



**The World Bank**

Mali Water Security Project (P181538)

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# Project Information Document (PID)

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Appraisal Stage | Date Prepared/Updated: 04-Nov-2024 | Report No: PIDIA00894



## BASIC INFORMATION

### A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Mali	WESTERN AND CENTRAL AFRICA	P181538	Mali Water Security Project
Financing Instrument <b>Investment Project Financing (IPF)</b>	Estimated Appraisal Date 21-Oct-2024	Estimated Approval Date 10-Dec-2024	Practice Area (Lead) Water
Borrower(s)  Republic of Mali	Implementing Agency  Societe Malienne de Gestion de l'Eau Potable (SOMAGEP), Societe Malienne de Patrimoine de l'eau Potable (SOMAPEP), Direction National de l'Hydraulique (DNH)		

### Proposed Development Objective(s)

Increase access to improved drinking water supply and enhance conservation of water sources in selected cities.

### Components

- Component 1: Water Supply investment (US\$87 million)
- Component 2: Enhancing the conservation of the water sources (US\$8 million)
- Component 3: Project management and Capacity reinforcement (US\$5 million)
- Component 4: Contingency Emergency Response Component (US\$0 million)

## PROJECT FINANCING DATA (US\$, Millions)

### Maximizing Finance for Development

**Is this an MFD-Enabling Project (MFD-EP)?** Yes

**Is this project Private Capital Enabling (PCE)?** No

## SUMMARY

Total Operation Cost	100.00
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<b>Total Financing</b>	<b>100.00</b>
<b>of which IBRD/IDA</b>	<b>100.00</b>
<b>Financing Gap</b>	<b>0.00</b>

**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	100.00
IDA Credit	50.00
IDA Shorter Maturity Loan (SML)	50.00

Environmental And Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)



## B. Introduction and Context

### Introduction

1. **Mali, a Sahelian country, faces multifaceted problems that impede its economic development.** Water insecurity contributes to this situation, aggravated by climate change, natural resource degradation, fragility, and rapid population growth. The country is highly vulnerable to climate change impacts, such as the increasing severity and incidence of floods and droughts which adversely affect agricultural production, on which most of the population depends, and food security. Poor water resources management, aggravated by limited development, exacerbates the precariousness of livelihoods, worsening economic and human capital outcomes. Inadequate coordination among institutions responsible for the management and use of natural resources, including water, increases the country's vulnerability to climate change.
2. **Well-coordinated and integrated water-related interventions are needed to increase resilience to climate variability, reduce fragility, and strengthen the foundations of socio-economic development in Mali.** The proposed project aims to enhance climate resilience by improving water security in the selected cities and their corresponding sub-basins. The project's primary objective is to enhance resilience to climate change exacerbated drought risk by supporting the government's priority to improve sustainable access to drinking water services in continuity of the Kabala program in Bamako and secondary centers, while securing water resources in the corresponding sub-basins through activities implemented by local community organizations. Through harmonization across the World Bank portfolio and with other partners, a coordinated approach to water security will also encompass water resources management, ecosystems preservation, irrigation, optimized rain-fed agriculture, flood management, and access to safely managed sanitation.

### Country Context

3. **Mali faces internal and external shocks that hamper progress toward inclusive and sustainable development.** The country's Human Development Index ranks among the lowest as education, health and social protection systems remain weak. Climate change, rapid demographic growth, insecurity, armed-conflicts, social conflict, and global trade disruptions induced by the war in Ukraine have exacerbated the vulnerability and fragility of the country. A vast landlocked country of 22.4 million people, Mali experiences an average annual population growth of 3.3 percent, with a median age of 21.4 years.<sup>1</sup> Most of the population lives in the south close to the Senegal and Niger rivers, with 57 percent of the country's population residing in rural areas and 12 percent in the capital city of Bamako. With a per capita gross domestic product (GDP) estimated at US\$885, Mali ranks as the 22<sup>nd</sup> poorest country in the world. The proportion of the Malian population living under the national poverty line was 45.48 percent in 2021/22, concentrated in rural areas.<sup>2</sup> Access to basic services and infrastructure is low and highly unequal, with extremely marked regional disparities. In 2019, poverty rates were highest in Sikasso (63 percent), where households depend on cotton farming, and high in Ségou (53 percent) and Mopti (61 percent) where families mostly depend on rainfed sorghum and millet cultivation. In Kayes, where households depend on remittances and livestock, poverty is lower (33 percent).<sup>3</sup> On the gender Inequality Index, measuring three important aspects of human development — reproductive health, empowerment, and economic status — Mali ranks 158<sup>th</sup> out of 162 countries.<sup>4</sup>

4. **Mali remains among the world's most vulnerable countries to climate change and the economy has seen little structural change over the last three decades to increase resilience to these shocks.** Mali is ranked as

<sup>1</sup> RGPH5-2022: Rapport provisoire novembre 2023 – (Fifth General Census of Population and Housing 2022)

<sup>2</sup> West African Economic and Monetary Union [WAEMU] household survey 2021-22

<sup>3</sup> For this entire paragraph, see United Nations estimate (July 2021). According to the results of the Agricultural Economic Survey integrated into household living conditions, the agricultural population stands at 16.8 million, of which 48.3 percent are women (EAC 2018); World Bank (2021) From Covid-19 Crisis response to resilient recovery. Saving lives and Livelihoods while Supporting Green, Resilient and Inclusive Development (GRID). Development Committee of the Boards of Governors of the Bank (The World Bank and IMF) and World Bank (2015) Geography of Poverty in Mali.

<sup>4</sup> UNDP <http://hdr.undp.org/en/content/gender-inequality-index-gii>, consulted in November 2021.



the 180th out of 187 countries on the Notre Dame Global Adaptation Initiative, making it one of the countries, most vulnerable to climate change and least ready to improve resilience.<sup>5</sup> Most climate scenarios project temperatures in the Sahel to rise by at least 2°C in the near term (2021 to 2040) while rainfall patterns are projected to become more irregular, with sudden oscillations between very wet and very dry years. Future droughts and floods are likely to become more extreme.<sup>6,7</sup> More extreme droughts will decrease food security for an economy with an important agricultural sector and subject water utilities to supply stress while sources go dry. More extreme floods are likely to damage critical infrastructure, including agricultural and urban water supply networks. In fact, Mali has already suffered the consequences of climate change, with major floods in the Senegal and Niger rivers in 2020 impacting 80,000 individuals, 6000 houses and 7000 tons of food.<sup>8</sup> In at least one project area, the San district, monthly precipitation has significantly decreased between 1989 and 2019,<sup>9</sup> leading to severe droughts such as the 2021 drought that hit the project regions of Mopti and Segou.<sup>10</sup> Very recently the Government declared a state of national disaster (August 23<sup>rd</sup>, 2024) because of flooding that caused 30 fatalities (and affected 47,374 people).<sup>11</sup>

**5. Such climatic shocks hamper efforts to reduce poverty by impacting economic growth, especially in the agriculture sector, compounding political instability, and insecurity.** Agriculture and low-productivity services dominate the economic and employment landscape, while manufacturing remains limited and concentrated in agro-industries and cotton ginning. Exports are dominated by gold and cotton, exposing the economy to commodity-price and climatic shocks. Two-thirds of the country is arid and semiarid and exposed to desertification, and climate change vulnerability is worsened by overexploitation and degradation of natural resources. As only 14 percent of the country's land area is considered suitable for agriculture, landscape restoration to enhance drought resilience is a central issue. It is projected that by 2050 Mali's annual GDP will have shrunk by roughly 10.7 percent, with 2.2 million additional people in poverty, due mainly to shocks related to climate change, unless urgent investments in climate adaptation are made.<sup>12</sup>

## Sectoral and Institutional Context

### *Water resources challenges: overview*

**6.** The country's hydrology is shaped by four international river basins: the Niger basin, the Senegal basin, the Volta basin and the Comoé-Bia-Tanoé basin. Mali also encompasses two major transboundary aquifer systems: the Taoudenit Basin (or Taoudenit-Tanezrouft Aquifer System) and the Illemeden Aquifer System. Temporal and spatial water variability, exacerbated by the changing rainfall patterns,<sup>13</sup> contributes to economic water scarcity. With an annual renewable water resources of 6,290 m<sup>3</sup> per capita,<sup>14</sup> Mali's current water consumption levels do not exceed sustainable water resources at the country level. However, extreme variations in water availability between regions and seasons exacerbated by climate change, particularly between populations living along rivers and those living in the Sahara, as well as poor management (contributed to by underdeveloped infrastructure, insufficient knowledge and poor service provision), result in glaring inequalities in people's access to water,

<sup>5</sup> NDGAIN Country index 2022

<sup>6</sup> Mali Climate Risk Profile, 2018, USAID.

<sup>7</sup> [Climate Risk Profile: Mali](#), GIZ/KfW.

<sup>8</sup> Flessa M (2021) [What is the role of climate change as a conflict multiplier in Mali?](#) University College of Fryslan, Groningen, the Netherlands.

<sup>9</sup> Doukoro D, Abbevi Abby G, Kalifa T (2022) [Drought monitoring and assessment of climate parameters variability in Koutiala and San districts](#), Mali. *American Journal of Climate Change*: 11(3).

<sup>10</sup> ARC Limited (2022) [Drought-stricken Mali receives first-ever ARC Limited climate risk insurance pay-out](#).

<sup>11</sup> Communiqué of the Extraordinary Council of Ministers of Friday, August 23, 2024. CM No2024-35/SGG.

<sup>12</sup> World Bank. 2022. *Sahel Region: Country Climate and Development Report*. Washington, D.C.: World Bank Group.

<sup>13</sup> Temporal and spatial variability

<sup>14</sup> FAO Aquastat. 2018. <https://www.fao.org/aquastat/statistics/query/index.html?jsessionid=E357A9D3F72DC9F3EDAA5F11C57E6CBD>



exacerbating water insecurity. Additionally, violence has restricted movement, disrupting economic activities and limiting access to fields and grazing areas, which has led to the abandonment of farmland.

**7. The quality of surface water is also deteriorating due to climate change, notably increasing runoff and solid transport, and human activity.** Changes in rainfall patterns, gold mining in riverbeds, deforestation, soil erosion, and pollution from point and non-point sources are affecting raw water quality, significantly increasing water treatment costs in cities like Bamako.<sup>15</sup> In this context, Mali's weak knowledge and limited monitoring of its water resources hinder climate-resilient, sustainable, and sound decision-making regarding water investments. In addition to enhancing drought resilience by providing reliable drinking water sources, the project aims to improve the quality of water utilized by the population.

#### *Water supply and sanitation*

**8. While access to drinking water supply services continues to increase, but overall service quality remains poor.** Access to water supply reaches 83 percent of the population (94 percent in urban areas and 74 percent in rural areas),<sup>16</sup> but only 62 percent of services qualify as improved. Due to years of climate shocks compounded by poor water services management (including underinvestment, failure to anticipate high population growth and poor service provider performance in rural areas), water supply services fail to deliver the expected positive outcomes for Mali's population. In addition, insecurity makes it difficult to develop basic services such as water and electricity. Water supply is the responsibility of the Ministry of Energy and Water, which delegates urban asset management to SOMAEEP-SA (*Société Malienne de Patrimoine de l'Eau Potable*) and urban service management to SOMAGEP-SA (*Société Malienne de Gestion de l'Eau Potable*), while rural water remains the responsibility of the DNH (*Direction Nationale de l'Hydraulique*) and the municipalities. The urban water perimeter covers 90 centers but lacks the resources to upgrade their systems. With 65 percent water coverage,<sup>17</sup> several neighborhoods of Bamako already experience water shortages that could grow worse as a consequence of droughts exacerbated by climate change. Shortages due to low pressure and/or lack of water network are sometimes so acute that they cause social tensions to escalate, particularly in the oldest and poorest neighborhoods. To address these challenges, the government launched the Kabala program in 2013 with seven donors to increase water production and expand services in unserved neighborhoods of Bamako, but incomplete funding slows service delivery.

**9. The influx of internally displaced people, some due to climate shocks in other parts of the country, puts additional pressure on already inadequate water and sanitation services.** Mali currently hosts approximately 400,000 internally displaced persons (IDPs), with a significant number residing in project areas such as Mopti. Approximately 28 percent of the population in these areas lack access to basic water and sanitation services, underscoring a critical need. The project will consider the interactions between IDPs and host communities, their specific needs, and the potential implications for the project.

**10. Financial sector performance is low.** The extension of the urban sector zone in 2018 to include 72 additional secondary centers with low coverage (31 percent, compared to 64 percent in the original 18 centers),<sup>18</sup> has impacted the country's ability to meet the Sustainable Development Goals (SDGs) and to charge adequate tariffs for services,<sup>19</sup> further deteriorating the sector's financial situation. Mali has one of the lowest water tariffs in West Africa, unchanged since 2004 and too low to cover sector operating expenses, let alone make critical

<sup>15</sup> Source: urban water utility – Société Malienne de Gestion de l'Eau Potable (SOMAGEP)

<sup>16</sup> World Health Organization and UNICEF Joint Monitoring Programme. 2022.

<sup>17</sup> Elaboration d'un Plan pour la Viabilité Financière du Secteur de l'Eau Potable, 2020. SOMAEEP-SA/Banque Mondiale.

<sup>18</sup> Elaboration d'un Plan pour la Viabilité Financière du Secteur de l'Eau Potable, 2020. SOMAEEP-SA/Banque Mondiale.

<sup>19</sup> Under the now closed Mali Urban Water Supply Project (P122826), the Bank has financed feasibility studies for the improvement of water supply in 20 secondary towns served by SOMAEEP-SA and SOMAGEP-SA.



climate resilient investments. In 2020 a Bank-financed study of the sector's financial viability recommended: (i) in the short term, alleviation of debts to stabilize the sector, and (ii) in the medium and long term, the introduction of structural policy measures such as socially acceptable tariff adjustments, and balancing subsidies (for payment of the reform costs promised to SOMAEEP-SA when the assets of the former company, "Eau et Energie du Mali," were shared). SOMAEEP's poor financial and debt situation<sup>20</sup> is a major constraint to improving urban service coverage and performance. Although SOMAGEP-SA's service delivery performance is generally satisfactory, severe underfunding and the lack of commercial viability of secondary centers it manages<sup>21</sup> hinder its ability to provide climate-resilient water services.

**11. Non-revenue water (NRW) and energy costs pose the most significant challenge to improving drought resilience and sector financial sustainability, and they increase greenhouse gas (GHG) emissions.** The current network efficiency is less than 62 percent, which is considered very poor (80 to 85 percent would be regarded as efficient), and forces additional water abstraction, limiting drought resilience. The financial model in use to monitor the sector's financial viability identified tariff adjustment as a rapid way to improve the drought resilience and financial sustainability of the water utility. According to SOMAGEP-SA, the main reasons behind the increase in NRW between 2018 and 2019 were: (i) the commissioning of the new Bamako (Kabala) Water Treatment Plant, which exerts higher pressure on the older network, causing numerous water leaks, (ii) the water production that generated no revenue in towns experiencing security issues (i.e., Kidal) and (iii) the poor quality of networks in the 72 secondary centers added to the urban perimeter in 2018. SOMAGEP-SA has a dedicated NRW department with staff who knows the network well and strategies for leak detection, metering and establishing district metering area (DMA). The project will target NRW reduction through a program of network rehabilitation, sectorization, and the installation of production and distribution meters combined with innovative solutions (such as the use of solar energy) to improve energy efficiency.

**12. Only 20 percent of households have access to safely managed sanitation services nationally.<sup>22</sup>** Access to sanitation has progressed at a much slower pace than access to water and is low compared to many countries in the region. Through the Bamako Urban Resilience Project (PRUBA), the World Bank is developing two major fecal sludge treatment plants, 800 sanitary blocs, as well as 20,000 household latrines. The ongoing implementation of these investments will generate learnings to define future sanitation sector engagement.

### C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

Increase access to improved drinking water supply and enhance conservation of water sources in selected cities.

#### Key Results

**13. Key results include:**

- Number of people provided with access to safely managed water in the project area: 227,000 people.
- Number of people with enhanced access to drinking water source: 270,000 people.
- Reduction of non-revenue water (NRW) leading to reduced energy consumption (percentage): from 35 to 25%
- Number of hectares under enhanced water sources conservation and management in drought or flood prone areas: 3,000 Ha

<sup>20</sup> With World Bank financing, the government conducted a study to revise the tariff structure with the objective of achieving financial equilibrium in the sector by 2024. Administrative procedures are underway to implement the recommendations of this study.

<sup>21</sup> Elaboration d'un Plan pour la Viabilité Financière du Secteur de l'Eau Potable, 2020. SOMAEEP-SA/Banque Mondiale.

<sup>22</sup> Progress on household drinking water, sanitation and hygiene 2000-2020: Five years into the SDGs. Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2021.



#### D. Project Description

14. **Given the climate change vulnerability and other water security challenges faced in Mali, a more integrated approach is crucial to sustain economic development and reduce fragility and conflict.** The proposed project will enhance drought and flood resilience by supporting sector development through a comprehensive water management approach, focused on improving access to drinking water supply service as a continuation of Kabala investment program in Bamako and in priority areas while protecting associated water resources at the sub-basin level. To this end, the project will support keystone climate resilient water investments for water supply and water source conservation, as well as operational and institutional measures to enhance sector performance, such as non-revenue water reduction and support to define priority reforms. The project will not only tackle immediate water access and quality concerns but also lay the groundwork for long-term resilience and contribute to water-related job growth and economic activity. In supporting these activities, the project contributes to building a more stable, sustainable future for the country, reducing the risks of water-related conflicts, and supporting economic growth in vulnerable regions.

15. **The proposed project is structured around four components contributing to elements of water security.** The project followed a rigorous selection process with key criteria such as: (i) the maximum number of people to be provided with access, (ii) cities vulnerable to climate change (droughts/floods), (iii) the level of water service; (iv) the readiness of technical studies; and (v) security situation, as appropriate. Most of these investments benefit from well advanced detailed studies. For secondary centers, alternative centers are also identified to anticipate possible security issues that could hinder implementation. The detailed project description features in annex 2.

16. **Component 1: Water Supply in Bamako and selected secondary centers (US\$87 million).** This component will ensure safe access to drinking water in the face of climate change exacerbated droughts and floods by supporting the development of efficient and well-performing drinking water services in Bamako and selected secondary towns. The component will leverage technical studies already conducted with the support of the French Development Agency (AFD) in Bamako and secondary centers of Mopti, Sevare and San. Special attention will be given to the most vulnerable and underserved neighborhoods on the left bank of Bamako, which are also most exposed to floods and droughts. The component will be structured as follows: (i) Water supply systems in secondary centers (US\$47 million), (ii) Water supply system in Bamako (US\$28 million), and (iii) Management of non-revenue water (US\$12 million).

17. **Subcomponent 1.1: Water supply systems in secondary centers (US\$47 million):** This subcomponent will enhance drought resilience by improving access to water supply services in selected secondary urban centers through the construction of water supply systems in three selected secondary centers: Sevare, Mopti, and San. The works include the construction of: (i) boreholes for a production of 24,400 m<sup>3</sup>/day, (iii) three pumping stations with mixed energy (solar/grid), (iv) four elevated water tanks of 2000 m<sup>3</sup> each and one ground-level water tank of 1000 m<sup>3</sup>, (v) the water distribution network, (vi) water transmission pipes, and (vii) social household connections and community standposts.

18. **Subcomponent 1.2: Water supply systems in Bamako (US\$28 million):** This subcomponent will increase drought resilience by supporting improved access to water services in Bamako through the construction and supervision of water supply systems, mainly a 9-km transfer from Djikoroni Para to Missira, a pumping station at Missira, a 6-km transfer from Missira to Kati-Sud, an elevated water tank of 2000 m<sup>3</sup>, the distribution network, and household connections.

19. **Subcomponent 1.3: Management of non-revenue water (NRW) (US\$12 million):** This subcomponent will enhance drought resilience by improving the quality of water supply services and reduced energy usage through



network loss reduction, improvement of metering for households and big consumers (companies, administration), procuring equipment to ease leak detection, replacement of poor segments of the network and capacity reinforcement for network mapping and establishing district metering areas (DMAs). Activities under this subcomponent include: (i) network rehabilitation works to replace 100 km of poor segments in Bamako, Bafoulabe/Mahina, Dioila, and Ouélessébougou, (ii) development of DMAs in Bamako for efficient metering and water supply network management, (iii) renewal of household and distribution meters for the city of Bamako and three other secondary cities (Bafoulabe/Mahina, Dioila and Ouélessébougou), and (iv) the installation of production meters in the three secondary centers of Bafoulabe/Mahina, Dioila and Ouélessébougou. Such measures will help reduce operating costs (5% reduced water loss generates 24,255 m<sup>3</sup>/day of water gain), increase revenue (and thereby improve financial viability), and reduce the amount of water abstracted from water sources, thus increasing drought resilience.

20. **Component 2: Enhancing the conservation of water sources (US\$8 million).** Infrastructure investments in Component 1 are closely tied to the water resources they depend on and are affected by climate change. To ensure a climate-resilient water supply, this component will support: (i) preparatory studies for riverbanks restoration; (ii) preparatory studies for enhanced natural aquifer recharge; (iii) civil works of nature-based solutions (NBS) for riverbank restoration; (iv) civil works of NBS for soil stabilization and reforestation; (v) support to Local Water Committees (*Comités Locaux de l'Eau*, CLE) for long term monitoring and maintenance of riverbanks, soil and forests; and (vi) technical support to DNH to monitor soil and water preservation measures.

21. **Component 3: Project management and Capacity reinforcement (provisional assessment US\$5 million).** This component will support activities including non-consulting services, and consulting services, operating costs and training; safeguards activities; monitoring and evaluation; citizen engagement activities; capacity building activities including those relevant for the WaterSAP application and dialogue with counterparts on sector financial viability; implementation support such as field missions and data collection, and outreach and communication. It will also support the financing of resettlement action plans associated with the project.

22. **Component 4: Contingency Emergency Response Component (US\$0 million).** This zero-funded component will allow the Government of Mali to quickly mobilize funds in the event of an emergency that requires immediate recovery and/or reconstruction response. In the event of a crisis or disaster caused by a natural hazard, including climate-related emergencies such as severe drought and flood, this component enables the government to reallocate IDA project funds to disaster response and recovery purposes under streamlined procedures. It will therefore support Mali's emergency preparedness and response capacity, including financing of critical emergency goods or emergency recovery and associated services, as well as the targeted provision of post-disaster support to affected households and individuals. Following an adverse natural event, the government's declaration of disaster in accordance with national law, and adherence to the World Bank's activation policy, the CERC component would be triggered.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Area OP 7.60	No
Summary of Screening of Environmental and Social Risks and Impacts	



23. **Environmental and social (E&S) risk is rated Substantial, with Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) risks assessed as "Moderate."** The overall risk assessment is largely influenced by the project's activities and their implementation in highly densely populated urban areas like Bamako and other secondary cities. Potential risks and impacts of the project during the construction phase may include: (i) increased pollution due to hazardous and non-hazardous waste (such as oil, paint, and asbestos), as well as dust, noise, vibrations, and accidental spills of fuel and lubricants; (ii) traffic congestion that could disrupt local transportation and activities; (iii) significant disturbances to surrounding ecosystems, affecting local wildlife and plant life; and (iv) health and safety issues for both workers and nearby communities, particularly due to working conditions and accident risks. In contrast, during the operational phase, risks and impacts are expected to be relatively minor, thanks to appropriate management and monitoring measures.

24. **To ensure effective management of E&S risks and impacts, given that the project sites are already clearly defined, it will not be necessary to prepare an Environmental and Social Management Framework (ESMF).** Existing E&S Impact Studies (ESIA<sup>23</sup>/ESMP), conducted for the Mopti/Sévaré and San sites, are being updated to ensure alignment with the Bank ESF<sup>24</sup>. These two updated ESAs will be consulted upon and disclosed before project approval. For the sites in Bamako and Kati, specifically the Djicoroni-Para-Missira and Missira-Kati sections, a single ESIA/ESMP will be developed as soon as the necessary technical details are available. Given that the technical studies are still in progress, this ESIA/ESMP will not be finalized before project approval but will be complete and relevant once finished. Depending on the conclusions of the ESAs on the need for land acquisition, a RAP<sup>25</sup> will be prepared wherever necessary. The project will also finance technical assistance to SOMAEEP-SA and SOMAGEP-SA to enable the sector to achieve financial viability and improve technical and commercial performance, including customer management over their entire urban transferred area. These activities will be managed in accordance with the Bank ESF and relevant Advisory Note for Technical Assistance. In addition to the site-specific instruments, the Borrower has prepared a Labor Management Procedures (LMP) and a Stakeholder Engagement Plan (SEP). The LMP establishes clear protocols for the recruitment, training, and management of local workers, ensuring safe and fair working conditions. They address essential aspects such as workplace safety, workers' rights, and conflict resolution mechanisms. The SEP identifies key stakeholders and effectively address their communication needs. This plan supports continuous dialogue with stakeholders, enabling them to voice their concerns and inquiries about the project. In consultation with the Bank, the Borrower has prepared an Environmental and Social Commitment Plan (ESCP) which includes a timeline and a commitment to relevant instruments and set out the substantive measures and actions that will be taken by the Borrower to meet environmental and social, and health and safety requirements.

25. **Gender.** In Mali, significant gender gaps persist, particularly in access to water services and decision-making power within households and communities. Women, especially in rural areas, are responsible for water collection and spend up to 8 hours per day on household chores, including up to 1 hour collecting water. This reduces their time for income-generating activities and education, perpetuating poverty and gender inequality. Additionally, women have limited decision-making power over the design and location of water infrastructure, which often exacerbates their disproportionate burden in water collection and increases safety risks, including exposure to GBV when traveling to distant or unsafe water points. To address these challenges, the project will implement two key actions. First, women's input will be actively incorporated into the planning and design of water infrastructure, particularly in the selection of locations for household connections and standposts. This will be achieved through structured consultations with women's groups, ensuring their participation in decisions regarding water infrastructure placement to enhance accessibility and safety. Designing infrastructure with

<sup>23</sup> ESIA: environmental and social impact assessment

<sup>24</sup> ESF: Environmental and social framework

<sup>25</sup> RAP: Resettlement Action Plan



women's input will help meet their specific needs, reducing the distance they must travel and enhancing their security. Second, the project will prioritize the construction of water points closer to homes, particularly in areas where women are typically responsible for water collection. By shortening the distance to water sources, the project aims to reduce the time women spend collecting water, freeing up their time for income-generating activities, education or other productive uses. This reduction in daily water collection time will also enhance women's safety by minimizing the risks associated with traveling to distant water points. To monitor progress, the following indicators will be used: the percentage of water infrastructure (e.g., household connections and standposts) that were designed in consultation with women, with a target of 30 percent and (ii) the reduction in the average time women spend in water collection, aiming for a 30/50% reduction in target areas. These actions are expected to enhance women's participation in water management, reduce their labor burden, and contribute to gender equality.

26. **Citizen Engagement.** Engaging citizen in project related activities will play a crucial part in the project. Regular inclusive consultations and participatory planning will be conducted throughout the project cycle. Inputs from citizens will be integrated in project design and implementation to ensure that the feedback loop is closed. The project will also ensure that the process of social mobilization and participatory planning is inclusive so that the voices of disadvantaged and vulnerable groups are enhanced, and all social groups are involved. A gender-related indicator will track these processes: Percentage of water points (household connections and standpoints) that were designed in consultation with women. Additionally, the project will develop an accessible and robust GRM to allow beneficiaries and other stakeholders to submit project-related complaints and share concerns and feedback. The GRM will ensure that queries or clarifications about the project are responded to in a timely manner and that grievances are addressed efficiently and effectively.



## E. Implementation

### Institutional and Implementation Arrangements

#### A. Institutional and Implementation Arrangements

27. **This project will build on the successful institutional and implementation arrangement of the Kabala program under the leadership of the Ministry of Energy and Water, through SOMAEEP-SA.** The PASEMa<sup>26</sup> project is anchored in the urban water assets holding company SOMAEEP-SA. SOMAEEP-SA has a strong project management team that has handled several investment projects including the World Bank-financed PEMU (P122826) in the framework of the Kabala investment program supported by many donors. The institutional and implementation arrangements will ensure the proper involvement of other entities benefiting from the project, in particular DNH and SOMAGEP-SA. The institutional framework of the project will be based on (a) a Project Steering Committee (PSC); (b) a Project Management and Implementation Agency – PMIA (SOMAEEP-SA); and (c) two executing agencies, SOMAGEP-SA and DNH, respectively responsible for the implementation of subcomponent 1.3 and Component 2.

28. **The Project Steering Committee (PSC):** A PSC chaired by the Ministry of Energy and Water (*Ministère de l'Energie et de l'Eau, MEE*) will be responsible for the overall oversight and strategic direction of the proposed project. The PSC will be composed of representatives of the Ministry of Economy and Finance (*Ministère de l'Economie et des Finances, MEF*), MEE, Regulatory Commission for Energy and Water (*Commission de Régulation de l'Energie et de l'Eau, CREE*), DNH, SOMAEEP-SA, SOMAGEP-SA and the project coordinator who prepares PSC meetings and attends them as secretary. The PSC will ensure that activities are consistent with the sector strategy.

29. **Project Management and Implementation Agency (PMIA):** SOMAEEP-SA will be responsible for overall Project management and the implementation of subcomponents 1.1 and 1.2. SOMAEEP-SA will be responsible for project management and coordination, fiduciary and safeguards activities, monitoring and evaluation, communication activities and preparing progress and completion reports in accordance with World Bank rules and procedures. Therefore, the PMIA will handle payments and disbursements, prepare the Annual Budgets and Work Plans; ensure that annual financial audits are submitted on time and will also file and archive all project documents for auditing purposes. The PMIA will be responsible for carrying out the bidding process for the works; supervising the project implementation; coordinating the activities of the various stakeholders, including consultants, manufacturers, installers, inspection services, and all the public services concerned; approving technical documents; ensuring sound financial management of the project; coordinating the commissioning of the infrastructures created by the project once completed; and preparing and participating, as secretary, in the meeting of the PSC. SOMAEEP-SA will also sign a convention with DNH and SOMAEEP-SA to define their roles and responsibilities in project implementation.

30. **Project Implementation Agency 1 (SOMAGEP-SA):** SOMAGEP-SA will manage the technical implementation of sub-component 1.3 (Management of non-revenue water) by hiring consultants to prepare detailed technical studies and bidding documents, helping to evaluate bids and supervising construction works related to the subcomponent.

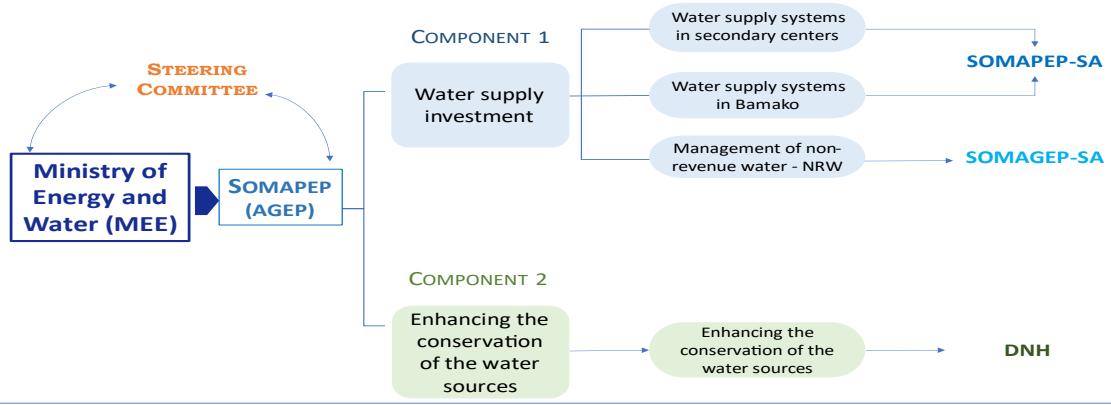
31. **Project Implementation Agency 2 (DNH):** DNH will manage the technical implementation of component 2 (Enhancing the conservation of the water sources) by hiring consultants to prepare detailed technical studies and bidding documents, helping to evaluate bids and supervising construction works related to the component.

32. The institutional and implementation arrangements for the project are depicted in Figure 2, and further described in the relevant sections below.

<sup>26</sup> PASEMa: Projet d'Appui pour la Sécurité de l'Eau au Mali – ( in English : Mali Water Security Project)



**Figure 1: Institutional relationships – PASEMa project.**



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Mali Water Security Project (P181538)

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