water source and the physical strain of water transportation), reduced time available for income-generating activities, limited engagement in social and community life, heightened conflicts due to pressure on water resources, a rise in waterborne diseases, and the deterioration of service delivery related to basic social infrastructure (health, education, etc.). The project therefore aims to strengthen the adaptive capacities of women and youth within these local

		CR11: Please explain how the project will ensure an equitable distribution of benefits across the target communities, households and individuals.	communities by improving access to safe drinking water through the development of water supply infrastructure and equipment. It will also significantly reduce the vulnerability of women and youth (considered through multiple lenses such as gender, age, and disability) by lowering the risks of waterborne diseases, reducing healthcare costs, and fostering the development of income-generating opportunities made possible by improved access to potable water (e.g., small-scale trading, enhanced operations of cassava processing units, palm oil production, etc.), thereby increasing their economic resilience. **Response CR11** To ensure the equitable distribution of benefits among the project's key stakeholders (communities and households), the project will rely on village and regional committees for the management of potable water access infrastructure. These committees will be composed to ensure fair representation of the various socio-economic groups in all their diversity within decision-making bodies. The project will conduct stakeholder consultations to establish inclusive

			rules for water management and distribution, as well as the infrastructure governance mechanism, ensuring that gender-specific needs are considered in both the design and implementation of the infrastructure. The capacities of these committees will be strengthened to enable the effective implementation of these rules.
		CR12: Please i) describe any marginalized and/or vulnerable groups identified in the target areas and, ii) describe the benefits provided by the project to such groups.	**Response CR12** i) Women and young girls responsible for household water supply in rural areas were identified as the most vulnerable groups in the concept note, specifically in the chapter entitled "Project Justification: Vulnerability of Women and Youth to Water Scarcity" on page 14. (ii) The project brings numerous economic, social, and environmental benefits to the communities, particularly to women and young girls. These benefits are detailed in Section II-B of the concept note on page 16.
	5. Is the project / programme cost effective?	**Yes.** **However further information is needed.** Although the proposal provides a logical explanation of the selected scope and approach, including reference to different alternatives analyzed in the	

		search for water access solutions in the targeted regions. **CAR 2:** In addition, please include cost comparison for the alternatives analyzed. This is best presented in a tabular format showing AF funded solution.	**Response CAR 2** The observation has been taken into account. A table and a text have been inserted in Section C on page 19
	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?	**Yes.** The project is in line with several national and subnational development plans, programs and strategies, in particular with the Sustainable Development Goals (SDGs), the National Development Plan (NDP), the Integrated Water Management Plan (IWRM), the NDCs, the National Adaptation Plan, the Strategy for the Preservation, Rehabilitation and Extension of Forests (SPREF). **CR13:** Please confirm if there are any relevant provincial-level plans and strategies the project may align with.	**Response CR13** The project covers five regions in central Côte d'Ivoire, namely the GBEKE Region, the N'ZI Region, the MARAHOUE Region, the BELIER Region, and the IFFOU Region. The Regional Councils of these areas have local development plans, which the project aligns with. These plans have been taken into account in Section II-D of the concept note on page 22.
	7. Does the project / programme meet the relevant national	**Unclear.** Section E makes reference to Law No. 2023-902 of November 23, 2023 relating	

	technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	to the Water Code, which sets the general framework for legal and institutional texts relating to Water in Côte d'Ivoire. However, further details are provided regarding the way in which the project will comply with the regulation. **CAR3:** Kindly revise this section in order to 1. provide a comprehensive list of all applicable national technical standards that will apply to the project (is there any additional regulatory guidance beyond the Water Code that needs to be considered?); and 2. describe in a logical manner how the project will comply with each of them (e.g., whether any of the proposed activities may trigger the need for an Environmental Impact Assessment, or how the project will comply with drinking water quality standards, etc.). National technical standards include not only those pertaining to a possible need to carry out Environmental Impact Assessments, but also any technical standards pertaining to building codes, water quality regulations, and sector-specific regulations.	**Response CAR3** Section E has been revised in accordance with the recommendations. (see page 22-24)

		CR14: Please include Table 3 on the determination of the project's risk category in part II.K instead, as it should be substantiated by the findings of the ESP screening/assessment process.	**Response CR14** Table 3 has been relocated to Section II.K.
	8. Is there duplication of project / programme with other funding sources?	**Unclear.** **CR15.:** Please provide more details on the project location of the government's social program 1 (PSgouv 1) to ensure synergies and a lack of duplication, for example to ensure coordination of capacity building activities/lessons learned. **CR16:** Please provide more details on the coordination mechanism which will be employed to ensure coordination with other relevant projects in the target area.	**Response CR15** The PS Gouv 1 project covered the 2019–2020 period and targeted all regions of Côte d'Ivoire. However, a second phase of the project was launched, in which the localities targeted in the present proposal were not included. **Response CR16** The ONEP (National Drinking Water Office) will be heavily involved in the implementation of the project, notably by serving as the study and monitoring office, which will ensure that the planned activities in the targeted localities are duly considered to avoid any duplication.
	9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	**Yes.** As outlined in the activities under component 3.	

	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?	**Partially.** The consultative process conducted is outlined in Section H and in Annex 1. However, further details are needed on the feedback received through the consultation workshops, and their integration into the project's design. **CR17:** As part of Annex 1, please provide a consultations summary/report including a description of the consultation techniques (tailored specifically per target group) and the key findings (in particular suggestions and concerns raised by participants). Please describe in part II.H the extent to which the interests or concerns marginalized; vulnerable groups were taken into account when designing the concept note. **CR18:** Please kindly confirm the extent to which private sector representatives and universities/research centers have been consulted or will be consulted during the design of the fully developed proposal.	**Response CR17** Annex 1 has been revised in accordance with the recommendations (see revised Annex 1 on page 38). **Response CR18** The initial consultations focused on rural communities, administrative authorities, and local governments, particularly the regional councils. During the development of the full proposal, all relevant stakeholders will be consulted, including representatives from the private sector as well as universities and research centers.
	11. Is the requested financing justified on the basis of full cost of	**Yes.** The proposal provides information on the financing rationale with a focus on Component 1 of the project. An analysis	

	adaptation reasoning?	of the funding impact compared to a baseline scenario (without funding) is provided. **CR19:** Please explain how taken solely with the AFs resources the project will be able to deliver on its outcomes.	**Response CR19** The project's resources are insufficient to meet the needs of all localities within the targeted regions. The objective is therefore to prioritize localities that currently lack water supply systems. Priority will be given to modest-sized villages with populations ranging from 100 to 1,500 inhabitants. Accordingly, in each beneficiary locality, the project will strive to meet the water needs of these populations.
	12. Is the project / program aligned with AF's results framework?	**Yes.** **CAR4:** Please ensure that the Table in Part III.A follows the template and instructions provided in the AF Operational Guidance. Please note that: i) project objective(s) indicator(s) have to be inserted in the "Project objective indicator(s)" column; ii) corresponding grant amounts have to be provided in the "Grant amount (USD)" columns (ensuring that the total figures equal the project activity cost); iii) the project outcomes have to be inserted in the "project outcome(s)" column and their corresponding indicators provided in the "project outcome indicator(s) section; and iv) the corresponding grant amount should be provided for each Fund output listed in the "Grant Amount (USD)" column	**Response CAR4** The table in section III.A has been reviewed, and the formulation of the Fund's outcomes and indicators has been revised accordingly. (See section III.A, page 34)

		(ensuring that the total figures equal the project activity cost). Kindly ensure that the AF Outcomes and indicators included in the table correspond to those in the Guidance (currently the wording is a bit different). Please refer to the AF Results Framework: https://www.adaptation-fund.org/wp-content/uploads/2019/10/Adaptation-Fund-Strategic-Results-Framework-Amended-in-March-2019-2.pdf.	
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	**Partially.** The project identifies several actions aimed to ensure sustainability, related to maintenance of the infrastructure, optimizing water management and preserving the water tables. Further details can be provided regarding components 1 and 3. **CR20:** Please indicate if the project will prioritize the purchase of durable equipment (for infrastructure included in Component 1), as a way of contributing to technical sustainability.	**Response CR20** The equipment to be used under the project will be identified and provided in close collaboration with the National Office for Drinking Water (ONEP), the agency responsible for defining and implementing the national drinking water strategy in Côte d'Ivoire. This approach will ensure the acquisition of durable and sustainable equipment.

		CR21: Please provide further details on the establishment of sustainable community financing mechanisms for the maintenance and upkeep of the infrastructure planned as part of Component 1.	**Response CR21** The response has been incorporated under Output 2.2 of Component 2, on page 15 of the concept note.
	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?	**Yes.** The project has assessed the possible risks against the 15 AF principles, considering the impact of such risks, and proposed measures to address them. However, the risks identification is generic, and can be more specific to the project activities. An environmental and social management framework aligned with FIRCA's internal procedures and the AF environmental and social policy will be developed and included in the full proposal development phase. **CR22.:** Kindly note that risks categorized as a medium would require further assessment during the full proposal development. Please revise the table to indicate this in the second column.	**Response CR22** These elements are indicated in the third column of Table 5 (Column 3: Potential impacts and risks, further assessment and management required for compliance) in the measures section. The actions identified in this section will be subject to in-depth assessment during the project implementation phase, should the risks be confirmed. (page 29)

		CR23: Please indicate which project components or activities would lead to the identified risks. Considering the scope of activities planned under Components 1 and 2, in particular installation of water distribution points and water supply networks for rural social infrastructure, as well as the promotion of reforestation, kindly provide further details on any risks and mitigation related to involuntary resettlement, protection of natural habitats, lands and solid conservation. Please refer to the ESP guidance document and/or the ESP itself, as needed. Please consider all potential direct, indirect, and cumulative impacts and risks that could result from the project; ensure that findings are evidence-based and substantiated; and acknowledge risks related to all 15 Principles. **CAR5:** An initial gender analysis is required at the concept note stage. Kindly provide it.	**Response CR23** Components 1 and 2 of the project may entail risks due to the nature of the activities to be implemented. In accordance with FIRCA's environmental and social policy, which is aligned with that of the Adaptation Fund, the environmental and social assessment procedure will apply to all project interventions to further define the level of risk and identify appropriate mitigation measures. This provision of the procedure will also apply to unidentified sub-projects. **Response CAR5** The initial gender analysis has been added to Annex 2 page 43.
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	**Yes.**	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total	**Yes.** The IE fee is at 8.5 % of the total project budget before the fee. An PFG is requested for US$150,000, which is	

	project/programme budget before the fee?	within the size allowed for Project size US$5M and above.	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	**Yes.** The Execution Costs are at 8.68%	
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	**Yes.** The Interprofessional Fund for Agricultural Research (FIRCA) accreditation expires on April 28, 2025.	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage	
	2. Are there measures for financial and project/programme risk management?	n/a at concept stage	
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and	n/a at concept stage	

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

	align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?		
	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage	

ADAPTATION FUND

CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAM INFORMATION

Title of Project/Program: ***Strengthening access to drinking water for rural communities in the central zone of Côte d'Ivoire to reduce their vulnerability to the effects of climate change***

Country: **Côte d'Ivoire**

Thematic Focal Area: **Water management**

Type of Implementing Entity: **National Implementing Entity**

Implementing Entity: **Interprofessional Fund for Agricultural Research and Consulting (FIRCA)**

Executing Entities: **- National Climate Change Program (PNCC) of Ministry of the Environment, Sustainable Development and T Ecological Transition (MINEDDTE)**

Amount of Financing Requested: **10,000,000** (in US Dollars Equivalent)

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

Amount of Requested financing for PFG: **150,000** (in US 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 annexes.

Project/Program Background and Context:

Provide brief information on the problem the proposed project/program is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.

Geography and climate

Ivory Coast is a country in West Africa located along the Gulf of Guinea. It is bordered to the north by Mali and Burkina Faso, to the west by Liberia and Guinea, to the east by Ghana and to the south by the ocean Atlantic.[1]The country is crossed by the intertropical convergence zone and is therefore influenced by the monsoon during the wet season and the harmattan during the rainy season dried.[2]The State of the Climate for the year 2022 established by SODEXAM (Société d'Exploitation et de Développement, Aéroportuaire, Aéronautique et Météorologique) reveals that the southern part has two (02) rainy seasons. The most intense and longest has a maximum in June (on average 700 mm of rain in the Abidjan area) while the shortest is centered on September-October. The two seasons are separated by a small dry season from August to September. On the coast, the rains are also quite abundant in March and November and even in December on the westernmost part. They vary from 1500 to 2500 mm of rain per year. On the other hand, inland the rains are generally less intense. They vary from 1200 to 1500 mm per year and can reach 2000 mm in the mountainous area. The northern part of Côte d'Ivoire has only one rainy season with its maximum in August. Average temperatures range from 30°C on the coast to 32 to 34°C in the interior areas of Côte d'Ivoire.

Territorial distribution of Ivory Coast[3]

The Ivorian territory is organized into two autonomous districts (Abidjan and Yamoussoukro), twelve (12) districts and thirty-one (31) administrative regions. Table 1 and Figure 1 present the different districts of Côte d'Ivoire as well as their regions:

Table 1: *District and Regions of Ivory Coast*

Districts	Geographical location	County town	Regions
Abidjan	South		
Yamoussoukro	Center		
Lakes	Center-East	Dimbokro	Aries, Iffou, N'zi, Moronou
How	South East	Abengourou	India-Djuablin, South Comoé
Dengue fever	Northwest	Odienne	Folon, Kabadougou
Goh-Djiboua	South-central	Gagnoa	Goh, Loh-Djiboua
Lagoons	South	Dabou	Agnébi-Tiassa, Mé, Grands-Ponts
Mountains	West	Man	Tonkpi, Cavally, Guémon
Sassandra-Marahoue	Center-West	Daloa	Daloa, Bouaflé
Savannas	North	Korhogo	Poro, Tchologo, Bagoue
Bas-Sassandra	Southwest	San Pedro	Nawa, San-Pedro, Gbôklè
Bandama Valley	Center	Bouake	Hambol, Gbeke
Woroba	Northwest	Seguela	Bere, Bafing, Worodougou
Zanzan	Northeast	Bandoukou	Boukani, Gantougo

[1]National Environmental Policy, 2011
[2]Environmental Profile of Côte d'Ivoire, July 2021
[3]Decree No. 2013-294 of May 2, 2013 establishing thirty-one (31) regions, administrative districts, in regional local authorities.

Figure1:*Administrative map of Ivory Coast*

Population distribution

The population of Côte d'Ivoire was 29,389,150 inhabitants in 2021, including 14,044,160 (47.8%) women and 15,344,990 (52.2%) men, with an annual intercensal growth rate of 2.9% between 2014 and 2021. This population is divided into 5,616,487 households with an average size of 5.2 people. The population density is 91 inhabitants/km2. The active population aged 15-64 is 59.2%, that of under 15 is 38.2% as well as 2.6% over65 years old[4]. The distribution of the population according to the place of residence reveals that more than half of the population resides in cities. Indeed, 15,428,957 (52.5%) people live in cities compared to 13,960,193 (47.5%) in rural areas. The urbanization rate increased from 32.0% in 1975 to 52.5% in 2021.[5]

The Autonomous District of Abidjan, the Ivorian economic capital, has the highest concentration of inhabitants with 2,994 inhabitants/km2 (with a total of 5,616,633 inhabitants, Abidjan is the most populated city). It is followed by Bouaké, the second largest metropolis in the country with a population of 832,371 inhabitants, then by Korhogo, which occupies third place with 440,926 inhabitants and finally by the city of Daloa with 421,879 inhabitants. Abidjan is the largest city in the country and the second most populated in West Africa after Lagos (Nigeria).

Environmental context and climate change

Côte d'Ivoire is highly exposed to climate change due to rising temperatures, sea levels and changes in rainfall patterns. The average temperature increased between 0.5°C and 0.8°C between 1970 and 2021 (5-year moving average).6Rainfall patterns have changed as rainfall has become more frequent during the dry season, while there have been more rainless periods during the wet season. Different studies from the UK Met Office, the European Centre for Medium-Range Weather Forecasts (ECMWF) and the World Bank predict that by 2050, Côte d'Ivoire could face the combined

[4] UN-Habitat Côte d'Ivoire Country Report, "A Better Quality of Life for All in an Urbanizing World", 2023
[5]General census of population and housing, 2021
[6]The 5-year average temperature increased from 26.29°C in 1970 to 27.22°C in 2021, an increase of 0.93°C. If we consider only annual temperatures, which are more likely to have outliers, the increase during this period is 0.70°C.

effects of warmer average temperatures (between 1°C and 4°C depending on the GHG emissions scenario), an increase in the frequency of extremely hot days (with 20 additional hot days by 2030 and 60 more by 2060 in a moderate emissions scenario),7greater variability in precipitation (-9% in May and +9% in October) and a rise in sea level (up to 30 cm by 2050), as well as the associated risks of flooding and coastal erosion.

The effects of climate change are already evident in Côte d'Ivoire and are expected to be exacerbated in the future with rising temperatures, greater variability in weather conditions and more extreme climate events. In the future, periods of drought and rain are likely to become more extreme, and more droughts and an increased risk of flooding are expected.

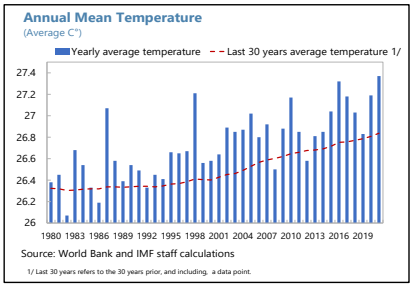

Figure 2 :Temperature assessment from 1980 to 2019

Côte d'Ivoire's vulnerability to climate change is exacerbated by deforestation.

Driven by intensive agricultural production practices, the country has experienced severe forest loss, from 37% of the country's cover in 1960 to 14% in 2010. By 2019, forest cover had fallen to 8%. While forests generally sequester carbon, deforestation reduces this effect. It also increases vulnerability to climate change by amplifying temperature increases, decreasing the likelihood of precipitation, and degrading land, increasing the risk of floods and landslides.[8]

Water resources[9]

The hydrographic network of Côte d'Ivoire is made up of: (i)
From four (04) large hydrographic basins from West to East (Cavally, Sassandra, Bandama and Comoé), (ii) ;
Small coastal rivers in the south of the country, the most significant of which are the Tabou, the Néro, the San-Pédro, the Niouniourou, the Boubo, the Agnéby, the Mé, the Bia, the Tanoé and the Néro, (iii) ;
Tributaries of the Niger in the far North-West extending over a watershed from West to East (the Gbanhala, the Baoulé, the Dégou, the Kankélaba and the Bagoué), (iv) ;
Tributaries of the Black Volta in the North-East (the Koulda, the Kolodio, the Gbanlou Bineda and the Kohodio).
The Bandama watershed is the only entirely national basin (apart from a few small coastal basins); the others are shared with neighboring countries, notably the Niger and Volta rivers. There are no natural lakes and ponds. The existing bodies of water, with large areas of water storage inland, are artificial, linked to hydroelectric and hydroagricultural dams. In total, the mobilizable surface water resources amount to 39 billion m3.

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[7]As average annual temperatures increase, the frequency of extremely hot days (with maximum temperatures (daily temperatures above 35°C) is expected to increase significantly, particularly in northern Côte d'Ivoire. In the SSP2-4.5 scenario (moderate emission reduction), it is predicted that by 2030 there could be 20 additional very hot days per year compared to 2000. This number is expected to reach 30 by 2050 and 60 more by 2080.
[8]World Bank Group West and Central Africa, Côte d'Ivoire: National Report on Climate and Development, October 2023
[9]https:www.fao.org

National drinking water context[10]

Water is a renewable resource, but also limited and fragile, and a key factor in development. The country is full of a dense hydraulic network, but this density contrasts with the lack of hydraulic stations. Since 1973, the government has taken measures to increase access to drinking water for the population throughout the territory by guaranteeing both quantity and quality. More than 22,000 boreholes equipped with human-operated pumps (PMH) have been drilled, of which 18,000 have been operated using village hydraulics to supply localities and agglomerations of 100 to 1,000 inhabitants. The rest is operated using urban hydraulics (HU) or improved village hydraulics (HVA) for localities of 1,000 to 4,000 inhabitants.

Despite these efforts, the national drinking water coverage rate is 53% for localities and agglomerations. The capacities of the national bodies responsible for drinking water supply, in particular the National Office for Drinking Water (ONEP), as well as those of local authorities and communities, remain insufficient to ensure the deployment of water infrastructure throughout the territory. Furthermore, very strong regional disparities persist : according to the MICS (multiple indicator survey), the proportion of the population consuming surface water reaches 8.2% in the West, 14.8% in the North-East and 23% in the central zone.

The impact of climate change on the Bandama watershed[11]

From the 1980s to 2000, analysis of historical data shows that Côte d'Ivoire experienced a long period of rainfall deficit of around 3% compared to the 1971-2000 normal, with periods of severe drought, particularly in 1983 and 1998 with respective drops of 15% and 11% compared to the same normal. Generally, dry and wet periods of different amplitudes were observed over the period 1981-2016 in the Bandama watershed. An interannual fluctuation in rainfall was noted, characterized by a more or less deficient period from 1981 to 1999 followed by a wet period from 2000 to 2016.

During the dry season, in the watershed there is a decrease in water availability marked by the intensification of drought and the decrease in rainfall. The downward trend in precipitation observed during the dry period from January to March across the entire watershed affects mainly surface water resources. This indicates a decrease in the rate of coverage of water needs during this period for all water use sectors. In the center of the watershed there is a high level of exposure to drought risks because the main activities of the populations in the center are linked to water (agriculture and livestock), which causes greater exposure to climate change in these regions.

In the city of Bouake for example, water availability depends on surface water and particularly on agro-pastoral dams. While the strong anthropogenic pressure and inadequate land use around these dams causes a particular sensitivity of these structures and their users to climate change. In addition, the sensitivity analysis shows that the irregularity of the seasonal distribution of precipitation is reflected in the availability and quality of water resources. Indeed, the decrease in the volumes of precipitated water over the period 1981-1999 was manifested by a generalized decrease in surface flows. Similarly, the lack of precipitation in the dry season induces a lack of water availability in these structures during these seasons.

JUSTIFICATION OF THE PROJECT

General

Water is the major challenge of the 21st century. Extreme weather events, droughts and floods have devastating consequences for access to water and global food security. The threats to Côte d'Ivoire's

[10] SECTOR MINISTERS' 2019 MEETING, The Ivory Coast, COUNTRY BRIEF, 2019

[11] PROJECT: CIV 10 0010310 "Strengthening the integration of adaptation to climate change in planning *development in Ivory Coast »*development of five sectoral reports on soil, agriculture, water resources, coastal resources and health,**Sector report: water resources.**

water resources are diverse. Overall, the quantity of water is sufficient but resources are unevenly distributed between the southern, central and northern areas of the country.[12] Indeed, the Ivorian territory is relatively well watered (1,000 to 2,500 mm/year) and has significant surface and groundwater reserves, with a hydrographic network comprising approximately 537 watercourses including four (04) main watersheds (Cavally, Sassandra, Bandama and Comoé). However, many surface water reserves, constituting the main sources of drinking water supply for rural populations, dry up during periods of drought. Thus, the proportion of rural households without access to water supply services stands at 42.2% in general and at 53% among the poorest households. The main manifestation of climate change is observed in the evolution of temperature and precipitation.

Temperature evolution

Over the period 1960-2010, temperatures increased by 1.6°C across the entire Ivorian territory. The current trend observed in Côte d'Ivoire is expected to worsen overall, but to varying degrees depending on the location. Temperatures will continue to rise; projections show an increase of about 1.3°C by 2030, 1.8°C by 2050 and 2.1°C by 2070, compared to 1960. Under the RCP 4.5 scenario (Scenario with stabilization of emissions before the end of the 21st century at a levelweak)[13], temperatures could increase by 3°C across most of the country by 2100. In the north, in the eastern and central regions, temperatures are expected to increase more than in the southern and western regions.

Evolution of precipitation

In terms of precipitation, projections indicate that total annual precipitation could increase by an average of 0.3% by 2050 and 1.2% by 2070. The largest increase would occur in the northern and western regions. However, in the central part of the country, precipitation could decrease by about 3%. Seasonal rainfall patterns will continue to change, with rains starting and ending earlier than historical norms. Based on the RCP 4.5 scenario, by 2100, daily precipitation is likely to decrease by about 8% during the months of April to July[14].

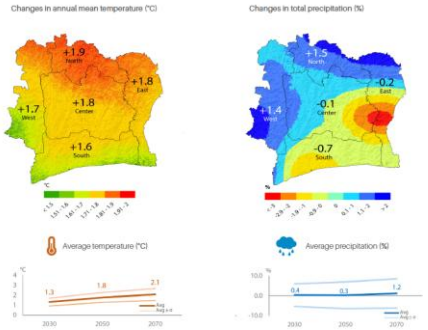

Figure 3: *Projected changes in temperature and precipitation in Côte d'Ivoire by 2070*[15]

Project Scope

The above-mentioned climate information reveals that in recent years, some areas of Côte d'Ivoire have been subjected to strong climatic variations, which are mainly manifested by a greater increase in temperatures and a sharp decrease in precipitation. This climatic trend has led to a decrease in water resources, particularly surface water, which is the main source of drinking water for populations

[12]SECTOR MINISTERS' 2019 MEETING, The Côte d'Ivoire COUNTRY BRIEF, 2019
[13]Intergovernmental Panel on Climate Change, Scenarios for greenhouse gas concentrations, March 2015
[14]BAD, National Climate Change Profile, 2018
[15]World Bank Group West and Central Africa, Côte d'Ivoire: National Report on Climate and Development, October 2023

in rural areas. In fact, only 58.8% of rural households have access to a water source improved.[16] Communities are therefore dependent on surface waters which are affected by these effects of climate change. This dependence therefore increases their vulnerability. Rural communities are thus faced with a real problem of access to water due mainly to the drying up of surface water sources. This difficulty affects the quality of life of rural populations, particularly on a socio-economic level, particularly for women, young people and children. The central area of the country, which according to projections concentrates both the highest probabilities of an increase in temperatures (+3°C) by 2100 and decreases in precipitation (-3%) by 2070, appears to be the most vulnerable.in relation to the supply of drinking water to its populations.

Faced with this situation, it is necessary to strengthen access to drinking water for rural communities in the central part of Côte d'Ivoire to reduce their vulnerability to the harmful effects of climate change.

PROJECTION TO 2075 OF THE AVAILABILITY OF WATER RESOURCES IN THE PROJECT AREA[17]

Studies carried out in the Bandama watershed and in coastal basins are unanimous in saying that the rainfall deficits recorded in Côte d'Ivoire since the 1970s have negatively impacted the quantity of water mobilized in rivers.
However, as regards groundwater resources, under the RCP 4.5 scenario, we will observe around:

- **2025:** a significant increase in flow rates from June to August and an increase in groundwater recharge from 172 mm to 304.8 mm;
- **2050:** a significant increase in flow rates from June to August and an increase in groundwater recharge from 170.1 mm to 301.1 mm;
- **2075:** a significant increase in flow rates from June to August and an increase in groundwater recharge from 173.9 mm to 311.9 mm.

Furthermore, according to the RCP 4.5 scenario, by 2050, with a constant abstraction effort, the assumption is that we are at least able to maintain the levels of exploitation and abstraction of water resources. Based on the RCP 4.5 scenario, the construction of boreholes in the project area is an adaptation option to be considered because groundwater will still be exploitable in the coming decades.

Presentation of the project area

The project will be implemented in the center (figure 5) of Côte d'Ivoire, particularly in the regions of Bélier, Gbêkê, Iffou, Marahoué and N'Zi. The water resources of these regions are subject to climatic hazards, particularly in rural areas, thus leading to difficulties in accessing water to meet their basic needs.

[16] SECTOR MINISTERS' 2019 MEETING, The Côte d'Ivoire COUNTRY BRIEF, 2019
[17] PROJECT: CIV 10 0010310 "Strengthening the integration of adaptation to climate change in planning *development in Ivory Coast",* development of five sectoral reports on soil, agriculture, water resources, coastal resources and health, **Sector report: water resources.**

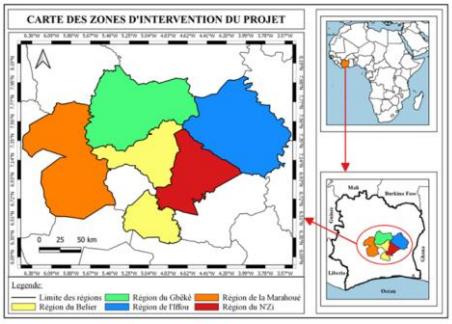

Figure 4: *Area targeted by the project*

The selected areas were selected because of the impact of climate change on their surface water resources. Several villages in the targeted regions reported a decrease in surface water and difficulty in accessing drinking water.

~~Several villages in the targeted regions reported a decrease in surface water and difficulty in accessing drinking water.~~ A field mission conducted as part of the preparation of~~feasibility study for~~ this project in 18 villages in May 2024 determined that several villages in the targeted regions did not have means of water supply. For villages that had already benefited from the installation of a drinking water supply system, several pumps were faulty or were insufficient in number. The villages visited have an average population ranging from~~of~~ 200 to~~and~~ 1,500 inhabitants, and the density of pumps per number of inhabitants is often well below the actual needs of the inhabitants. The populations therefore resort to surface water or artisanal wells. However, with the advent of climate change, access to unimproved water sources is increasingly difficult, especially during periods of drought because backwaters, rivers and wells can dry up. Without an improved drinking water system, villagers are therefore very vulnerable to the vagaries of climate change and this has significant environmental and socio-economic consequences. Data collected during this field mission indicate that 206 villages within the project area do not have access to drinking water. The total affected population is estimated to range between 41,200 and 309,000 inhabitants. The final number of villages to be included, along with the corresponding number of direct beneficiaries, will be specified during the development of the full project proposal. The main criteria for village selection are as follows: (1) Drinking water coverage rate: Identify villages where access to drinking water is almost non-existent and where vulnerability levels are highest. The greater the deficit, the higher the priority given to the village, (2) Population size and density: Take into account the population size and density. Villages with a large number of inhabitants (or high population density) justify priority support to maximize impact. However, the number of inhabitants must range between 100 and 4,000, (3) Distance and accessibility: Assess the distance between the village and the nearest source of drinking water. The longer (or more difficult) the journey, the more urgent the need, (4) Local engagement and sustainability prospect: Confirm the willingness of local authorities and residents to participate (e.g., in infrastructure maintenance and cost-sharing). A committed village increases the likelihood of long-term sustainability of the infrastructure.

A selection committee composed of representatives of administration, regional councils and local communities, will be established as part of the full project proposal. This committee will validate the selection criteria and make the final decision on the beneficiary localities.

This table below was established on the basis of data collected from the Regional Directorates of Hydraulics (source: field mission)

These observations are listed in the table below: These data are approximate and may be refined

~~during~~ in the ~~final~~ full proposal.

Table 2: *Distribution of pump needs in the area targeted by the project*

Regions	Number of villages without access to drinking water	Number of villages with pumps that are faulty	Number of villages whose population increase requires an increase of appropriate water supply systems~~in suitable work~~
IFFOU	57	12	10
RAM	23	N / A	18
GBEKE	48	13	16
MARAHOUE	51	9	N / A
NZI	27	N / A	N / A
Total	**206**		

Presentation of the targeted regions

The Gbêkê region[18]

Located in the centre of Côte d'Ivoire, 350 km from Abidjan, the Gbêkê region is part of the so-called "forest-savannah transition zone", made up of a mosaic of savannahs, open forests and dense semi-deciduous forests.19It covers an area of 9136 km2. It has four (04) departments namely: Bouaké, Béoumi, Botro and Sakassou made up of twenty (20) sub-prefectures and 771 villages. **Its total population is 1,352,900 inhabitants** including 699,816 men and 653,085 women (INS, RGPH 2021).[20]The entire area falls within the Bandama watershed, and more specifically straddles two sub-basins: the Bandama Blanc to the northwest and the N'Zi to the south and east.

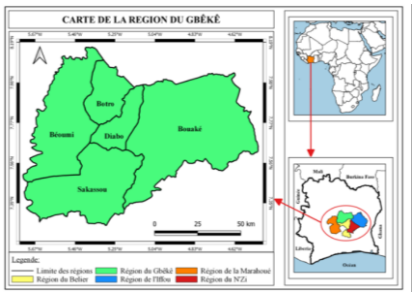

Figure 5:*Map of the GBÊKÊ Region*

The ~~Aries~~ Bélier region[21]

The Bélier region covers the Yamoussoukro Autonomous District (Yamoussoukro and Attiégouakro departments) and the Bélier Administrative Region (Diedievi, Djékanou, Tiebessou and Toumodi departments). Located approximately 200 km north of Abidjan, it covers 11,695 km2. The Bélier Region has a population of 702,341 inhabitants, divided into 353,812 men (51%) and 348,529 women (49%). This area of the country is distinguished by a relatively flat relief, crossed by a hydrographic

[18]Ivoirepolitics.Org/presentation-de-Gbêke
[19]https://ivoirepolitique.org
[20]National Institute of Statistics, General Population and Housing Census, 2021
[21]Ivoirepolitique.Org/presentation-de-Bélier

network with gentle slopes (1 to 3%), narrow basins and reduced lateral contributions: the Bandama River and the N'Zi and Kan rivers. The flows are characterized by significant interannual variability and marked low water levels that appear from January to April.
As for its vegetation, it is composed of wooded savannahs, grassy savannahs and gallery forests (mesophilic gallery forests along watercourses) characteristic of the "V Baoulé" (transition zone between the southern forest and the northern savannah of the country).

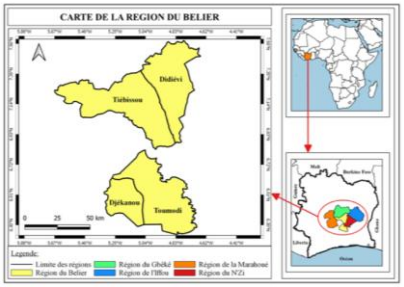

Figure 6:*Map of the ~~Aries~~ Bélier Region*

The N'ZI region[22]

Located in the center-east of Côte d'Ivoire, the N'ZI region is bordered to the west by the Lakes region, to the north by the Iffou region, to the east by the Iffou and Moronou regions and to the south by the Moronou region. The population of the region is 254,623, including 129,386 men and 125,237 women. It is subdivided into three departments: Dimbokro, Bocanda and Kouassi-Kouassikro. The characteristic watercourse of the department is the N'zi. Its floods are relatively low due to low rainfall. The vegetation of the region consists of patches of mesophilic forest and large meshes of savannah separated by gallery forests.

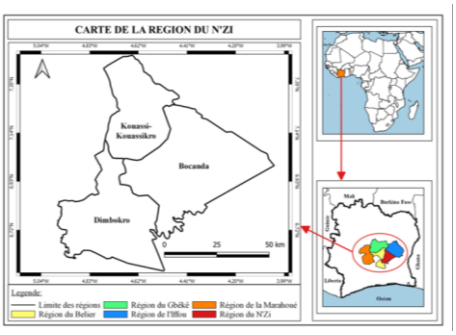

Figure 7: *Map of the N'ZI region*

Iffou region[23]

The Iffou region is located in the former "cocoa loop" in the center-east of Côte d'Ivoire. The territorial constituency of the Iffou region is limited to the north by the Hambol region, to the south by the Moronou region, to the east, to the southeast by a natural border (the Comoé), and beyond, respectively by the regions of Gontougo and Indénié-Djuablin, to the west by the regions of N'zi and Bélier, to the northwest by the region of Gbêkê. It is located in the center-east of Côte d'Ivoire to the

[22]Ivoirepolitics.Org/presentation-of-NZI
[23]Ivoirepolitique.Org/presentation-de-Iffou

east of V Baoulé with an area of 8955.05 km2 or 2.8% of the national territory. Its total population is 378,560 inhabitants including 196,717 men and 181,843 women (INS, RGPH 2021).

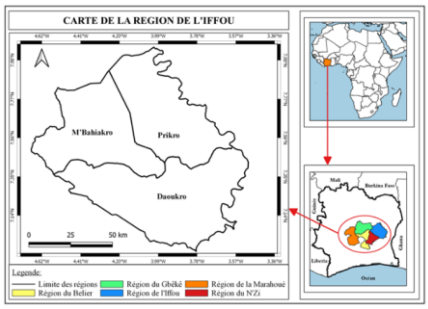

Figure 8: *Map of the IFFOU Region*

Marahoue region[24]

The region is located in the center-west of Ivory Coast. From an administrative point of view, the area is bordered to the north by the Béré region, to the south by the Gôh region, to the east by the Gbêkê and Bélier regions, and to the west by the Haut-Sassandra region. Straddling the forest zone and the savannah zone, the Marahoué region covers an area of 9,092.48 km², including 4,222.48 km² for the Bouaflé department, 3,252 km² for the Zuénoula department and 1,618 km² for the Sinfra department. Its total population is 981,180 inhabitants, including 521,475 men and 459,704 women (INS, RGPH 2021).

The Region is drained by the Red Bandama River which acts as a natural border on the eastern side, then the Marahoué which crosses most of the study area, and the Baha, Ouréné, Bôlè, Zabré, Bouré, Dromonyi, Houda and Tenére rivers.

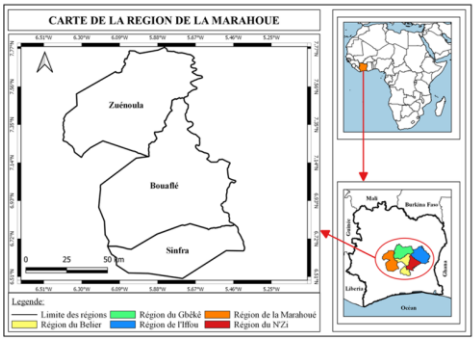

Figure 9: *Map of the Marahoué Region*

Vulnerability of selected communities to lack of drinking water

The interviews conducted during the field mission helped determine the vulnerability of rural communities to climate change. The selected communities depend on surface water (rivers, backwaters, etc.) for their needs. The different uses of water in the study area include: (i) domestic use, such as drinking, cooking, and daily hygiene; (ii) economic use, particularly for processing agricultural products (e.g., grain mills, cassava processing); (iii) community use, for public services

[24] Ivoirepolitics.Org/presentation-de-Marahoue

such as schools and health centers that require water for their daily operations.

During the rainy season, women obtain water from the backwaters in their villages and from rainwater. However, during the dry season, the backwaters dry up and people, especially women, must travel long distances (on average 5 to 8 km) to find a water point. In addition, these water points are often polluted by animal waste and human activity. Sectors such as education and health are also greatly affected by this lack of water. State officials (nurses, teachers, etc.) are not ready to settle in villages that do not have adequate access to drinking water. Students, sometimes very young, must therefore travel long distances to attend school. In case of serious illness, people in villages without clean water must go to the nearest health centre, often located in a village several kilometres away. In the event of a water shortage, artisanal small-scale agro-processing units may be forced to reduce or stop their activities.
People collect rainwater during the rainy seasons. Poor treatment and storage of this water also increases the risk of illness.
The quality of life and well-being of villagers is also affected by the lack of water. Indeed, the populations interviewed revealed that in areas without drinking water pumps, young men have difficulty finding a partner to ~~share their daily lives~~mary. Women who are responsible for supplying their households with water refuse to live in villages where they will have to go through an obstacle course to get water. Young spouses are therefore abandoned after a few days. Also, hours of sleep are limited because they have to get up very early to collect water and then have enough time to do the day's work. Finally, we are witnessing an exodus of the youngest who prefer to move to regions with less difficult living conditions. But any movement leads to a competitive effect and can lead to conflicts.

Vulnerability of women and youth to water scarcity

In rural areas, women and girls are responsible for providing water to households. They are responsible for going to water points, collecting water, transporting it and carrying out household tasks that require water. Women have to travel long distances to get water. Then they have to do the same journey to get home. This is hard work that does not generate any income for them. On the contrary, by doing this task, they lose time that they could have spent studying or developing an income-generating activity. Thus, in the absence of adequate access to drinking water, women are even more likely to suffer from gender-related inequalities because the lack of drinking water impacts their health, their access to education and reduces their capacity for empowerment. Having to carry heavy loads sometimes several times a day over long distances has a significant impact on the health of women and girls who can develop diseases that cause disabling pain. Also, the lack of drinking water pushes populations in rural areas to use the first water they can get to meet their daily needs. The use of this often unsanitary water leads to diseases. However, in the event of illness in a household, it is women who are responsible for caring for the sick and replacing them in their household activities, thus leading to an increase in their burdens. Women are more often confronted with the negative health effects of poor water quality and untreated wastewater due to domestic roles such as cooking, cleaning and childcare. In addition, women are particularly affected by the lack of access to drinking water and sanitation, due to hygiene needs and increased vulnerability to infections ~~around~~ during menstruation and reproduction. Difficulties in accessing clean water have deadly consequences for women in labor and newborns. Sometimes, simply having access to quality water could have made a difference. Unfortunately, in rural areas, health services also suffer from a lack of water. Women are therefore the most vulnerable to the lack of clean water and will be the first to benefit from the advantages of this project.

Project/Program Objectives:

The objective of the project is to strengthen access to drinking water for rural communities in the central part of Côte d'Ivoire to reduce their vulnerabilities to the effects of climate change.

Specifically, this will involve: (i)
Improving drinking water production and distribution infrastructure for rural communities in the context of climate change, (ii) ;
Strengthening the sustainability of access to drinking water for rural communities made vulnerable by climate change, (iii) ;
Ensure the sharing of knowledge generated to promote the learning of sustainable drinking water supply and management practices to strengthen the adaptation capacities of rural communities in the face of the scarcity of water resources due to the lengthening of drought periods and the reduction in rainfall.

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Project/Program Components and Financing:

The table below shows the components of the project as well as the estimated cost of each component.

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Project/Program Components	Expected Concrete Outputs	Expected Outcomes	Amount (US$)
1. Strengthening the capacity of rural communities to access drinking water	Infrastructures for access to drinking water are installed/rehabilitated (Drilling, PMH, HVA) Distribution networks are installed in the targeted areas to transport water from the boreholes to the final beneficiaries	The infrastructure for the production and distribution of drinking water for rural communities is strengthened	7,416,977
2. Strengthening the sustainability of access to drinking water for rural communities made vulnerable by climate change	Local technical capacities are strengthened for the maintenance of installed infrastructure and equipment Water management is optimized in beneficiary localities Measures to preserve groundwater supplies to vulnerable communities are being implemented	The sustainability of access to drinking water for rural communities made vulnerable by climate change is strengthened;	700,000
3. Sharing knowledge to promote learning about sustainable drinking water supply and management practices in a context of water resource scarcity due to climate change	Lessons learned from the actions taken and the good practices identified are capitalized on The knowledge generated by the project is shared for learning sustainable drinking water supply and management practices	Communities in regions prone to water scarcity due to climate change are equipped with knowledge on good practices for sustainable drinking water supply and management to improve their resilience	300,000
6. Project/Program Execution cost			**799,613**

7. Total Project/Program Cost	**9,216,590**
8. Project/Program Cycle Management Fee charged by the Implementing Entity (if applicable)	**783,410**
Amount of Financing Requested	**10,000,000**

Projected Calendar:

Milestones	Expected Dates
Start of project/program implementation	~~January~~ July 2026
Mid-term review	~~December~~ June 202~~8~~7
Project/Program Closure	~~December~~ June 203~~0~~29
Terminal assessment	~~June~~ December 2030

PART II: PROJECT / PROGRAM JUSTIFICATION

A. Describe the project/program components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a program, show how the combination of individual projects will contribute to the overall increase in resilience.

In order to effectively implement concrete adaptation actions that will benefit rural communities in the central regions of Côte d'Ivoire subject to the scarcity of drinking water resources in the dry season and reduce their vulnerabilities to the effects of climate change, the project was designed to be implemented through three (3) key components: (i)
Component 1: Strengthening the capacity of rural communities to access drinking water, (ii) ;
Component 2: Strengthening the sustainability of access to drinking water for rural communities made vulnerable by climate change, (iii) ;
Component 3: Knowledge sharing to promote learning of sustainable drinking water supply and management practices in a context of dwindling water resources due to climate change.

Component 1: Strengthening the capacity of rural communities to access drinking water
In rural areas, the supply of drinking water is traditionally ensured from water sources such as rivers, backwaters, wells, etc. These water sources have an increasingly marked tendency to dry up during the dry season. Alternative drinking water sources deployed to compensate for this insufficiency are boreholes equipped with human-powered pumps (HMPs) or improved supply systems that reduce the difficulty of collecting water, called Improved Village Hydraulics (HVA). This project will involve strengthening the drinking water supply system (DWS) in the targeted regions through the construction of new infrastructure, as well as the rehabilitation and extension of existing infrastructure, in particular HMPs and/or HVAs in accordance with current standards.[25.]
A PMH consists of: (i) a borehole equipped with a manual or solar pump; (ii) a safety fence; (iii) a soakaway pit for drainage and sanitation. An HVA consists of: (i) a borehole equipped with an electric or solar pump; (ii) a safety fence; (iii) a water storage tank; (iv) a supply and distribution network; (v) public standpipes.

The expected products and activities under component 1 are:

Product 1.1 Infrastructure for access to drinking water is installed/rehabilitated (Boreholes, PMH, HVA)
Surveys conducted in the project area have revealed not only a decrease in water resources, but also insufficient water supply infrastructure, making access to this resource difficult. To reduce the vulnerability of rural communities in central areas due to the scarcity of drinking water resources in the dry season, the project will strengthen drinking water access infrastructure in these localities. To achieve this, the activities to be carried out will focus on: (i) conducting feasibility studies to determine the type of structure (PMH/HVA) to be carried out and (ii) the construction/rehabilitation of the structures selected at the end of the studies.

Product 1.2 Distribution networks are installed in the targeted areas to transport water from boreholes to the end beneficiaries
Water distribution in rural areas remains a concern even when a source of drinking water supply exists in the locality. Indeed, many constraints make it difficult to distribute water efficiently. These include, in particular, the distance between places of residence and the water source, the influx of users at water supply points during periods of high demand or the low flow rate of the borehole supplying the water supply points. In order to overcome the difficulties mentioned above and improve the conditions of access to water, distribution networks will be installed to transport water from boreholes to the end beneficiaries in densely populated localities. To this end, the project will (i) install or rehabilitate public

[25]National standards for the type of drinking water supply system to be implemented according to the population size of the locality concerned

drinking water distribution points and (ii) install drinking water supply networks for rural social infrastructure (schools, health centers).

Component 2: Strengthening the sustainability of access to drinking water for rural communities made vulnerable by climate change

The sustainability of access to drinking water is hampered by several constraints including: (a) the reduction of the quantity of water in aquifers and the pollution of infiltration water; (b) the weakness of local governance in terms of effective management of water resources and water access infrastructure and (c) the difficulties of maintaining the installed infrastructure. To ensure the sustainability of access to drinking water for rural communities made vulnerable by climate change, the project will ensure (i) implementing measures to preserve the water tables supplying water to vulnerable communities, (ii) optimizing water management in beneficiary localities and (iii) strengthening local technical capacities for the maintenance of installed infrastructure and equipment.

Output 2.1: Measures to preserve groundwater supplies to vulnerable communities are implemented

The sustainability of the availability of groundwater in quantity and quality to supply rural households with drinking water is becoming increasingly problematic. Indeed, climate variability marked by the lengthening of drought periods, combined with the decline in precipitation, leads to difficulties in recharging groundwater tables. Similarly, the phenomenon of deforestation greatly reduces the capacity of soils to absorb rainwater, promotes rainwater runoff and increases the risks of soil erosion and evaporation of soil water.

To contribute to the sustainability of groundwater supply and groundwater quality, the project will focus on (i) promoting reforestation in groundwater recharge areas supplying installed boreholes and (ii) raising awareness among rural communities about good phytosanitary practices in these areas.

Product 2.2: Water management is optimized in beneficiary localities

The information collected during the consultation mission carried out with the communities of the target localities of the project revealed shortcomings in community management of drinking water supply infrastructure and a poor knowledge of water resource management in a context of climate change. These shortcomings are reflected in particular by: (i)

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Dysfunctions or even the cessation of activities of infrastructure management committees in certain localities which have water supply systems, (ii) ;

Low synergy between local communities, technical managers of the decentralized administration responsible for managing water access infrastructure and decentralized communities responsible for coordinating local development, to ensure the sustainability of water access infrastructure, (iii) ;

The lack of funding for the maintenance and upkeep of installed infrastructure and equipment, which leads to the cessation of water supply in certain localities, (iv) ;

Poor knowledge of governance, technical and financial management mechanisms to ensure the sustainability of installed infrastructure, (v) ;

Low awareness among rural communities of the need to adapt their local water use practices to ensure sustainable water availability in the context of climate change.

To optimize water management in beneficiary localities, the project will support (i) the establishment of village committees for the management of drinking water access infrastructure in localities that do not have it, (ii) the establishment of regional committees for the integrated management of access to drinking water, (iii) the establishment of community mechanisms for sustainable financing of the maintenance and upkeep of drinking water access infrastructure through a household contribution of 50 FCFA (0,091 USD) per 25-liter container, similar to the costs applied in villages already equipped with such systems, (iv) capacity building of committees set up for the sustainable management of infrastructure and financial resources mobilized by the community for this purpose, (v) raising awareness among local communities on climate change and the need for efficient water management.

Product 2.3: Local technical capacities are strengthened for the maintenance of installed infrastructure and equipment

Consultations with communities in target localities and discussions with technical managers of the

decentralized administration responsible for managing water access infrastructure have revealed (a) a shortage of qualified local technicians for the maintenance and upkeep of infrastructure in the event of a breakdown, (b) the shutdown of certain PMH or HVA systems installed due to the lack of suitable tools for maintenance by available technicians and (c) irregular maintenance of installed equipment. To address these malfunctions, the project will strengthen local technical capacities for the maintenance of installed infrastructure and equipment through (i) training and equipping local repair craftsmen in the maintenance of installed infrastructure and equipment and (ii) deploying local services for the maintenance and upkeep of installed infrastructure and equipment.

Component 3: Knowledge sharing to promote learning of sustainable drinking water supply and management practices in a context of dwindling water resources due to climate change.

The implementation of the project will generate knowledge products both in terms of water production and distribution systems in localities facing the scarcity of the "water" resource due to the lengthening and intensity of drought periods, and in terms of means to ensure the sustainability of access to drinking water for rural communities made vulnerable by climate change. The knowledge thus generated will be capitalized on and shared with other communities facing the problem of water shortages induced by the effects of climate change with a view to learning ways of resilience.

Product 3.1: Lessons learned from actions taken and good practices identified are capitalized on

The project will ensure that all actions initiated, the results obtained and the lessons learned are documented through monitoring and evaluation, both in the processes of implementing the actions and in the exploitation of the results obtained. Capitalization workshops bringing together beneficiaries, service providers, the decentralized administration in charge of managing water access infrastructure and the territorial administration of the intervention areas will be organized to retain good practices and lessons learned that will be disseminated.

Output 3.2: Knowledge generated by the project is shared for learning sustainable drinking water supply and management practices

The project will ensure wide dissemination of its interventions and achievements, with a view to promoting the learning of sustainable drinking water supply and management practices. To this end (i) audio-visual media for the dissemination of good practices and lessons learned will be developed, (ii) exchange visits and sharing of experiences bringing together other vulnerable communities and decentralized authorities, subject to the same climatic hazards, will be organized and (iii) the mass dissemination of good practices learned will be ensured through all supporting channels.

B. Describe how the project/program 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/program will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The project aims to strengthen access to drinking water for rural communities in the central part of Côte d'Ivoire to reduce their vulnerability to the effects of climate change. The climate changes observed in recent years have had an impact on water resources in rural areas and on rainfall. Indeed, drought periods are becoming longer and more frequent, leading to a reduction in water availability. Rural communities that are dependent on rainwater and surface water therefore encounter difficulties in water supply. These difficulties lead to environmental, social and economic consequences because the income of the populations, particularly those of women, is reduced because of the time spent collecting water that could be used for a lucrative activity. The implementation of this project will generate benefits at three levels: economic, social and environmental.

Economic impact of the project

Women will be the first beneficiaries of this project for access to drinking water. Indeed, according to

the International Labor Organization (2019), access to water and its use has different impacts on women and men. This is explained by the fact that women are the most concerned by most domestic work. The chore of water for consumption is one of these tasks carried out mainly by women, often including the transport of heavy loads of water over long distances (it is estimated that African women spend several hours a day transporting water for their households). By providing women with water points near their homes, they will be able to use the time saved to carry out additional activities that help diversify their sources of income. These activities will have an impact not only on the women themselves but also on their families who will benefit from a different source of income, thus increasing their standard of living and purchasing power.

The economic activities carried out by women will have positive impacts on the local and even regional economy. The targeted areas will indeed be able to observe a reduction in poverty and an improvement in the standard of living of rural communities. In summary, the project will reduce the time spent collecting water and will promote the exercise of additional activities that contribute to diversifying their sources of income for women and young people. This will have an impact not only on the women themselves, but also on the targeted families and communities.

Social impact of the project

The initial gender analysis conducted as part of this project shows that the workload related to supply of drinking water to households is devolved to women and young people in the beneficiary regions. As a result, the scarcity or shortage of drinking water due to climate change increases the vulnerability of this social group, which is increasingly exposed to its harmful effects. These effects are reflected in increased workloads (longer distances to access water sources, greater physical strain from carrying water), reduced time available for economic activities (such as income-generating initiatives), less time for social activities (including family well-being and community participation), the resurgence rising conflicts due to pressure on water resources, increase in waterborne diseases and a deterioration in the provision of basic social services (health, education, etc.) due to limited access to water infrastructure.

The project therefore aims to strengthen the adaptive capacities of women and youth people in these local communities to climate change by improving access to drinking water through the development of infrastructure and equipment for production and distribution of drinking water. It will also contribute to significantly reduce the vulnerability of women and youth in their multiple dimensions (gender, age, and disability) by reducing the risks of waterborne diseases, reducing healthcare costs, and creating opportunities for income diversification. These include small-scale businesses enabled by access to drinking water (such as petty trade, employment-generating activities, and improved productivity in small processing units of attiéké, crude palm oil, etc.), ultimately leading to increased income.

~~Women and young people responsible for fetching water are exposed to pain, fatigue and even health problems. Their workload tends to increase in the event of a water shortage. Women who fetch water have less time to devote to paid employment, thus increasing their material dependencies on their spouses and therefore gender inequalities. The provision of drinking water and the facilitation of access, through the project, will allow women and young people to considerably reduce the time spent fetching water and allocate it to activities that allow them to take charge of themselves.~~

~~Furthermore, competition for access to water during droughts sometimes leads to conflicts within communities. Providing sufficient drinking water to communities at all times of the year through the project will therefore reduce these risks of conflict and thus improve social cohesion within communities.~~

~~Furthermore, by providing drinking water to populations in targeted areas, the risks of diseases linked to the consumption or use of unsanitary water will be reduced or even eliminated.~~
~~The installation of distribution networks in public places such as clinics and schools will reduce the risks associated with a lack of water.~~

~~The supply of drinking water to villages will also improve their attractiveness, particularly for state public officials such as teachers and nurses, by allowing them to settle more easily in these areas, thus reducing long journeys for educational or health needs. The project will facilitate access to water. Thus, young people, especially girls, will spend less time looking for water. This will allow more time to be devoted to school, thus improving the schooling and education rate in local communities.~~

~~Finally, villagers revealed that the difficulty for young men to find a partner is partly linked to the lack of drinking water in villages prone to water shortages, as young girls refuse to live in areas where access to water requires a lot of physical effort. The project will therefore impact this aspect of social life and allow young people to have the opportunity to start families without it being necessary for them to leave their villages of origin.~~

Environmental impact of the project

The project will directly and indirectly impact the environment of the targeted villages. By providing direct access to drinking water, rural communities can be less dependent on natural water sources, thereby reducing pressure on wetlands.

Promoting reforestation in the groundwater recharge areas supplying the boreholes installed in the localities targeted by the project will ultimately contribute to strengthening the soil's capacity to absorb rainwater and reducing rainwater runoff, as well as soil erosion and evaporation of soil water.

Furthermore, raising awareness among rural communities on good phytosanitary practices will help protect groundwater from pollution, thereby improving the quality of drinking water available to rural communities. In addition, rural communities will be better equipped to efficiently manage drinking water through awareness campaigns conducted under the project.

All these environmental benefits will result in an overall improvement in the quality of life in the villages and the preservation of the surrounding ecosystems.

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

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In the targeted rural areas, communities are struggling to meet their water needs. They rely mainly on rainwater harvesting or on surface water sources such as rivers, streams and backwaters. However, the effects of climate change are increasingly being felt. Temperatures are rising, dry seasons are lengthening and rainfall is decreasing alarmingly. These water sources tend to dry up during the dry season.

This situation is having a profound impact on people's lives. Without a sustainable solution, traditional water supply methods will become increasingly unreliable, increasing the vulnerability of communities. Women and young people, who are responsible for fetching water, spend long hours searching for water, when they could instead be engaged in activities that help diversify their sources of income, or studying. Conflicts are breaking out over access to this scarce resource, undermining social cohesion. Health problems caused by water-borne diseases are increasing, and pressure on local ecosystems is constantly increasing.

Faced with these challenges, some villages are beginning to empty of their inhabitants, who have left in search of better living conditions. If nothing is done, the adaptation costs for these vulnerable populations will become unsustainable, and the lack of water could, in the long term, cause loss of human life.

It is in this context that the project, whose financing is estimated at 10,000,000 US dollars, will support

villages in the central zone of Côte d'Ivoire, by allowing them to have access to public pumps, a better water distribution network and a management system adapted to local realities.

To achieve this, the project will implement resilient technologies. Thus, depending on the size of the communities, Human Powered Pumps (HMPs) or Improved Village Hydraulics (HVA) systems will be installed in the localities. The main objective will be to enable rural populations to have drinking water, and this, in a sustainable way, in order to reduce their dependence on surface water or rainwater, and therefore increase their resilience to the effects of climate change.
The financing to be mobilized will cover investment expenditure for water infrastructure and improve water distribution networks. The development of distribution networks and the increase in public distribution points as well as the strengthening of local capacities for (i) the maintenance of installed infrastructure and equipment, (ii) the optimal management of water in beneficiary localities and (iii) the implementation of measures to preserve water tables supplying water to local communities, will make it possible to meet the water needs of populations in optimal conditions in all seasons.

The financing of the Adaptation Fund will therefore play a catalytic role in the development of drinking water supply in the central part of the country and in strengthening the adaptation capacities of rural communities vulnerable to climate change. It will also improve working conditions in health centres and schools in the targeted localities, which will benefit from an efficient and sustainable supply of drinking water. This improvement in access to drinking water for households and social services, in view of the social, economic and environmental consequences induced by difficulties in accessing water in the project intervention area, should constitute a guarantee of improvement in the quality of life of the target populations. Indeed, the implementation of the project will make it possible to: (i) free up time, previously allocated to fetching water, to devote to activities that contribute to diversifying sources of income for women and young people; (ii) reduce the risks of community conflicts over access to water and improve social cohesion; (iii) improve the health status of target populations by reducing the risks of waterborne diseases; (iv) improve the attractiveness of rural areas, and promote the installation of State agents assigned to these localities, thus impacting the effectiveness of social services (health center, school); (v) improve the schooling and education rate in local communities; (vi) limit the exodus of young people, particularly young girls, to urban areas and promote the establishment and consolidation of rural couples; (vii) preserve ecosystems by reducing pressure on wetlands and (viii) strengthen the availability and quality of groundwater supplying rural households.

In parallel, two other alternatives were analyzed in the search for solutions to the problem of access to drinking water in the targeted regions. These are: (a) the construction of wells equipped with pulleys and (b) the installation of gravity water supply systems.

There are significant advantages to constructing wells. These wells are designed with walls lined with nozzles, ensuring their durability and protection against collapse. They are also equipped with a lifting frame on which several pulleys can be mounted, thus facilitating drawing. A protection is built around the wells and a cover is installed to prevent contaminants, such as dust or debris, from falling inside when they are not in use. The groundwater exploited by these wells is generally of good quality, since it comes mainly from rainwater that infiltrates through the different layers of the ground, thus benefiting from a natural filtration process. However, this device can have limitations. Although the water may be free of bacterial contamination, it is sometimes affected by natural chemical contaminants, such as arsenic. In addition, human activities near the wells can also cause chemical or bacterial pollution. Therefore, a thorough analysis of the chemical and bacteriological quality of water is necessary before making it accessible for human consumption. Another potential problem lies in the risk of contamination during drawing. The ropes and scoops used can introduce impurities into the water, compromising its quality. These constraints limit the effectiveness and reliability of this solution to meet the long-term needs of the target populations.

Another option being considered is the installation of gravity-fed water supply systems. These systems use gravity to transport water from the source to the users through a network of pipes. This process brings water closer to the population, reducing the time and effort required to collect it, especially for women and youth. In addition, the water transported through these networks is protected from external

contamination during its transport. However, this solution is not without challenges. It requires the existence of an elevated water source, such as a river, lake or dam reservoir, capable of meeting the water needs of the local population. Unfortunately, the regions targeted by the project do not have such natural sources. In addition, the construction of a dam to supply a locality as well as the installation of water filtration and transport equipment are more expensive, making this option unviable for the communities concerned.

Table 3: Costs of the different alternatives ~~(FCFA)~~

Projet (PMH et HVA)		Construction of pulley wells	Installation of gravity water supply systems
PMH	HVA	Wells equiped with pulleys	Gravity water supply systems (water retention or dam)
14 000~~-~~ 000 FCFA (28,000 USD)	65~~-~~ 000~~-~~ 000 FCFA (130,000 USD)	+7 000~~-~~ 000 FCFA (+14,000 USD)	+ 400 000~~-~~ 000 FCFA (+800,000 USD)

A PMH is intended for populations of 100 people or fewer. For the same village, an additional PMH must be installed for every additional 400 people (in other words, for a population of 500, two PMHs are required). The average cost of installing a PMH is 14,000,000 FCFA (~~or~~ 28 000 ~~dollars~~ USD)~~D~~. An HVA system should be installed in villages with populations between 1,000 and 3,999 inhabitants. In an HVA system, one water distribution standpipe is installed for every 500 people (in other words, for a population of 1,500, an HVA system with three standpipes is required). An HVA system with three distribution standpipes costs on average 65,000,000 FCFA (~~, or~~ 130~~,~~-000 ~~dollars~~ USD).
Other alternatives include pulley-equipped wells and gravity water supply systems (such as reservoirs or dams). Considering that wells are supplied by groundwater, a well yields on average 1 m^3 of water per day in the targeted central zones. A household of five people consumes an average of 100 litters of water per day. A single well can therefore serve 10 households per day, or about 50 people. For 100 people, two wells would be needed. The installation cost of a well is at least 7,000,000 FCFA (~~or~~ 14~~,~~-000 ~~dollars~~ USD). However, due to the severity of the dry season, wells generally dry up during this period. Gravity water supply systems (reservoir or dam) use gravitational force to transport water from a source to users through a network of pipes. The source can be a lake, river, or a water reservoir created by a dam. The areas targeted by the project generally do not have permanent natural sources such as rivers or lakes (with water in the dry season). Therefore, in such zones, the most reliable source within this type of system remains the construction of a water reservoir through dam building. The cost of building a dam for drinking water supply in rural areas is estimated at a minimum of 400,000,000 FCFA (~~or~~ 800~~,~~-000 ~~dollars~~ USD). Added to this cost are the water intake and filtration equipment, the piping system to convey the water to the villages, and the installation of standpipes for water distribution.~~To this cost must be added the equipment for water intake and filtration, the piping system to convey the water to villages, and the installation of water distribution standpipes.~~

In summary, the drinking water supply solutions proposed by the project offer the best cost-benefit advantages for strengthening the resilience of beneficiary communities to the effects of 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.

The project on improving access to drinking water in the central zone of Côte d'Ivoire is in line with several national and subnational development plans, programs and strategies, in particular with the Sustainable Development Goals (SDGs), the National Development Plan (NDP), the Integrated Water Management Plan (IWRM), the NDCs, the National Adaptation Plan, the Strategy for the Preservation, Rehabilitation and Extension of Forests (SPREF).

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Alignment with the Sustainable Development Goals (SDGs)

Access to water is an important pillar of sustainable development. Millions of people around the world are denied the basic right to clean drinking water. Failure to achieve this basic right means that people do not have equal opportunities for good health, education and financial security. Achieving the Millennium Development Goals (SDGs) can change this.[26].
As a member state of the United Nations since 1960, Côte d'Ivoire fully validates this approach and has articulated it with its own National Development Plan. Thus, improving access to water for populations is at the heart of the concerns of the Ivorian State, which is implementing policies and projects to ensure water for all. In this context, the project on improving access to drinking water in the central zone of Côte d'Ivoire through its components and activities will contribute to progress towards achieving several SDGs.
Thus, through component 1, which concerns strengthening the capacities of rural communities to access drinking water, the project will initially improve water quality and make it accessible to all. It will contribute to reducing poverty in the targeted regions (SDG 1), improving access to drinking water for all (SDG 6), improving the health of populations (SDG 3), improving education in the target communities (SDG 4), increasing food security in the selected regions (SDG 2) and reducing inequalities (SDG 10). Indeed, drinking water is an essential element for the quality of life of populations. However, access to quality water depends largely on household income. Low-income populations are often those who have the least access to safe drinking water or they must make greater efforts to gain access to it, which reduces the time they could spend on an income-generating activity.
Also, the project will increase the resilience of populations to climate change, thus making it possible to move closer to SDG 13 (fight against climate change). Finally, the populations most vulnerable to climate hazards, i.e. women, will be the first beneficiaries of the project. At the end of the project activities, women will benefit from more time to carry out an income-generating activity, thus leading to a reduction in gender inequalities (SDG 5).

Through component 2, which focuses on strengthening the sustainability of access to drinking water for rural communities, the project promotes sustainable management and rational use of natural resources (SDG 12). By promoting the reforestation of groundwater recharge areas supplying boreholes, the project contributes to the preservation and restoration of terrestrial ecosystems (SDG 15) and contributes to the implementation of measures to combat climate change (SDG 13).

Alignment with the National Development Plan (NDP)

The vision of the Ivorian Government is to ensure access to drinking water for all and at a lower cost, throughout the national territory, through the development of quality hydraulic infrastructures.
With a view to increasing the rate of access to drinking water to 95% by 2025, the government has given priority to access to drinking water in the 2021-2025 PND.
The government intends to address the following challenges, among others: (i)
The construction of quality human hydraulic infrastructures taking into account the promotion of technological innovation, (ii) ;
The rehabilitation, reinforcement and maintenance of human hydraulic infrastructures, (iii) ;
The extension of the public drinking water distribution network with structuring projects such as hydraulic and multi-village boulevards and/or satellite accounts, (iv) ;
Strengthening the human, technical, material and financial capacities of the sector.;
Thus, thanks to the implementation of its components (component 1 and 2), the project on improving access to drinking water in the central zone of the country will contribute to the development objectives targeted by the Ivorian government in the area of drinking water.
In addition to contributing to improving access to drinking water, the project is a climate change adaptation project. The fight against climate change is at the heart of the Ivorian state's development policy.

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[26]WaterAid West Africa, July 2021, Climate change and water security in Burkina and Niger

Alignment with the Integrated Water Resources Management (IWRM) plan[27]

Component 2 of the project, which concerns strengthening the sustainability of access to drinking water for rural communities, is in line with the principles of IWRM. In this component, women have a key role in the local management committees that will be created, and according to the third principle of IWRM, women are at the heart of the processes of water supply, management and conservation. It is indeed indisputable that women play a key role in the supply and preservation of water for household and, very often, agricultural purposes, but that their influence is less than men in the management, analysis of problems and decision-making process related to water. The project will seek to remedy this by giving women an important place in the decision-making process. In addition, IWRM stipulates that water development and management should be based on a participatory approach involving users, planners and decision-makers at all levels. This vision is consistent with that of the project, which aims to actively involve national, regional and local decision-makers and beneficiary communities in the various stages of the project, particularly in decision-making and infrastructure management.

Alignment with Nationally Determined Contributions (NDCs)

Côte d'Ivoire's NDCs aim to reduce greenhouse gas emissions by 30.41% by 2030. To this end, the energy sector has been identified as a priority sector. Côte d'Ivoire wants to reduce the use of fossil fuels and move towards renewable energies. The project is aligned with this vision of the Ivorian state because the pumping system used in HVA systems for the production and distribution of water to populations will be partly powered by solar energy. It will therefore be a step forward for the country towards the use of renewable energies. In addition, the reforestation of groundwater recharge areas supplying the boreholes will contribute to the reduction of greenhouse gases.

Alignment with the National Adaptation Plan (NAP)

Water resources are one of the priority sectors established by the PNA of Côte d'Ivoire. Côte d'Ivoire has a significant hydraulic system that is vulnerable to climate change. The PNA therefore aims to control water resources for different uses and to preserve and secure this resource. The project on improving access to drinking water in the central zone of Côte d'Ivoire is in line with these two ambitions because through the strengthening of the capacities of communities on optimized water management and the reforestation of groundwater recharge areas supplying the boreholes to be installed, water resources will be better managed in the localities concerned.

The Strategy for the Preservation, Rehabilitation and Extension of Forests (SPREF)

Ivory Coast has implemented an ambitious strategy to preserve, rehabilitate and extend its forest cover, which has been severely degraded in recent decades. This strategy is part of the fight against climate change, the protection of biodiversity and sustainable development. Among other objectives, it aims to increase the forest cover of Ivory Coast to 20%. Through the reforestation actions of the groundwater recharge areas supplying the boreholes to be installed, the project will contribute to the achievement of this objective.

In addition to national and international plans and strategies, the proposed project is aligned with national and regional technical standards: the Water Code and the sustainable development orientation law.

The Regional Councils of the five regions covered by the project (GBEKE, N'ZI, MARAHOUÉ, BÉLIER, and IFFOU) have a Regional Spatial Planning and Development Scheme (SRADT). These documents present territorial diagnostics of each region, prospective scenarios, and strategic intervention frameworks. These plans identify the fight against climate change as a priority. The project will align with these SRADTs.

Alignment with the Water Code

[27]Integrated Water Resources Management

The project takes into account Article 9 of Law No. 2023-902 of November 23, 2023 on the Water Code, which stipulates that the management and development of water resources in hydraulic developments and structures must involve at all levels: (i) planners, decision-makers and specialists in the field; (ii) operators; and users. In addition, Article 5 of the said law states that the right of access to water is a right common to all. Thus, by facilitating and improving the conditions of access to drinking water in rural communities, the project aligns with this law.

Law No. 2014-390 of June 20, 2014 on sustainable development:
This law constitutes a guide for the implementation of the project. It directs all development actions according to the principles of sustainable development. This law will be particularly highlighted in the context of citizen engagement which aims at the appropriation of the various activities of the project by the beneficiaries for a rational and sustainable management of water resources and the hydraulic works which will be carried out.

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.

~~The proposed project is aligned with the relevant national technical standards and meets the requirements stipulated by the Environmental Code. The adaptation actions to be carried out as part of the application of technologies will comply with the various codes in force, in particular the Water Code. The relevant regulatory text applicable to this project is Law No. 2023-902 of November 23, 2023 relating to the Water Code. This Code sets the general framework for legal and institutional texts relating to Water in Côte d'Ivoire. Its objective is to enable integrated management of water resources, developments and hydraulic structures. This management aims to ensure:~~

- ~~the preservation of aquatic ecosystems, sites and wetlands;~~
- ~~protection against all forms of pollution;~~
- ~~the preservation of water resources against the effects of climate change;~~
- ~~the restoration of surface water, groundwater and sea water within the limits of territorial waters~~
- ~~the protection, mobilization and management of water resources;~~
- ~~the development and protection of hydraulic facilities and structures;~~
- ~~the valorization of water as an economic resource and its distribution in such a way as to satisfy or reconcile, during the different uses, activities or works, the requirements;~~
  - ~~of the drinking water supply of the population~~
  - ~~health, public health, civil protection~~
  - ~~of the conservation and free flow of water and protection against floods~~
  - ~~agriculture, fishing and marine farming, freshwater fishing, industry, etc.~~
  - ~~coherent planning of water resource use at both the hydrological catchment area and national levels;~~
  - ~~improving the living conditions of different types of populations, while respecting the balance with the surrounding environment;~~
  - ~~the conditions for rational and sustainable use of water resources for present and future generations;~~
  - ~~the establishment of an institutional framework characterized by the redefinition of the role of the stakeholders.[28]~~

~~The expected results of the project and the actions to be carried out are in line with the said law which stipulates in its chapter 2, article 3, that the following are subject to the provisions of this law:~~

- ~~natural or legal persons under public or private law carrying out an activity relating to water resources;~~
- ~~hydraulic developments and works;~~
- ~~installations classified in accordance with the laws and regulations in force, unclassified installations, works and activities carried out for domestic or non-domestic purposes, by any~~

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[28] National Assembly, Law No. 2023-902 of November 23, 2023 relating to the Water Code

natural or legal person, under public or private law and resulting either in withdrawals from surface water or groundwater, returned or not, or a modification of discharges, flows, direct or indirect, chronic or episodic discharges, even non-polluting.

To highlight the participatory nature of the Law in the context of water management, Article 9 of Chapter 4 recalls that the development of water resources, hydraulic developments and works must involve at all levels:

- planners, decision-makers and subject matter experts;
- the operators;
- users.

With regard to the regime applicable to hydraulic developments and works, it is governed by articles 30, 31, 32 and 33 of this code in its chapter 3.

According to Article 30, the location, construction and operation of hydraulic developments and works are subject, depending on the case, to authorization or prior declaration, in accordance with the provisions of Articles 31 and 33 of the Law on the Water Code.

The implantation is preceded by the intervention:

- of a hydrologist or hydrogeologist expert for hydraulic works and developments subject to authorization;
- services of the Water Authority and the Ministries responsible for hydraulic developments and works subject to declaration.

Article 31 specifies all works subject to prior authorization, while Article 32 sets the environmental framework for developments and hydraulic works. According to the classification of projects by the Adaptation Fund and in view of the nature of the activities that will be carried out, the project may be classified in category B, therefore with moderate impact.

The environmental management framework is presented in the following table:

Table 3 : Project environmental management framework

Environmental Principles of the Adaptation Fund	**Assessment required for compliance**	**Potential impact and risks, as well as assessment and management required for compliance**
Principle 1: Respect for the law	No appreciable risk.	The project is fully compliant with the country's policies, standards and laws. According to the FA principles, the project is classified as "Category B". The project ensures that all safeguards are in place to ensure that the project activities will not have a significant impact on the environment.
Principle 2: Access and equity	The project beneficiaries include vulnerable populations who are often	The FIRCA environmental and social policy approach to social screening will be applied to mitigate the risk associated with unequal distribution of resources. In addition, awareness campaigns for beneficiary and non-beneficiary communities will be

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	excluded from decision-making processes. There is therefore a risk of unequal distribution of resources which could ultimately generate conflicts between beneficiaries.	conducted to facilitate community acceptability of priorities focused on the most vulnerable communities.
Principle 3: Marginalized and vulnerable groups	There is a risk of exclusion of vulnerable and marginalized groups when implementing project activities.	The target groups of the project are rural communities whose access to water is limited as a result of the scarcity of water resources due to climate change. This situation increases their vulnerability due to their dependence on climatic factors, particularly rain. Thanks to FIRCA's targeting approach through categorical consultations (from the most vulnerable to the least vulnerable), this group of actors will be considered as well as the specific needs related to their situation.
Principle 4: Human rights	All activities proposed under this project are in line with the Universal Declaration of Human Rights. In addition, the proposed project will promote the fundamental human rights of access to food and water.	The project will not engage in any activity that may result in a violation of human rights during its implementation.
Principle 5: Gender equality and women's empowerment	The proposed project targets rural communities vulnerable to climate change where the gender gap may be significant.	Although there are risks of social exclusion of women, limited access to water and low mobilization of women, the project has set its objectives. Project activities are designed and will be implemented in such a way that men and women have equal opportunities to participate in all stages of project implementation.

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	There is a risk that women in these communities may not benefit equitably from the adaptation interventions and capacity building of the proposed project.	
Principle 6: Fundamental labor rights	No appreciable risk	The project does not involve any activity that poses a threat to the rights of those involved in its implementation. However, it will ensure that national labor standards are respected at the various construction sites and that appropriate wages are paid for each task assigned. And no child/underage workers will be involved in the project.
Principle 7: Indigenous populations	No appreciable risk	According to the FA definition of indigenous peoples, no indigenous peoples have been identified in Côte d'Ivoire, but the project will strive to include minority groups in the project.
Principle 8: Involuntary resettlement	No appreciable risk	During consultations on the project, beneficiaries confirmed that there is no risk of displacement in the project intervention areas.
Principle 9: Protection of natural habitats	There is no risk that the project will affect natural habitats (loss of natural habitats and species of ethnobotanical importance).	The Project will not involve the conversion or undue degradation of critical natural habitats, including those that are (a) legally protected; (b) formally proposed for protection; (c) nationally recognized by the government for their high conservation value, including as critical habitat; or (d) recognized as protected by traditional leaders and communities. All necessary assessments will be conducted by the Project team.
Principle 10: Conservation of biological diversity	There is no risk of loss of biodiversity during the implementation of the project.	The project will have no impact on the conservation of biodiversity.
Principle 11: Climate change	There is a low risk of emissions (GHG) during the construction of	The project will not generate a significant increase and/or unjustified emissions of greenhouse gases or any other cause of climate change.

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	~~hydraulic infrastructure.~~	
~~**Principle 12:**~~ ~~Pollution prevention and resource efficiency~~	~~There is no risk of degradation of the environment and natural resources.~~	~~The project will have no impact on the environment and natural resources.~~
~~**Principle 13:**~~ ~~Public health~~	~~No risk to public health~~	~~The project will not have a negative impact on the health of residents. On the contrary, it will solve many health problems related to water quality.~~
~~**Principle 14:**~~ ~~Physical and cultural heritage~~	~~No appreciable risk~~	~~No mitigation measures required.~~
~~**Principle 15:**~~ ~~Land and soil conservation~~	~~No risk of soil degradation~~	~~The project will ensure that all environmental codes and standards are met during the implementation of the project.~~

The project will comply with all applicable laws, technical standards, and regulations in force in Côte d'Ivoire, as well as with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund. Adaptation actions, particularly the construction and rehabilitation of water infrastructure, will strictly adhere to the relevant legal frameworks.

⇒ **Compliance with the Adaptation Fund's Environmental and Social Policy (ESP)**

In accordance with the ESP of the Adaptation Fund and FIRCA's internal procedures, the project has been classified as Category B (moderate impact). This classification recognizes that while the project's activities are expected to generate positive outcomes, they may also involve potential environmental and social risks that require mitigation measures. To address these risks, an Environmental and Social Management Framework (ESMF) will be developed during the full proposal phase. This framework will detail the procedures for the selection, assessment, approval, and monitoring of outputs to ensure compliance.

⇒ **Compliance with the national legal framework**

- **Law No. 2023-902 of 23 November 2023 on the Water Code**

Law No. 2023-902 of November 23, 2023, on the Water Code constitutes the regulatory basis of the project. It defines the principles, rights, and obligations for any activities related to the mobilization, use, and protection of water resources. Its objective is to enable the integrated management of water resources, hydraulic developments and structures: (i) **Fundamental principles (Art. 6)**: The project must integrate in its design and management the core principles of precaution, prevention, participation, the user-pays principle, and the polluter-pays principle. The establishment of management committees with household financial contributions, as provided under Project Output 2.2 to ensure the maintenance of infrastructure, constitutes a direct and compliant application of the user-pays principle, (ii) **Authorization and declaration regime (Articles 30, 31, 33):** The law stipulates that the location, construction, and operation of hydraulic structures (including boreholes, PMH, and HVA systems) are subject either to an authorization or a prior declaration. Article 31 specifies that structures likely to pose risks to health, public safety, or the environment require formal authorization, while others fall under the declaration regime. The types of infrastructure (PMH and HVA) have been identified and classified accordingly. The applicable administrative procedure will therefore be carried out with the Ministry in charge of Water Resources, (iii) **Protection of water**

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abstraction points (Art. 49): The Code requires the creation of protection around water abstraction points intended for human consumption. Within these zones, all polluting activities are strictly prohibited. The project has planned for the installation of security fencing, as described in the specifications for PMH and HVA systems, to ensure the protection of these zones around each borehole, (iv) **Prohibition of waste and pollution (Articles 47, 50, 53):** The Code prohibits any waste of water and any discharge or deposit of substances likely to pollute water resources. The project must therefore include measures for efficient water management and strict protocols to prevent contamination of groundwater (whether from construction activities (e.g., handling of oils, fuels, and drilling sludge) or from surrounding agricultural practices. Project Component 2, which includes an awareness of good phytosanitary practices in groundwater recharge zones, directly addresses this requirement for water quality protection, (v) **User Participation (Art. 9):** The Water Code enshrines the principle of participatory management, stipulating that the management and development of water resources must involve users at all levels. The establishment of village and regional water management committees, as planned under Project Output 2.2, fully aligns with this legal provision and represents a key factor for ensuring the sustainability of project interventions.

- **Law No. 2023-900 of 23 November 2023 on the Environment Code**

Law No. 2023-900 of November 23, 2023, on the Environmental Code establishes the general framework for environmental protection in Côte d'Ivoire. It reinforces the obligations of project developers and serves as the legal foundation for the environmental assessment process: (i) **Fundamental Principles (Articles 6, 11):** The Code affirms every citizen's right to a healthy environment and enshrines key guiding principles of environmental action, notably the precautionary principle. These principles justify the need for a rigorous analysis of potential risks and impacts before the start of any project activities, (ii) **Environmental and Social Impact Assessment (ESIA) requirement (Art. 25):** The Code stipulates that the State (and by extension, any project developer) must conduct an environmental and social impact assessment for all development plans, policies, programs, and projects. This provision embeds the obligation to carry out an ESIA within the framework law, making it a mandatory requirement for a project of this nature, (iii) **Obligation to Comply with Anti-Pollution Standards (Art. 60):** The law stipulates that the State shall make technical anti-pollution standards mandatory in the areas of air, water, soil, and noise. This reinforces the requirement for the project to comply with water quality standards and to manage construction-related nuisances in accordance with established regulations.

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- **Decree No. 2024-595 of June 26, 2024, establishing the rules and procedures applicable to environmental and social assessments**

This decree is the most relevant implementing regulation for the initial phases of the project. It defines the precise procedure the project must follow to obtain environmental clearance. It also specifies threshold values for water boreholes, which determine the type of environmental assessment required: (i) a Simplified Environmental and Social Impact Assessment (SESA) is required for boreholes with a discharge rate below 500 cubic meters per day (m^3/day), (ii) a Comprehensive Environmental and Social Impact Assessment (CESIA) is required for boreholes with a discharge rate above 500 m^3/day. The decree formalizes the procedure, which involves the submission of file to the National Environmental Agency (ANDE), organizing a public consultation, obtaining technical validation from an interministerial commission, and securing final approval through a decree issued by the Minister in charge of the Environment.

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- **Drinking Water Quality**

The Ivorian regulatory framework for drinking water quality operates at two levels. The primary reference is based on the WHO Guidelines for Drinking-Water Quality (4th edition, including the first addendum of 2017). These guidelines serve as the baseline standard for the project. They set guideline values for microbiological parameters (e.g., E. coli), chemical parameters (e.g., arsenic, nitrates), and organoleptic parameters (e.g., pH, turbidity). Specific standards also apply to social infrastructure, particularly hygiene in schools and health centers. These standards set detailed

requirements not only for water quality but also for quantity (e.g., 400 to 750 liters per bed per day for a health center) and infrastructure specifications (e.g., type of storage tank, disinfection of the distribution system).

- **Infrastructure Development and Safety**

The construction activities related to boreholes and water distribution networks are governed by several technical regulations, including: (i) **Decree No. 2021-679 of November 3, 2021,** regulating easements for drinking water, sanitation and drainage infrastructure, as well as electrical, gas, and oil pipeline networks. For HVA systems, this decree sets specific and non-reducible easement widths for buried pipelines, based on their nominal diameter (DN). Network deployment plans must fully integrate these constraints during the execution of construction works. (ii) **Labor Code (Law No. 2015-532 of June 20, 2015).** This code governs health and safety conditions on construction sites for boreholes and distribution networks. Article 41.1 and subsequent provisions impose a general duty of care on employers (in this case, construction companies contracted under the project). This obligation translates into specific requirements: the provision of Personal Protective Equipment (PPE) adapted to site-specific risks (e.g., helmets, gloves, safety boots, harnesses), worker training on construction-related hazards, and the securing of the work site perimeter to protect third parties. The project will ensure that these requirements are explicitly stated and contractually binding in the specifications for all service providers.

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

The proposed project and its interventions will avoid any duplication of actions and sources of funding present in its intervention area. During the identification and design of the project, consultations were conducted with all local stakeholders (administrative and customary authorities, local communities). No projects are underway in almost all of the villages visited. This ensured that there was no duplication of projects or sources of funding.

The table below presents some projects related to the themes of drinking water in Côte d'Ivoire.

***Table* 4 :** Project/Program in the drinking water sector

Project/Program	Objective Synergy/with the proposed project	Complementarity with the proposed project
The government's social program 1 (PSgouv 1)	The programme aims to strengthen social action by identifying priority measures that guarantee immediate and lasting results for all. Axis 5 of this program is to improve the well-being of rural populations, in particular by promoting access to housing, drinking water, energy, transport and consumer goods. It targets all regions of the country.	**Possibility of complementarity** with the proposed project because they both aim to improve access to drinking water for populations. However, the proposed project will not cover the same areas.

The Agro-Industrial Pole Project in the Bélier region (2PAI-Bélier)	It aims to establish the foundations of an agro-industrial hub to transform and modernize agriculture in the Bélier region through the restoration and development of productive capital, the modernization of means of soil cultivation and communication (ICT) and the promotion of the private sector and industrialization. One of the activities of this project is to build boreholes and pumps to facilitate access to drinking water for the project beneficiaries.	**Possibility of complementarity** The 2PAI-Bélier project does not target all regions of the country but only the Bélier region which is one of the beneficiary regions of the selected project. However, the proposed project will not cover the same areas.
Water and Sanitation Security Support Project (PASEA)	The project addresses the issue of access to drinking water. Its objective is to develop and strengthen integrated water resources management, improve governance and the sustainability of urban water supply and increase access to improved drinking water and sanitation services. It will be implemented over 6 years in 11 regions in the north of the country.	No duplication because the project is interested in the northern regions of the country while the target of the present proposal concerns the central area of the country.

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

The problem of drinking water supply in a context of climate change, which the project addresses in the central part of the country, affects a number of other regions of the country, especially since it is estimated that in Côte d'Ivoire, more than 41% of households do not have access to an improved water source. The actions of component 3 will therefore ensure a wide dissemination of its interventions and achievements, to promote learning by local communities, other local authorities and administrations and partners involved in the production, distribution and management of drinking water. The implementation of the project is accompanied by a communication and knowledge management strategy whose objective is to enhance the acquired knowledge by capitalizing on it and disseminating it to rural stakeholders, technicians and authorities in charge of the development of rural communities.
This strategy can be broken down as follows: (i)

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capitalization workshops bringing together beneficiaries, service providers, the decentralized administration responsible for managing water access infrastructure and the territorial administration of the intervention zones will be organized to identify good practices and lessons that will be disseminated, (ii) ;
audio-visual media for disseminating best practices and lessons learned will be developed, (iii) ;
exchange visits and sharing of experiences bringing together other vulnerable communities and decentralized authorities, subject to the same climatic hazards, will be organized, (iv) ;
the mass dissemination of capitalized good practices will be ensured through all supporting channels.

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.

In the process of identifying and formulating the project, several actors and stakeholders were

consulted in an inclusive and participatory process.

The process took place in two main phases: (i) a diagnostic, consultation and field visit mission; (ii) a national stakeholder consultation and exchange workshop for the validation of the project concept note.

1. **Diagnostic, consultation and field visit mission**

A diagnostic mission was organized in April-May 2024 in five (5) regions of the central zone of Côte d'Ivoire: the Iffou Region in the Center-East, the N'ZI, Bélier and Gbêkê Regions in the Center, the Marahoué Region in the Center-West. This mission aimed to consult local communities in these Regions and carry out field visits. Conducted jointly by the accredited entity (FIRCA) and the Ministry of the Environment, Sustainable Development and Ecological Transition, this mission was supported by the Regional Directorates of the Ministries in charge of hydraulics and the Ministry of the Environment. A total of 164 people including 63 women (38.41%%) and 101 men were consulted in 18 villages in the 5 regions.

Administrative authorities (Prefects, Regional Councils, Regional Directors of the Environment, Regional Directors of Hydraulics), customary authorities, communities as a whole (women, men and young people) were questioned on the current state of their water supply, their needs and their expectations. The consultations were conducted with respect for gender equality and gender issues were taken into account in the same way as environmental and social issues, in accordance with the environmental and social policy and the gender equality policy of the Adaptation Fund. The results of these consultations were used for the development of the draft of the concept note.

Visits to the communities' drinking water supply sources were carried out. They made it possible to observe the state of the wells, backwaters and watercourses used in these localities (image 2), which as a whole were in an advanced drying phase at the time of the visits. To ensure their drinking water supply during this period, these communities are forced to move to the nearest neighboring villages with sustainable water supply systems such as human-powered pumps or Improved Village Hydraulics systems. The nearest neighboring villages are generally located between 2 and 5 kilometers away.

To travel from their localities to these neighboring villages, the young people and women of the communities visited, in charge of the water chore, either walk, use bicycles or rent motorcycles or tricycles. When the populations move, the water collected from the neighboring villages is purchased at 50 FCFA (about 0.1 USD) per 25-liter can. On the other hand, the 25-liter can cost 200 FCFA (0.4 USD) in the case where it is offered for sale (by resellers) on site in the communities concerned. Each household uses on average 4 25-liter cans, or 100 liters of water per day.

Image 1:*a. Discussions in the village of IFFOU; b. Discussion in the Kouréfla community in the Marahoué region*

Image 2:a. Well in the village of Amanikro in the Gbêkê Region; b. Watercourse in the village of Blofonoud in the Gbêkê Region

Picture1:*a. Visit to the Prefect of the Gbêkê Region b. Exchange with the Hydraulic Director of the Iffou Region*

Extensive community level consultations in the targeted sites will be undertaken during the development phase of the full project proposal prior to the exact description of project activities.

2. National Stakeholder Consultation Workshop

A national stakeholder workshop was organized on October 31, 2024 in the conference room of the Prefecture in Bouaké, capital of the Gbêkê region. This workshop brought together the various stakeholders including the prefectural body, the Gbêkê Regional Council, the Regional Directorates of Hydraulics, the Regional Directorates of the Environment, customary authorities, representatives of women and youth from the target communities, the Ministry of the Environment, Sustainable Development and Ecological Transition (MINEDDTE) and the FIRCA team. This workshop made it possible to present the different axes and actions selected in the draft of the concept note and to collect observations from stakeholders. The workshop brought together a total of 63 people including 14 women (22%).

***Image 4**: National Stakeholder Consultation Workshop*

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

The funding requested from the Adaptation Fund will be used to strengthen community resilience by improving access to drinking water in rural areas of the Bélier, Gbêke, Marahoué, N'zi and Iffou regions (central Côte d'Ivoire).
Rural residents in these regions are already subject to the vagaries of climate change, particularly in terms of their water resources. However, even more intense changes are predicted for the coming years. If nothing is done now, these populations risk finding themselves in an emergency situation and these villages could even disappear because the villagers will move to areas with better living conditions.

The FA funding to strengthen the water access capacities of its populations will ensure that water supply systems are available in all selected villages. With the funding of the Adaptation Fund, hydraulic infrastructures such as boreholes and pumps will be built and local, regional and national actors will benefit from a strengthening of their capacity in sustainable water resource management. This funding will provide access to renewable energies such as solar energy for the operation of pumps. Thanks to this funding, repair artisans will see their capacities strengthened to intervene in the event of a breakdown of the installed systems, which will ensure their sustainability.

Workshops bringing together state actors in charge of water will be organized with a view to strengthening their capacities, better managing the resource, properly distributing roles and coordinating activities. Through the promotion of reforestation in recharge areas and raising awareness among rural communities of good phytosanitary practices in said areas, the financing of the FA will contribute to establishing the sustainability of groundwater supply, and therefore the sustainability of water supply to the targeted communities. The funding obtained will also improve the working conditions of schools and dispensaries by installing functional pumps. In short, the grant provided by the Adaptation Fund will be used to cover the cost of adaptation to climate change of rural communities in the five (5) target regions.

As noted above, each rural household in the targeted localities consumes an average of 100 liters of water per day, mainly from surface water sources. During the dry season, households are forced to fetch this water from the nearest neighboring villages, which have sustainable water supply systems, traveling 2 to 5 kilometers per day over the 4 to 5 months of this period. The 25-liter can purchased for 50 FCFA, like the populations of the host villages, costs 200 FCFA when taking into account the

costs of transporting this water back home. Thus, to ensure its daily supply, each household in the target villages spends an average of 800 FCFA (1.6 USD).

With the project, the installation of sustainable water supply systems in the target localities will enable households to meet these daily needs. To ensure the management and maintenance of the system installed with the support of the project, in order to ensure its sustainability, a contribution of 50 FCFA per 25-liter can will be requested, similar to the costs charged in villages that already have such systems. Thus, to cover their daily water needs, each household will have to pay 200 FCFA (0.4 USD). The adaptation cost, assessed by taking the difference between the situation without the project and the situation with the project, therefore amounts to 600 FCFA (1.2 USD) per household per day. Assessed over the 5-month drought period at a rate of 30 days per month, the adaptation cost will amount to 90,000 FCFA (180 USD) per household per year. It is this financial cost that the FA grant will help to support, with a view to ensuring the adaptation of communities in target localities to the harmful effects of climate change in order to guarantee their supply of drinking water.

Furthermore, by investing in drinking water supply infrastructure in the target localities, the project will improve the health situation of the population by reducing water-borne diseases linked to the consumption of generally unsanitary water from surface water sources, which constitutes the source of water supply for the populations in the absence of the project.

In addition, these investments, which bring drinking water sources closer to the population, will lead to a reduction in the time and effort spent on water supply, mainly for women and young people responsible for fetching water. This time saved can be used to engage in other social or economic activities for women, and learning time, school and recreational activities for young people.

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 is linked to the impact it will have on the quality of life of the populations in the targeted areas and the benefits of this project in the long term. The sustainability aspect has been taken into consideration by involving the main stakeholders from the design phase. This is demonstrated by the involvement of administrative authorities, who have a legal mandate to supervise the project activities in the target localities in addition to the beneficiaries. Furthermore, several actions are planned to ensure the sustainability of the project results.

First, in addition to the installation of water supply infrastructure, it is planned to strengthen local technical capacities for the maintenance of infrastructure and equipment. To this end, actions will focus in particular on the training and equipment of local repair artisans and their deployment.

Table 5 **:** Environmental and social impacts and risks of the project

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	OK	Risk: Failure to comply with all applicable national and international laws and regulations. Probability: Low Potential impact: High Measures: The IE will ensure that the project complies with applicable national and international law, as well as a description of the legal and regulatory framework for any project activity that may require prior authorization.
Access and Equity	OK	Risk: Failure to ensure and monitor fair and equitable access for all community members. Probability: Low

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		Potential impact: Low Measures: IE will ensure that the project provides all members of the community with fair and equitable access to the benefits of the project, and is designed and implemented in a way that does not prevent any group from accessing essential services and rights referred to by: 1) carrying out stakeholder mapping to identify potential beneficiaries, rivals, protesters, marginalized or vulnerable people. 2) Using risk analysis to identify and assess the risk of impeding access to essential rights and services and exacerbating existing inequalities
Marginalized and Vulnerable Groups	OK	Risk: Imposing any disproportionate negative impact on marginalized and vulnerable groups. Probability: Low Potential impact: Moderate/High Measures: 1) identify and quantify marginalized, minority and vulnerable groups; 2) describe the main findings and characteristics of marginalized, minority and vulnerable groups; 3) identify the negative impacts that each marginalized, minority and vulnerable group is likely to experience; and 4) identify the monitoring mechanism that may be necessary during the implementation of the project.
Human Rights	OK	Risk: occurrence of human rights violations Probability: Low Potential impact: Moderate/High Measures: The project will comply with national and international human rights standards, policies, rules and regulations, including the UDHR. EI will ensure that human rights issues are part of stakeholder consultations during project identification and/or formulation, provide an overview of relevant human rights issues (if any) and monitor implementation.
Gender Equality and Women's Empowerment	OK	Risk: Unequal access between men and women to water and decision-making. Probability: moderate Potential impact: Moderate/High Measures: Gender will be mainstreamed into all components of the project. IE will assess the current situation, potential risks and the legal and regulatory context and proactively take measures to promote gender equality to ensure equal access to benefits and that there are no disproportionate negative impacts.
Core Labour Rights	OK	Risk: Project activities do not comply with core labour standards due to limited knowledge of labour rights standards. Probability: Low Potential impact: High Actions: The project will respect fundamental labour rights and integrate ILO standards into design and implementation, as well as raise awareness of how the standards can be applied.
Indigenous Peoples	No risk observed	In accordance with the guidelines of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) on the definition of indigenous peoples, we confirm that there is no

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		indigenous population in Côte d'Ivoire and therefore in the targeted areas of the project.
Involuntary Resettlement	No impact on natural habitats	No risk observed but a full risk assessment will be undertaken at the fully developed proposal stage
Protection of Natural Habitats	No impact on natural habitats	No risk observed but a full risk assessment will be undertaken at the fully developed proposal stage
Conservation of Biological Diversity	No impact on biodiversity	No risk observed but a full risk assessment will be undertaken at the fully developed proposal stage
Climate Change	OK	Risk: Increased greenhouse gas emissions Probability: Low Potential impact: High Measures: The project will contribute to climate change adaptation measures. No GHG emissions expected. The project will demonstrate compliance by conducting a qualitative risk assessment for each of the climate change drivers mentioned, as well as any impacts of the project on carbon capture and sequestration capacity.
Pollution Prevention and Resource Efficiency	OK	Risk: Increased pollution and resource inefficiency Probability: low Potential impact: high Measure: The project will comply with established national and international pollution standards, and will minimize all sources and forms of energy, water and other resources in a reasonable and cost-effective manner, as well as the production of waste and the discharge of pollutants.
Public Health	OK	Risk: negative impact on public health Probability: low Potential impact: high Measures: The project design will ensure that public health is not negatively affected by conducting screening and health impact assessment in accordance with WHO recommended practices.
Physical and Cultural Heritage	No impact on physical and cultural heritage	No risk
Lands and Soil Conservation	No impact on land and soil conservation	No risk

Then, emphasis will be placed on optimizing water management in beneficiary localities through the establishment or strengthening of village and regional committees for managing access to drinking water, strengthening the capacities of the committees set up, as well as raising awareness among local communities on climate change and the need for efficient water management and the establishment of sustainable community financing mechanisms for the maintenance and upkeep of infrastructure. Particular attention will be paid to establishing an economic cost to be paid by the populations for access to water that can help finance the maintenance of the installed devices.

Finally, the project provides for the implementation of measures to preserve water tables supplying vulnerable communities with water, by promoting reforestation in the water table recharge areas supplying the installed boreholes and raising awareness among rural communities about good phytosanitary practices in these areas. These actions aim to ensure the sustainability of the water table supply in terms of quality and quantity.

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

In accordance with FIRCA's environmental and social policy, the identification and analysis of potential risks arising from the implementation of the project will be carried out through the environmental and social screening procedure to ensure the implementation of appropriate mitigation measures.
To this end, an environmental and social management framework aligned with FIRCA's internal procedures and the Adaptation Fund's environmental and social policy will be developed and included in the full proposal development phase. This framework, which includes the environmental and social management plan, will specify all the impacts associated with the project and the associated risk mitigation plan.

Due to the nature of the activities identified, the project may be classified as Category B.
Sub-projects will be assessed in accordance with FIRCA's environmental and social policy, which is aligned with the Adaptation Fund's environmental and social policy, in the following stages: (i) screening or preliminary selection; (ii) environmental and social assessment of risks and impacts; and (iii) adoption of an environmental and social management plan.
The table below sets out the potential impacts and risks as well as the additional assessment and management required to comply with the Adaptation Fund's fifteen principles.

The table below presents the potential impacts and risks and the additional assessment and management required to comply with the fifteen principles of the Adaptation Fund.

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PART III: IMPLEMENTATION ARRANGEMENTS

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

Project objective(s)[29]	Project objective indicator(s)	Fund Result	Fund performance indicator	Grant Amount (USD)
Impact: Strengthening access to drinking water for rural communities in the central part of Côte d'Ivoire, to reduce theirvulnerability to the effects of climate change				
1. Strengthening the capacity of rural communities to access drinking water	Number of drillings, PMH, HVA installed Number of boreholes, PMH, HVA rehabilitated Length of the distribution network in linear meters Percentage of population with access to installed infrastructure	Outcome 4: Increased adaptive capacity within relevant services in the development and infrastructure asset sector	4.2. Improved physical infrastructure to withstand the climate change and stress induced by variability	7,416,977
2. Strengthening the sustainability of access to drinking water for rural communities made vulnerable by climate change	Number of local village management committees created/strengthened Number of people trained and equipped for the management and maintenance of structures Number of regional committees established	Result 3: Strengthened awareness and the appropriation of adaptation and adaptation processes reducing climate risks at the local level	3.1. Percentage of the target population aware of the predicted adverse effects of climate change and appropriate answers 3.2. Percentage of the target population applying appropriate coping responses	700,000
	Area of reforested groundwater recharge area Number of trees planted in groundwater recharge areas Number of people made aware of good phytosanitary practices	Result 5: Increased resilience of ecosystems in response to climate change and induced stress by variability	5.1. Number of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (e.g. type and scale)	

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

3. Sharing knowledge to promote learning about sustainable drinking water supply and management practices in a context of water resource scarcity due to climate change	Number of exchange and experience sharing visits organized Number of documents on lessons learned from the project Number of people (women/men) participating in knowledge dissemination activities	Result 3: Strengthened awareness and the appropriation of adaptation and adaptation processes reducing climate risks at the local level	3.2.1 Number of technical committees/associations formed to ensure the transfer of knowledge 3.2.2 Number of tools and guidelines developed (thematic, sectoral, institutional) and shared with the stakeholders concerned	300,000

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

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

A. **Record of endorsement on behalf of the government**[2] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Colonel YAO Marcel Primary contact point of Adaptation Fund National Designated Authority Director International Cooperation and Financing Mobilization Directorate of International Cooperation and Financing Mobilization	Date: July 2, 2025

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/programme 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/programme.

Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/program contact person's name, telephone number and email address

[6] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programs proposed by the implementing entities.

N'DIAYE Oumar N'Gor
Implementing Entity Coordinator

Date : 10th January 2025	Tel. and email: +225 2722528160 ndiayeo@firca.ci
Project Contact Person : **AYEMOU Djatin Edmond**	
Tel. and email: +225 0707880380 ayemou@firca.ci	

MINISTRY OF ENVIRONMENT,
OF SUSTAINABLE DEVELOPMENT
AND ECOLOGICAL TRANSITION

DIRECTORATE OF INTERNATIONAL
COOPERATION AND FUNDING
MOBILIZATION

N° 0 0 1 1 2 /MINEDDTE/CAB/DCIMF/ld

REPUBLIQUE OF COTE D'IVOIRE
Union - Discipline – Work

Abidjan, the 02 JUIL 2025

ADAPTATION FUND

Letter of Endorsement by Government

To: **Adaptation Fund Board**
1818 H Street, NW
Washington, DC 20433 USA
Tel : 202.522.3240/3245
Email : afbsec@adaptation-fund.org

Subject: Endorsement of the concept note for the project **"Strengthening access to drinking water for rural communities in the central zone of Côte d'Ivoire to reduce their vulnerability to the effects of climate change"**.

In my capacity as Director of International Cooperation and Financing Mobilisation, the designated entity for the Adaptation Fund for the Republic of Côte d'Ivoire, I confirm that the above national project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Côte d'Ivoire.

Indeed, the present project is fully in line with the National Adaptation Plan, which identifies water resources as one of the sectors most vulnerable to the effects of climate change. The project, which is part of the country allocation, aims to improve access to drinking water for rural communities in the central zone of Côte d'Ivoire, in order to reduce their vulnerability to the effects of climate change.

Accordingly, **I am pleased to endorse the above project proposal with support from the Adaptation Fund**. If approved, the project will be implemented by Fonds Interprofessionnel pour la Recherche et le Conseil Agricoles (FIRCA) and executed by the National Climate Change Program (PNCC).

Sincerely

Le Directeur

Colonel YAO MARCEL
Director of International Cooperation and Financing Mobilisation
Entity designated by the Adaptation Fund
Tel: +225 07 07 79 15 04
Email: ensamarcel@yahoo.fr

Appendix 1: Summary of stakeholder consultation

~~Appendix 1: List of attendance of consultations~~

1.1. Engagement plan

Stakeholder mobilization was carried out through several channels: (i) communication via phone calls, emails, and written letters and (ii) information dissemination through local radio stations and traditional communication systems.

1.2. Stakeholder engagement

To ensure that information is easily accessible to relevant stakeholders and that all groups are adequately represented and involved in the process, the project team adopted various methods and techniques based on a stakeholder needs assessment. These included: (i) communication via phone calls, emails, and written letters, (ii) holding public meetings, (iii) focus group discussions, (iv) individual interviews, (v) announcements through local radio stations and town criers in the project areas.

1.3. Information disclosure strategy

As part of the public consultations, multiple information disclosure methods were adopted depending on the target groups. For formal meetings with technical and administrative authorities, presentation materials were used to provide an overview of the project and its associated impacts. For larger groups of beneficiaries, the project team was assisted by a local language translator, adapted to each region.

1.3.1. Objective of consultation

The overall objective of stakeholder consultations under the project is to involve communities, groups or individuals potentially affected, as well as other concerned parties, in the final decision-making process regarding the project. The specific objectives of this approach are to: (i) first, provide stakeholders with accurate and relevant information about the project. Its purpose, detailed description, associated positive and negative impacts, and related mitigation measures; (i) invite stakeholders to share their opinions and suggestions on the proposed solutions and foster constructive dialogue, (ii) lay the foundations for the coordinated and sustainable implementation of the project's planned actions.

1.3.2. Approach adopted and stakeholders Consulted

The Consultations were conducted in the regions of Iffou, N'Zi, Gbêkê, Marahoué, the District of Yamoussoukro, and Bélier between April 24 and May 2, 2024. These consultations involved technical and administrative services of the prefectures, the communes concerned, civil society organizations including youth and women's groups and other stakeholders. A total of 232 individuals were consulted, including 139 women (59.91%) and 93 men (40.09%), either individually or in groups. To gather public feedback on the project, the following topics were presented and discussed after a project overview was provided by the field team:

- perception of the project;
- key barriers to accessing drinking water in the target areas;
- potential positive and negative environmental and social impacts;
- local conflict resolution mechanisms;
- stakeholder and community participation and engagement;
- vulnerable groups;
- concerns and apprehensions regarding the project;
- suggestions and recommendations for the project.

The table below provides the dates and locations of the consultations, along with the stakeholders engaged.

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INFORMATION COLLECTION MISSION FOR THE PREPARATION OF THE CONCEPT NOTE FOR THE SUPPORT PROJECT FOR STRENGTHENING ACCESS TO WATER FOR VULNERABLE POPULATIONS IN THE CENTRAL ZONE OF CÔTE D'IVOIRE (Tuesday 23 to Friday 3 May 2024)

Region	Locality	Date of consultation	Actors met	Number of people met	Women	Men
IFFOU	DAOUKRO	April 24, 2024	- Regional Directorate of the Environment - Regional Hydraulic Directorate	09	01	08
	KOUAKOU KOUADIOKRO		-Women's President -Youth President - Village chief and inhabitants	06	02	04
	AMANI KOUAKOUKRO	April 25, 2024	- Village chief and inhabitants - President of Women -Youth President	18	08	10
	DAOULEBO		- Influential village executive	05	01	04
NZI	DIMBOKRO	April 25, 2024	- Regional Directorate of the Environment - Regional Hydraulic Directorate	02	00	02
	ADI KOUAKOUKRO		Camp resident	02	01	01
GBEKE	BOUAKE	April 26, 2024	- Prefecture - Regional Directorate of the Environment - Regional Hydraulic Directorate	04	00	04
	DEKRETA	April 26, 2024	- Village Chief - President of Women - Youth President - Community Member	29	10	19
	BLAFONOU		- Village Chief - President of Women - Youth President - Community Member	20	16	04
	AMANIKRO		- Village Chief - President of Women - Youth President - Community Member	05	03	02
MARAHOUE	BOUAFLE	April 27, 2024	- Regional Directorate of the Environment - Regional Hydraulic Directorate	02	00	02
	TAAFLA	April 28, 2024	- Village Chief	10	04	06
	KOUREFLA		- President of Women - Youth President Community Member	26	10	16
	YOBOUET	April 29, 2024	- Village Chief	20	6	14

Region	Locality	Date of consultation	Actors met	Number of people met	Women	Men
	N'GUESSANKRO		- President of Women - Youth President - Community Member			
YAMOUSSOUKRO DISTRICT	YAMOUSSOUKRO	April 30, 2024	Regional Hydraulic Directorate	05	00	05
RAM	TOUMODI	02 05 2024		07	01	06
TOTAL				**232**	**139**	**93**

1.3.3. Consultation Results

At the end of the consultations and meetings, there was a general endorsement of the project. According to the stakeholders, the project offers significant benefits, the most important being: improved access to drinking water, the fight against poverty and unemployment, and the empowerment of youth and women. The discussions and exchanges also helped to identify key actions to be undertaken in response to the concerns raised by the stakeholders.

Topics	Recommendations
Recommendations on information, education, and communication (IEC)	- Develop and implement an information and communication plan for the project in the intervention areas; - Conduct IEC campaigns on hygiene and sanitation; - Conduct IEC campaigns on gender-based violence; - Raise stakeholder awareness on the sustainable management of water resources; - Disseminate project-related information through community radio stations; - Inform and raise awareness about national water management regulations.
Recommendations on capacity building	- Train and educate rural populations on the management of drinking water access infrastructure; - Build stakeholder capacity on gender-based violence (GBV); - Train actors on conflict resolution mechanisms; - Strengthen the capacities of associations and NGOs involved in environmental protection and water resource management; - Enhance the technical and human capacities of MINHASS and implementing agencies in supporting beneficiaries in the project areas; - Strengthen the capacities of rural land conflict management committees; - Train stakeholders on conflict resolution mechanisms; - Provide training to beneficiaries on topics related to climate change
Institutional Recommendations	- Establish a framework to facilitate communication between beneficiaries and project managers; - Set up a recruitment mechanism based on citizen participation of households; - Establish a mechanism for managing conflicts and disputes; - Involve all relevant stakeholders in project implementation; - Promote the recruitment of persons with disabilities and other vulnerable individuals in sub-projects; - Implement an effective monitoring and quality control system to ensure that infrastructure meets required standards;

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	- Ensure the systematic involvement of women in project implementation; - Establish a project management committee that includes all stakeholders; - Create a local labor recruitment mechanism during construction phases; - Support women's organizations and associations in creating small businesses linked to the project; - Set up a capacity-building mechanism for local labor; - Establish a general conflict and dispute resolution mechanism in the project areas; - Involve the Regional Directorates of MINHASS at all stages of the project; - Involve administrative and traditional authorities throughout the implementation process; - Engage the Ministry of Environment in raising awareness on environmental protection, as well as the Ministries responsible for Water and Forests, Agriculture, and Animal and Fishery Resources; - Involve social services in the project's implementation.

NATIONAL STAKEHOLDER CONSULTATION WORKSHOP FOR THE PREPARATION OF THE CONCEPT NOTE FOR THE PROJECT "STRENGTHENING ACCESS TO CONSUMPTION WATER FOR RURAL COMMUNITIES IN THE CENTRAL ZONE OF COTE D'IVOIRE TO REDUCE THEIR VULNERABILITIES TO THE EFFECTS OF CLIMATE CHANGE"
(Thursday October 31, 2024 in Bouaké)

Organization		Number of people met	Women	Men
Ministries				
1 Ministry of the Environment, Sustainable Development and Ecological Transition (Cabinet; Focal Point Adaptation Fund, DLCCTE, DCIMF, PNCC, Gender and CC)		6	0	6
2 Ministry of Hydraulics, Sanitation and Health (DR of the 5 regions concerned)	DR IFFOU	1	0	1
	DR N'ZI	1	0	1
	DR BELIER	1	1	0
	DR MARAOUHE	1	0	1
	DR GBEKE	2	0	2
3 Gbêkê Region Administration	Ministry of Water and Forests (DR Gbêkê)	1	0	1
	DR Environment	1	0	1
	DR Agriculture	1	1	0
	DR Animal and Fisheries Resources	1	0	1
	DR Family, Women and Children	1	0	1
	DG SODEXAM	1	0	1
	DR SODECI Bouaké	1	0	1
	DE FIRCA (2 UFA, 2 SERGEN, Consultant, CP Cola, DE)	8	4	4
Prefectural Corps	Prefect of the Gbêkê Region	1	0	1

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Organization		Number of people met	Women	Men
	Sub-Prefects of Gbêkê	4	1	3
Local Authorities	Gbêkê Regional Council	3	1	2
Rural communities	Water management committees of 7 localities (Village chief + 1 member + 1 women's representative) chosen in the 5 regions targeted by the project	29	8	21
GRAND TOTAL		**64**	**16**	**48**

Appendix 2: Initial gender analysis

1. Project information

Project title	***Strengthening access to drinking water for rural communities in the central zone of Côte d'Ivoire to reduce their vulnerability to the effects of climate change***
Project grant amount (USD)	10 000 000
Location (régions / country)	Gbêkê, Iffou, Bélier, Marahoué, Nzi / Côte d'Ivoire
Implementing entity	FIRCA

2. Project objective

The project aims to strengthen the resilience of rural communities in the central region of Côte d'Ivoire by facilitating access to drinking water. More specifically, it seeks to: (i) improve water production and distribution infrastructure for rural communities in the context of climate change; (ii) enhance the sustainability of access to drinking water for rural communities made vulnerable by climate change; and (iii) ensure the dissemination of knowledge generated by the project to promote learning and the adoption of sustainable drinking water supply and management practices, thereby strengthening the adaptive capacities of rural communities facing increasing water scarcity due to prolonged droughts and reduced rainfall.

3. Objective initial gender analysis

The objective of the initial gender assessment is to demonstrate how gender considerations were integrated into the project design. This analysis is based on primary data collected during field consultation missions conducted between April and May 2024, as well as secondary data gathered from reports issued by the regional technical departments in the project's target areas. It will be further developed during the full proposal stage through a more detailed gender analysis. The data collection process took place during the field mission and provided sex-disaggregated data, along with the aspirations and recommendations of women and youth gathered during public consultation sessions (focus groups).

4. General situation of gender equality in the country

In Côte d'Ivoire, despite legislative and policy advances in support of gender equality, significant disparities between women and men persist across several key sectors. Women represent approximately 49% of the population but remain underrepresented in political and economic decision-making spheres. Access to education, healthcare, land ownership, and productive resources remains limited for many women, particularly in rural areas. Women also spend more time on domestic tasks, which increases their burden of unpaid labor.

The Ivorian government has established a legal and institutional framework to promote gender equality, notably through the National Policy for Equity, Equality, and the Empowerment of Women (PNEEAF). However, its implementation continues to face sociocultural and structural barriers. In this context, any infrastructure project, such as drinking water supply systems, represents a strategic opportunity to reduce gender inequalities and strengthen women's participation in local development.

4.1. Methodology

The analysis began with the collection of sex-disaggregated data, using a combination of qualitative and quantitative methods. These included: (i) household surveys to assess the time spent collecting water, its various uses (domestic,

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agricultural, hygiene, commercial, etc.), and the means of access to water infrastructure, (ii) focus group discussions, conducted separately with women and men, to explore genuine perceptions, priorities, and expectations of stakeholders, (iii) individual interviews with community leaders, local authorities, women's associations, youth groups, etc.

Following data collection, gender roles were analyzed in relation to water management (access to and control over resources, decision-making power). This analysis helped identify inequalities and opportunities and led to the formulation of recommendations to better integrate specific needs and ensure the effective participation of all stakeholders. The findings were also incorporated into the project design, allowing for the adaptation of the logical framework using a gender-sensitive approach and the establishment of a gender-responsive monitoring and evaluation system.

4.2. Participation and role of gender subgroups

Table 2 : Water use by men and women

Tasks completed	Men	Women
Domestic use	- Drinking - Food preparation - Cooking - Bathing and personal hygiene	- Drinking - Food preparation - Cooking - Bathing and personal hygiene - Laundry - Dishwashing - House cleaning
Community use	- School (hygiene, canteens) - Health centers - Markets - Public standpipes	- School (hygiene, canteens) - Health centers - Markets - Public standpipes
Agricultural use	- Crop irrigation - Livestock use - Processing of agricultural products	- Crop irrigation - Processing of agricultural products
Artisanal use	- Construction	- Production of goods (beverages, soap, setc.) - Artisanal activities (dyeing, pottery, etc.)

Source: field mission, April–May 2024

4.3. Control over access to resources

This section summarizes insights from discussions on women's access to key resources (natural, physical, human, and financial). Table 3 below provides a synthesized overview of the findings.

Table 3 : Structure of decision-making authority

Type of decision	Who makes the decisions ?			
	Women only	Men only	Youth only	Men and women
Household management decisions	X			
Decisions related to household income management				X
Decisions related to income from agricultural activities				X
Decisions regarding the choice of activities practiced				X
Decision-making within women's groups	X			
Decision-making within youth groups		X	X	
Decision-making within the community				X

Source: field mission, April–May 2024

At the household level, women are generally dependent on their husbands for decisions related to the home and the activities they undertake. Sociologically, the man is considered the head of the household. As such, he is responsible for managing household expenses and allocating financial resources according to the family's needs. However, the target populations belong to matriarchal societies, which supports the involvement and consultation of women in decision-making processes. Decisions concerning children (such as schooling and activities) are typically made by the "father," who retains full authority in this area. Women, in turn, play an advisory role.

When it comes to income management, women have full autonomy over the income generated from their own activities. As a result, they often support their husbands in covering household expenses, particularly those related to the well-being of children. There is a relative autonomy among women in choosing which crops to grow and in managing the income derived from their own plots. In line with the social context, young people are expected to remain under the guidance of older men in order to learn household and family management skills.

5. Concerns expressed by vulnerable groups, recommendations, and integration into project design

Table 5 : The constraints expressed by the populations

CONSTRAINTS
- Excessive workload related to water collection for women and girls; - Increased risk of violence due to long distances traveled to fetch water, especially in remote areas, which exposes women and girls to harassment and violence; - Rural exodus caused by extreme water shortages, with populations leaving their villages in search of better living conditions; - Tensions between communities: water scarcity leads to disputes and conflicts between neighboring villages over access to available water sources; - The specific needs of vulnerable groups (persons with disabilities, widows, unskilled youth, and destitute families) are not adequately considered in the design of water infrastructure;

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- High risk of waterborne diseases due to the consumption of unsafe water, resulting in a high incidence of illness;
- Elevated healthcare costs from treating water-related diseases, placing a financial burden on households;
- Water scarcity hinders the establishment of basic infrastructure such as schools and health centers.

An analysis of these constraints led to the formulation of recommendations and the identification of ways to integrate them into the project through targeted actions before, during, and after project implementation.

Table 6 : Recommendations and their integration into the project design

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Issues	Recommendations	Integration into the project design
Conflict management	Design a water access management system that minimizes congestion and waiting times, while taking into account the specific needs of vulnerable groups.	**Differentiated or priority access hours:** Explore the possibility of establishing specific time slots or priority access for the elderly, persons with disabilities, pregnant women, and individuals with limited mobility. This could be managed through community-based organization.
		Rotation or Quota Systems : If demand exceeds the capacity of the pumps, establish a fair and transparent rotation system, ensuring that vulnerable individuals are informed and supported in complying with the arrangements.
		Community Mediation: Integrate a conflict resolution mechanism within the water management committee, including representatives from vulnerable groups, to promptly address tensions related to water access.
Cost of water	Establish a fair and affordable financial contribution system, taking into account the payment capacity of the poorest households and individuals without stable income.	**Social Tariffing:** Consider a progressive pricing structure or exemptions for households identified as the most vulnerable. The criteria for identifying such households should be defined through a participatory process with the community, led by village water management committees.
		Subsidies or Solidarity Funds: Explore the possibility of establishing a community solidarity fund or seeking external subsidies to support the most disadvantaged families in covering the costs of water access.
		Transparency and Cost Justification: Clearly and transparently communicate to the entire community the rationale behind any associated costs (maintenance, repairs) and how the funds will be managed.
Management and Community Ownership	Establish a pump management and usage system that ensures the participation and fair representation of all segments of the community, with particular attention to vulnerable groups.	**Inclusive Management Committee**: Establish a water management committee that reflects the diversity of the community, with meaningful representation of women, the elderly, persons with disabilities, and other vulnerable groups, and ensure their active participation in decision-making processes.
		nclusive Usage Rules: Collectively develop pump usage rules that take into account the specific needs of all community members (e.g., access arrangements adapted for persons with reduced mobility).
		Training and Capacity Building: Organize targeted training sessions for members of the management committee, including representatives of vulnerable groups, focusing on management, basic maintenance, and conflict resolution related to water access.
Infrastructure Accessibility	Select pump installation sites that ensure safe	**Participatory Site Selection Consultation:** Actively involve vulnerable groups in the process of selecting pump installation sites to ensure geographic accessibility and safety.

Issues	Recommendations	Integration into the project design
	and easy access for all segments of the community and adapt the infrastructure to meet specific needs.	**Specific Adaptations:** Provide infrastructure adjustments to facilitate access for persons with reduced mobility (access ramps, stabilized surfaces, and pump height adapted to user needs).
		Lighting and Safety: Ensure adequate lighting around water points, particularly if they are used during late evening or early morning hours, in order to enhance safety, especially for women and girls.
Equitable representation	Adopt an inclusive approach at all stages of the project, ensuring the participation of vulnerable groups and the integration of their perspectives throughout the process.	**Adapted Consultation Methods:** Use consultation methods that enable vulnerable individuals to express themselves easily (such as individual interviews, dedicated focus groups, and visual materials for non-literate participants).
		Participation quotas (if necessary and appropriate) : Consider establishing quotas to ensure the representation of vulnerable groups in the project's decision-making and management bodies.
		Awareness-raising and mobilization: Conduct community awareness campaigns on the importance of inclusion and the consideration of everyone's needs.
Fight against waste of water resources	Conduct awareness campaigns on the proper use of water resources.	Establish an inclusive committee structure with clearly defined roles (awareness-raising, monitoring, information relay), provide training and support to committee members, allocate an operational budget, and ensure coordination with the water management committee.
		Implement a continuous awareness program tailored to the various community groups to promote the responsible and efficient use of water resources and prevent waste.
		Include awareness modules from the project's outset, involve influential community members, use diverse communication channels, focus on youth education, and incorporate practical demonstrations.

ADAPTATION FUND

Revised PFG Submission Form[1]

Project Formulation Grant (PFG)

Submission Date: 10th January 2025

Adaptation Fund Project ID:
Country/ies: Côte d'Ivoire
Title of Project/Programme: Strengthening access to drinking water for rural communities in the central zone of Côte d'Ivoire to reduce their vulnerability to the effects of climate change.
Type of IE (NIE/RIE/MIE) : NIE
Implementing Entity: FIRCA (Fonds Interprofessionnel pour la Recherche et le Conseil Agricoles)
Executing Entity/ies: FIRCA

A. Project Preparation Timeframe

Start date of PFG	1st June 2025
Completion date of PFG	31st May 2026

B. Proposed Project Preparation Activities ($)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US$ Amount	Budget note[2]
Field visits to the project area to validate the project design and obtain information for a complete project proposal.	Validated project design	20,000	Expert missions (hydraulics, gender, environment, project set-up) in the 5 target regions.
Development of the environmental and social management framework (ESMF)	ESMF report	5,650	Mobilization of environmental study experts for ESMF drafting
Initial gender analysis	Gender Action Plan	4,800	Mobilization of gender experts for the drafting of the Gender Action Plan
Geophysical survey for borehole location	Localities validated and sites identified for drilling and pump installation in each selected locality	56,800	Mobilization of geophysical experts for the study

[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.

Workshops to develop a complete project proposal and take into account the Adaptation Fund Secretariat's comments on the proposal before approval (Detailed analysis of project components; Development of project log frame and results framework; Detailed project budget development)	Well described and detailed Project components Detailed Project Logframe and Results Framework developed. Detailed and concrete project budget Full Project Proposal developed	30,000	3 workshops planned: Preparation of the full proposal Consideration of comments from the first AF review Consideration of comments from the second review of the AF
Stakeholders' workshops for validating the project design and inputs for full proposal development	Workshop reports, validated project design, improved design, inputs to the design process	20,000	Final stakeholder consultation workshop
FIRCA Management fees	PFG execution report	12,750	Supervision of the preparation of the full proposal Reporting on the implementation of the PFG
Total Project Formulation Grant		**150,000**	

Field visits to the project area to validate the project design and obtain information for the preparation of full proposal: Field visits to the project area are essential to gather additional data and information to finalize the project design. These visits will mobilize a multi-disciplinary team of experts including gender, environmental, hydraulic and project management specialists. During these visits, consultations with local communities, administrative authorities and other stakeholders will be carried out to deepen the exchanges initiated during the elaboration of the concept note. Activities during this mission will focus on (i) data collection on the vulnerability of populations to the effects of climate change, (ii) the division of tasks in the supply of water to communities, (iii) the monitoring of local natural resources, (iv) the collection of environmental and social data, and so on.

Preparation of the environmental and social management framework for the full proposal. Based on the data collected during field missions, this phase will consist of drawing up the project's Environmental and Social Management Framework document.

Initial gender analysis: Based on data collected during field missions, this phase will involve drawing up the project's Gender Action Plan.

Geophysical survey: Expert geophysicists will be mobilized to carry out preliminary studies, enabling us to identify localities with groundwater resources capable of ensuring water supply in each area targeted by the project. In each locality, potential drilling sites and pump locations will also be identified. This study will make it possible to identify potential localities to be equipped with permanent drinking water supply systems.

Preparation of the full proposal: This will take the form of three technical workshops, bringing together all the project's technical experts to consolidate the results of the various consultations. The first of these three workshops will consist of a quality review, consolidating and integrating all the data collected and the results of the studies into the final technical proposal to be submitted to the stakeholders for validation at the validation workshop. The next two workshops will involve taking into account the various observations made by the Adaptation Fund Secretariat during the two technical reviews that are carried out before the complete proposal is submitted to the AF Board.

Workshop to validate the full proposal. This workshop brings together all project stakeholders to validate the final technical proposal and the institutional arrangement for implementing the project before its first submission to the Adaptation Fund Secretariat.

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
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