Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 19-Apr-2021 | Report No: PIDA30141

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Mali	P171658	Bamako Urban Resilience Project	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA WEST	03-May-2021	25-Jun-2021	Urban, Resilience and Land
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Republic of Mali	Ministre des Affaires Foncières, de l'Urbanisme et l'Habitat	

Proposed Development Objective(s)

Improve access to urban waste, sanitation and water services, increase resilience to floods in selected vulnerable areas of the District of Bamako and targeted neighboring communes, and strengthen urban management capacity.

Components

Improved Solid Waste Management
Improved Water Supply, Sanitation and Hygiene
Investments in Resilient Infrastructure
Strengthening Institutional Capacity
Project Coordination
Contingency Emergency Response Component (CERC)

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	250.00
Total Financing	250.00
of which IBRD/IDA	250.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	250.00
IDA Credit	200.00
IDA Grant	50.00

Environmental and Social Risk Classification

High

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Mali, a Sahelian country, is vulnerable to current and future impacts of climate change**. Anticipated continued increases in maximum and minimum temperatures, alongside more erratic rainfall patterns, are expected to amplify the incidence and impact of natural disasters.[1] Uncertainty in the evolution of rainfall patterns has increased the country's vulnerability to climate change – this is evident in the increased incidence of both floods and droughts.[2] Physical vulnerability is exacerbated by demographic, socioeconomic and environmental factors. This is also worsened by a high rate of poverty and inequality, weak urban and land-use planning and limited capacities of governments and communities. Support for climate change adaptation measures through more resilient infrastructure in cities is critical.

2. **Mali is among the poorest countries in the world, ranking 184 out of 189 on the 2019 Human Development Index**. The country's economic performance has been relatively strong, with GDP growth averaging 5.7% since 2014. However, more than 40 percent of the population (approximately 18 million citizens in 2020) live in poverty. Whilst the young age structure of the population presents a unique opportunity to secure the demographic dividend, in the context of limited security and widespread underemployment, it can have the opposite effect. The Government of Mali has recently prepared and adopted a strategy for the mitigation of conflict and violence risks (2020-2023), and improvement in living conditions of the population is an important pillar to directly address the root causes of conflict.

3. **The COVID-19 shock has hit the Malian economy hard, with growth expected to slow to below 1 percent**

[1] World Bank Climate Risk and Adaptation Country Profile – Mali

[2] Herman, Rebecca, Michela Biasutti, Alessandra Giannini, and Yochanan Kushnir, *The Effects of Anthropogenic and Volcanic Aerosols and Greenhouse Gases on 20th Century Sahel Precipitation*, Earth and Space Science Open Archive (ESSOAr), April 2020.

per annum. The crisis is affecting the country through domestic and external channels. On the domestic front, strict social distancing measures are causing a deceleration in economic activity, particularly in the hospitality, construction, transportation, and retail sectors, which account for almost half of GDP and employment. The drop in international remittance and domestic transfers due to COVID-19, the impact of a general inflation due to the pandemic and the impact on labor income will all exacerbate poverty. The IMF points out that the decline in economic activity, spillovers from global trade shocks, along with fiscal measures to combat the crisis have created urgent financing needs. If unaddressed, these financing needs will impinge on much needed developmental and social spending.

4. **Mali continues to face significant challenges to deliver basic services and make progress towards the Sustainable Development Goals.** Malaria is endemic and diarrheal diseases have remained among the top three causes of premature mortality over 2000-2017, in part due to the lack or poor quality of water and sanitation services and poor hygienic living conditions. Inadequate solid waste and drainage management exacerbate sanitary risks during the rainy season and flood events, especially in densely populated areas and slums. The country suffers from many endemic and epidemic communicable diseases, including malaria, diarrheal diseases, cholera and now COVID-19.

5. **Water is an essential element in preventing disease and protecting human health during outbreaks of infectious diseases, including the current COVID-19 pandemic.** The main protective measure against the coronavirus recommended by WHO is to wash hands frequently with soap. Poor water supply could adversely affect public health by promoting conditions for the spread of the pandemic. Poor hygiene conditions resulting in lack of access to sanitation also makes this risk very high, especially in peri urban and flooded areas. Bamako is the epicenter of the pandemic in Mali. It is important to ensure better water supply and sanitation conditions for vulnerable populations in this area, both in peri-urban and flooded areas**.**

6. **Many of Mali's development challenges have a spatial dimension.** Mali's rate of urbanization has risen above 40 percent in the last few years, and the country is urbanizing rapidly, almost twice as fast as its rate of population growth[3]. The Africapolis project led by the Organization for Economic Co-operation and Development (2020) shows how violent deaths and fragility in Mali have decreased significantly in urban areas despite the rapid population growth of cities. And yet, the risk of conflict in southern Mali could escalate, which would threaten more productive parts of the country, and thereby elevating overall levels of insecurity. Pressures to create jobs and provide housing and services have grown in more densely populated southern parts of the country. At the same time, low levels of wealth, fiscal resource, service delivery, weak institutions make it more challenging to address regional disparities and target public resources where it would be more efficient and equitable to increase productivity and livability for Malian residents[4]. The COVID-19 outbreak is likely to have long-lasting welfare impacts. Aggregate consumption is expected to fall by 2-4.3 percent, and public policy efforts will be needed to support households and firms in the short and medium term.

7. **Bamako dominates the country's landscape and is at the core of the urbanization challenge in Mali**. The economic importance of Bamako cannot be understated – it is the nerve center of the national economy

3 Mali's annual urbanization growth rate at 4.9 percent per annum exceeds by far the overall population growth rate of 2.9 percent per annum.

4 World Bank (2015) The Geography of Poverty in Mali.

and accounts for 35 percent of GDP. Its population has more than doubled over the 2000-2015 period and is expected to expand steadily in the coming decades. Urbanization trends in Bamako are exacerbated by the influx of urban forcibly displaced populations (or IDPs) due to the significant deterioration of the security situation in the country. The country continues to face widespread increased extremist violence, internal displacement, and marginalization of certain communities. Typically, when unmanaged, these marginalized populations tend to settle in informal neighborhoods, intensifying demand on local basic services. Thus, a focus on the capital will be a focus on addressing drivers of fragility for the country.

Sectoral and Institutional Context

8. **Bamako is the world's sixth fastest growing city – but it is not fulfilling its role as an engine of urban growth and service delivery.** Bamako's urban population growth averaged 5.4 percent between 1998-2009, and its city population is expected to reach 4.2 million by 2025.[5] Despite its importance to the national economy, Bamako has failed to make progress on delivering urban services for its citizens. Access to basic services such as potable water, sanitation, and waste collection lag Sub-Saharan African cities. These gaps are also demonstrated by the higher share of informal settlements in Bamako (63 percent) compared to the average urban areas of the region (55 percent).[6] The Bamako Urban Sector Review (2018)[7] found that fragmentation, both spatial and institutional, hinders the realization of the advantages associated with city growth and increases social and gender inequalities affecting particularly communities in vulnerable areas.

9. **May 16, 2019, flooding in Bamako killed 16 people and 2576 people were affected in one night**. The post-disaster needs assessment (PDNA) for May 2019 floods conducted by GoM with support from the development partners found a total damage and loss of US$9 million and needs for recovery of US$33 million. Infrastructure around strategic economic facilities, including for instance, several roads and drainage were damaged owing to their location in flood-prone areas. From 2007 to 2020 Mali was impacted by five large flooding events (two in 2007, 2013, 2016,2017, and 2019) impacting more than 4.2 million people. At the institutional level, Mali has set up a disaster management system monitored by the Directorate General of Civil Protection (*Direction Générale de la Protection Civile*), a national platform for disaster risk reduction (in 2005), a national multi-risk plan for disaster preparedness and response (in 2012), a National Strategy for Disaster Risk Reduction or SNRRC (in 2013) and an action plan (in 2015) implementing at regional and local scales, there are monitoring or crisis committees.

10. **However, sites and investments for urban upgrading are not guided by an understanding of disaster risks despite high-profile events in the past.** Efforts have been mainly focused on emergency management, lacking integrated risk management and have not yet been fully operationalized for the District of Bamako. Flooding events have often been a function of rivers, waterways and domestic latrines overflowing, combined with drainage system failures and accumulation of solid waste. This has also been linked to lack of adequate land use planning, followed by uncontrolled occupation of flood prone lowlands, rivers beds and floodplains. Institutional fragmentation has hampered data coordination and

5 Ville de Bamako. 2012. *Bamako 2030: Croissance et Développement – Imaginer des Stratégies Urbaines pour un Avenir Maîtrisé et Partagé*.

6 While the estimates for the Sub-Saharan African regions are based on the UN Habitat definition, the estimate for Bamako is based only on housing quality

7 WBG (2018) Bamako Urban Sector Review: An Engine of Growth and Service Delivery

efforts to properly map existing infrastructure and planned investments. The situation is worsened by the lack of consultation of the neighborhood leaders and local mayors. Informal settlements are also in areas prone to environmental risks and have been unable to capture the returns due to land improvements, such as infrastructure investments and regularized lay-outs, and low investments have been associated with very low land prices.[8] While long-term trends may be difficult to identify within existing climate variability, potential future climate impacts for the water sector in the Bamako region show a high level of flood indicator for 2030[9]. This project will contribute to mitigate current and future climate risks and implement the vision and recommendations set out in the disaster recovery framework (DRF) elaborated following the PDNA report to make Bamako a town resilient to flooding by 2030.[10]

11. **As the nerve center of Mali's economy, Bamako has been visibly affected by the COVID-19 crisis.** With the introduction of containment and mitigation measures, there has been a reduction in all sorts of activities, especially in retail and transport. Preliminary data suggests that markets in Bamako experienced sharp price increases (7-20 percent) for basic commodities, owing to the lockdown and interruptions in supply chains. The capital has also seen frequent demonstrations, as social tensions rise with most of the population depending on outside work for subsistence and for access to basic goods amid strict lockdown measures. Capital expenditures, already quite low, will be further affected[11] and will negatively affect the ability of the capital to drive social and economic development, locally and nationally.

12. **Urban development in Bamako has been fragmented spatially.** Instead of coordinated urban planning, Bamako is built through the growth of uncoordinated, underserviced and often informal areas (*lotissements*).[12] This has hindered land-use planning, leading to unplanned and spatially-fragmented urban expansion. Much of the new urban construction in Bamako has taken place far from existing urban concentrations, exacerbating the challenges of urban accessibility and access to services. Adequate investments in infrastructure and service delivery have failed to keep pace with urban growth.

13. **At the same time, the administrative landscape is characterized by institutional fragmentation**. The District of Bamako is part of the Bamako metropolitan region and is becoming integrated with the cities of Kati and Koulikoro into a multi-city agglomeration marked by fragmented governance structures.[13] National, parastatal and city-level agencies are involved in infrastructure investments and service provision, with overlapping and unclear regulatory scope and responsibilities. Central government ministries plan and implement by sector, but there is a lack of coordinated planning for development of the urban space and for service delivery in urban extension areas. Given the risk of a worsening security situation in the south of the country, better coordination for service delivery would contribute to increasing resilience of the populations.

8 Lall, S. V., Henderson, J. V., and Venables, A. J. (2017). *Africa's Cities: Opening Doors to the World*. World Bank.

9 Based on the WBG Climate Change Knowledge Portal: https://climateknowledgeportal.worldbank.org/country/mali/impacts-water

10 Strengthening Climate Resilience in Mali (P161406)

11 The government has announced a series of measures to fight against the spread of the virus and to support the most vulnerable, including tax breaks, increase in priority social spending. This implies a much higher deficit and necessary budget reallocation.

12 The subdivision of a single piece of bare land into plots with appropriate provision of infrastructure and collective facilities to host the buildings to be erected by the future occupants

13 The District of Bamako has a governing council elected by direct suffrage and is under oversight by the Ministry of Local Government, while the greater Bamako metropolitan region comprises in total 25 local governments i.e. the District of Bamako, the six communes of Bamako and 18 additional surrounding communes.

14. **The District of Bamako and the six communes of Bamako have urban planning departments, and the District has developed a plan to address identified shortcomings.** The Bamako 'Vision 2030' includes investments to, among others, densify the commercial center of the city and rebalance the development of the city through moving some institutions and commercial activities to the right bank of the Niger River. Relying on the provisions of the National Framework Document for Decentralization (*Document Cadre de Politique Nationale de Décentralisation* – DCPND), the District of Bamako and its six communes decided in late 2018 to mutualize their resources with other 18 surrounding communes, through the InterCollectivity Syndic called the Great Bamako (*Syndicat Mixte Intercollectivités - Grand Bamako – SMI-GB*), for achieving common development goals over the Bamako metropolitan urban area.

15. **Consistently, the transfer of urban waste and sanitation management responsibilities to local authorities has increased the need for coordination and efficiency**. The three strategies for solid waste, liquid waste and stormwater (drainage) fall under the National Sanitation Policy (2009) and the oversight of the Ministry of Environment, Sanitation and Sustainable Development (*Ministère de l'Environnement, de l'Assainissement et du Développement Durable,* MEADD) and its National Directorate for Sanitation and Control of Pollution and Nuisances (*Direction Nationale de l'Assainissement et du Contrôle de Pollutions et des Nuisances, DNACPN*). The Bamako Sanitation Master Plan (*Schéma Directeur d'Assainissement de Bamako, SDAB*) was updated in 2016 along with the Bamako Strategy for Solid Waste. It provides an integrated framework for investment planning, sector financing and management of these subsectors in line with the setup of the Grand Bamako.

16. **Solid waste management (SWM) exemplifies some of the coordination failures related to urban planning and service delivery in the Greater Bamako area**. On average, the District generates 1,500 tons of household waste each day. Bamako fares reasonably well in terms of collection rates compared to regional benchmarks,[14] with 57 percent collection rate and about 71 percent of households subscribing to private door-to-door collection services provided by about 200 small companies (*groupements d'intérêt économique* – GIEs)[15]. However, the lack of adequate infrastructure and regulation across the entire value chain hampers substantially the performance of service management. Erratic disposal practices are often observed such as dumping in drains or burning in open air, increasing the residents' vulnerability to pollution and diseases and related climate risks. The limited ability of the District and other communes in the metropolitan area to collaborate is compounded by the absence of revenues from, and low level of investments in SWM in local budgets – US$0.03 per capita for the District of Bamako. In 2011, the Government commissioned and developed a modern landfill in Noumoubougou, about 35 km from the city center. Yet the facility remains widely underused, at only 10 percent of its total capacity, owing to the lack of efficient mechanism to transport waste to the site and concerns with the neighboring communities.

17. **Similarly, the sanitation sector is barely organized and access to sanitation services is particularly dire in Bamako.** Only 40 percent of the Malian population has access to at least basic sanitation services (per SDG6.2 definition) against 53 percent in urban areas. However, only 9 percent of these urban dwellers benefit from safely-managed services, against 26 percent in rural areas. Urban density makes it more

14 Kaza, Silpa; Yao, Lisa C.; Bhada-Tata, Perinaz; Van Woerden, Frank. 2018. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development. Washington, DC: World Bank.

15 Mukim, Megha; Eghoff, Christian; Avner, Paolo; Selod, Harris; Chunet Alex; Plançon, Caroline; Reed, Tristan; Trubetskoy, Alexandr; and Coulibaly, Zie Ibrahima. 2019. The Bamako Urban Sector Review. Washington, DC: World Bank.

difficult to safely contain and dispose of sludge and septage from latrines, cesspools or septic tanks, and most cities don't have sewers and treatment facilities to discharge them. Public schools and health centers are also underequipped in basic sanitation and handwashing facilities, and sometimes even of functional water connections. In Bamako, sewer networks are almost nonexistent, and 98 percent of the population still rely on onsite sanitation. The capital city does not have any controlled fecal sludge and septage treatment facility, in part due to difficulties to secure sites. Private mechanized septage haulers / emptiers (*camions spiros*), most of which affiliated to the *Association des Vidangeurs du Mali*, have no other choice but to dispose fecal sludge and septage they collected from households wherever possible. The lack of adequate regulation of the sanitation services chain, including on tariffs, affects the providers' profitability, and, raises tensions between local authorities and residents over environmental and sanitary risks, which are exacerbated during the rainy season and floods and further increase vulnerability.

18. **While access to quality water services in Bamako is about to achieve major breakthroughs, improving sanitation is a priority.** Based on the Bamako Water Supply Master Plan 2012-2032, implemented since 2014, the flagship, multi-donor Kabala program[16] will multiply by ten water production and storage capacity. The new water treatment plant located in Kabala provides an additional capacity of 288,000 cubic meters since 2020, of which half already supplies the city. Close to one million people will get a new access to safe water at home through 116,000 social household connections by 2022. The design of the Kabala water program, anticipating that such an increase in water consumption would translate into more wastewater being generated and discharged, included a companion sanitation program to address the current absence of adequate sanitation systems and treatment options and high risks of groundwater pollution, bacteriological contamination and degraded living conditions, especially when combined with the accumulation of solid waste and exacerbated during flood episodes. Both GoM and the communes of Grand Bamako have progressed towards developing this program and preliminary studies provide the grounds for further, and now urgent implementation. Mitigating these risks through combined solid waste, sanitation and drainage investments and better urban planning is critical to reap the benefits of the water program and further, to improve livability and sustain economy growth in Bamako.

19. **Bamako's local governments lack the fiscal and other capabilities needed to develop and implement urban plans and invest in urban infrastructure**. This has contributed to ineffective spatial management of the Bamako metropolitan area. Local government budgets are largely used for on recurrent spending[17], leaving only 4.6 percent for capital expenditure. The combined identifiable infrastructure expenditure (operating and capital expenditure) by the seven local governments in Bamako (the District and six communes) was an abysmal US$0.72 per capita in 2016[18], compared to US$37 in other low-income cities. Local government own-source revenues are low by international standards (about US$6.17 per capita in 2012) – a far cry from the resources needed to provide a reasonable level of services. In addition, dysfunction in land markets is a significant deterrent to productive investment in cities, affecting not just the patterns of land-use and building volumes, but also limiting the ability of local governments to capture the value of land (for instance, through taxation) for economic development investments. The loss in aggregate economic value due to very low and stagnant land prices in informal areas in Bamako could

16 *Projet d'Approvisionnement en Eau Potable de Bamako à partir de la localité de Kabala,* supported by eleven donors including the World Bank (Urban Water Supply Projet, P122826, 2014-2021, US$130 million).

17 Budgets typically contain high proportion of emoluments (62 percent on average) and only 4.6 percent of budgets go towards investments.

18 Analysis of latest available budget data for this report: Budget execution reports for 2016 for the District and communes, except Commune I for which budget execution for 2015 was used.

equal almost US$210 million.[19]

20. **Urban plans and planning institutions are ineffective and lack the necessary coordination to effectively manage the spatial development of the metropolitan region.** The last approved urban structure plan for Bamako dates to 1995, and although it contains some considerations of trunk infrastructure in the metropolitan area, it is now irrelevant since it has been completely surpassed by development and expansion of the city in the meantime. A 2005 revision was elaborated to integrate parts of the surrounding area into the District but was never approved, since the institutional stakeholders could not agree on the boundaries of the District. A further attempt was made by the District in 2014 to recruit a planning agency (with external funding) to update the structure plan but floundered due to disagreement between the government and the District of Bamako over planning authority. Thus, an update of urban plans, and support to planning institutions is needed sorely.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

Improve access to urban waste, sanitation and water services, increase resilience to floods in selected vulnerable areas of the District of Bamako and targeted neighboring communes, and strengthen urban management capacity.

Key Results

21. **PDO Level Indicators**

The selected PDO Indicators include the following:

1. People with access to regular waste collection services in the project areas (sub-indicator: those who are female)
2. People provided with access to improved sanitation services (sub-indicator: those who are female)—*Corporate Results Indicator (CRI)*
3. People provided with access to improved water sources (sub-indicator: those who are female)—*Corporate Results Indicator (CRI)*
4. Area protected from a flooding event with a 10-year return period – *Corporate Climate Results Indicator*
5. People provided with improved urban living conditions (sub-indicator: those who are female)—*Corporate Results Indicator (CRI)*
6. Beneficiaries that feel project investments reflected their needs (sub-indicator: percent of which female) – *Citizen Engagement Indicator*
7. A digital platform (skills, data and tools) is used to inform critical urban planning activities and investment studies in the project areas

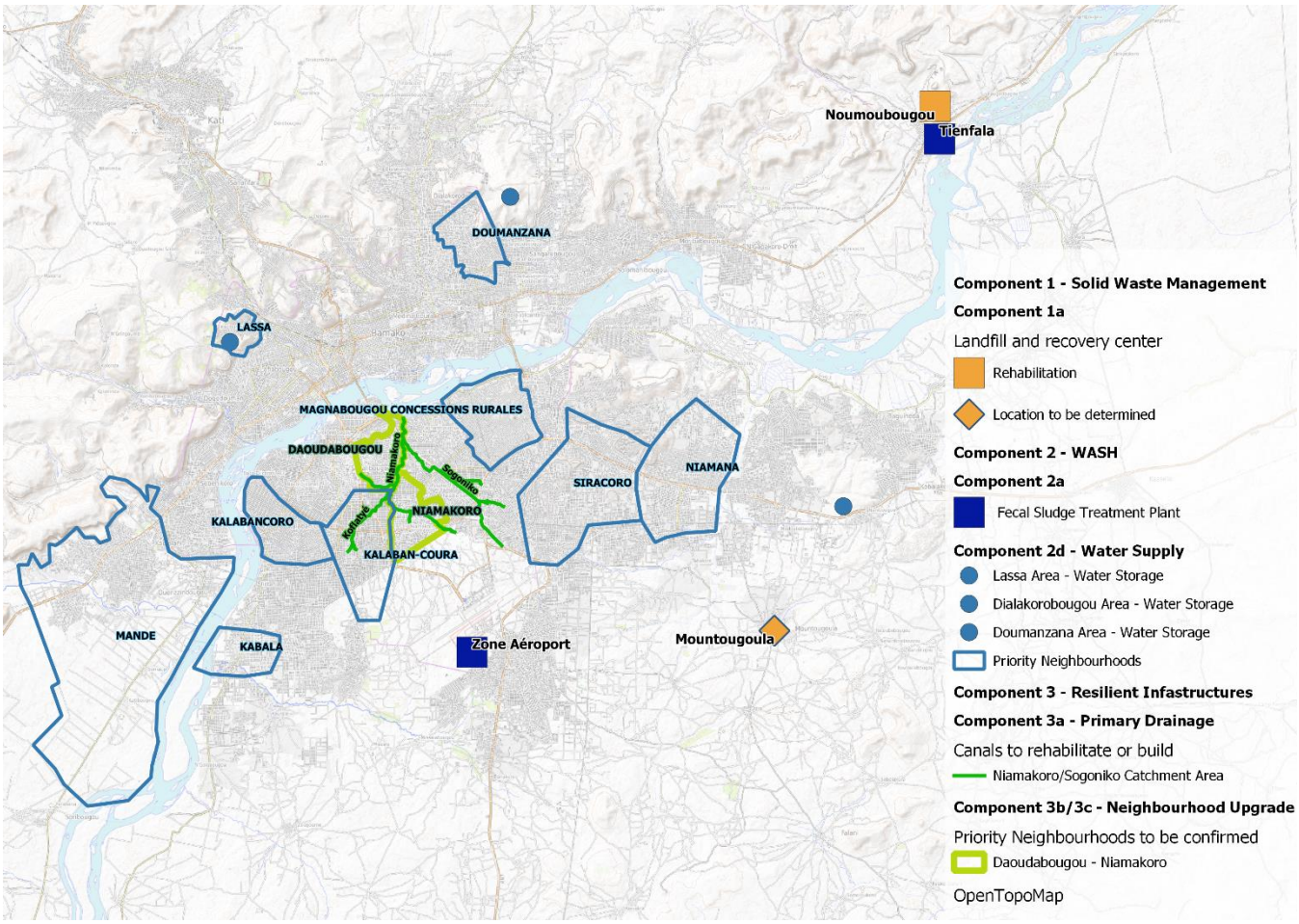
D. Project Description

22. The project will have the following components and sub-components (project areas and interventions are

19 Bamako Urban Policy Dialogue (2019).

also show in the figure below).

Figure 1: Map of Project Area and Interventions



Component #1: **Improved Solid Waste Management (SWM) (US$60 million)**

23. The objective of this component is to (i) rehabilitate and expand infrastructure needed to restore primary waste management functions i.e. collection, transfer and treatment, (ii) improve the sector's performance by strengthening the institutional and organizational framework as well as sector financing.

24. **Sub-component #1a: Development of Solid Waste Management infrastructure (US$55 million)**. The proposed investments consist of redeveloping the Noumoubougou landfill to provide the Greater Bamako with 20-year treatment capacity. This capacity will be achieved by (i) retrofitting the existing cell which would cover the city's disposal needs for the first 3 years, (ii) develop another 2-million-ton capacity on the remaining 40 hectares of the site, along with sorting and recycling facilities and, (iii) support the

construction of a new landfill on the right bank of the Niger river, near Mountougoula, as planned under the National SWM strategy of 2016 to reduce transportation costs for communes located south of the river.

25. **Sub-component #1b: Performance improvement of solid waste management services (US$5 million)**. This sub-component seeks to help improve the overall performance of the solid waste management sector and contribute to the formulation of a comprehensive sector strategy, through activities along four thematic areas: (i) studies to establish an effective framework for private sector participation, (ii) studies to enhance sector performance; (iii) propose upstream policy development to improve the institutional and regulatory framework; and (iv) support job creation initiatives along the value chain specifically targeting youth and women from communities affected by the project and vulnerable groups.

Component #2: Improved Water Supply, Sanitation and Hygiene (WASH) (US$70 million)

26. **The objective of this component is to expand access to improved water, sanitation and hygiene services**. Proposed activities will focus on priority sanitation investments and accompanying measures to strengthen the sector institutional framework and ensure sustainable fecal sludge management services along the sanitation chain, and water storage, distribution networks and household connections and standpipes needed to supply many unserved areas in Bamako and neighboring communes.

27. **Sub-component #2a: Fecal sludge treatment plants (US$18 million).** This sub-component will finance the construction of two fecal sludge treatment plants (FSTPs), as prioritized in the SDAB, to address the current absence of any appropriate sanitation system in Bamako. The two FSTPs will have a total daily capacity of 600 cubic meters, equivalent to 42 tons of dry matter, benefiting to an estimated 700,000 inhabitants. The Senou Airport area on the right bank (Commune VI) and in Tienfala on the left bank (commune of Tienfala) have been identified by GoM to host the FSTPs.

28. **Sub-component #2b: WASH in schools and health centers, domestic latrines and behavior change (US$15 million):** This sub-component will finance the following activities: (i) construction of 800 latrines and hand washing facilities in selected public schools, health centers and public markets, (ii) rehabilitation and/or construction of 20,000 domestic latrines along with sumps for grey water, targeted at the poorest households located in the vicinity of those establishments, (iii) Behavior Change and Communication (BCC) and awareness raising campaigns.

29. **Sub-component #2c: Strengthening institutional framework of the sanitation sector and capacity building for DNACPN and ANGESEM (US$4.3 million)**: To improve the sanitation service chain, the sub-component will finance: (i) support to DNACPN and ANGESEM[20] to help further clarify and operationalize the sector institutional framework and establish financial mechanisms to cover O&M costs and ensure the viability of the FSTPs, including through potential private sector participation, while keeping sanitation services affordable; (ii) support to manual and mechanical service providers, through an accreditation program of qualified emptiers and the scaling up of an existing 'Uber-type' app piloted by NGOs to connect

[20] ANGESEM is a public agency that was initially created for the management of wastewater treatment plants. Its mission was revised in November 2020 to expand its scope to both collective and onsite sanitation infrastructure, especially through technical assistance to sanitation operators and delegated project management on behalf of decentralized authorities (communes).

households with emptiers and enhance competition; and (iii) feasibility studies for future upgrading of the urban sanitation systems in Bamako.

30. **Sub-component #2d: Urban water supply (US$32.7 million):** Building on the achievements of the first phase of the Kabala water program, implemented by the national asset-holding company SOMAPEP (*Société Malienne de Patrimoine de l'Eau Potable*), the sub-component will finance infrastructure planned in its second phase to supply the left bank and outskirts of the District on the right bank, including: (i) increase water storage capacity to further regulate the distribution of the water system and improve service delivery, (ii) expand the distribution network in unserved areas by about 300 km, and (iii) increase access to piped water by installing 15,000 social household connections and 100 standposts.

Component #3: Investments in Resilient Infrastructure (US$90 million)

31. **The objective of this component is to enhance flood resilience and urban living conditions in selected vulnerable neighborhood, in turn increasing resilience to COVID19 compound risks.** This component will finance a range of complementary and integrated investments in drainage infrastructure, nature-based solutions, neighborhood upgrading, driven by a participatory approach for the selection, design, and realization of the infrastructures. This participatory approach will maximize local livelihood opportunities through grants for micro-projects led by local organizations as well as labor-intensive works for larger infrastructure fostering job creation and economic recovery in the wake of COVID-19. This component will incorporate investments to improve areas such as streetlighting, public spaces, and stormwater drainage systems to increase resilience and reduce flood vulnerability; thus, supporting both climate change adaptation and mitigation.

32. **Sub-Component #3a: Investments in Primary Drainage Infrastructure (US$56 million)** This component will finance urban drainage, and nature-based solution infrastructures to restore, increase and protect the capacity of the primary drainage network and reduce the negative impacts of recurrent flooding. With the primary drainage network, integrated storm water management will be adopted where possible, developing public and green spaces along canals and securing and enhancing the public spaces that are in poor condition and being threatened by encroachment to retain water during storm events.

33. **Sub-component #3b: Investments in Neighborhood Upgrading (US$30 million):** In selected neighborhood within those catchment areas, this sub-component will finance construction and rehabilitation of demand-driven neighborhood improvement infrastructure, including inter alia, local roads, pedestrian paths, small bridges, street lighting, secondary storm water drainage systems, community facilities (notably small health centers, schools, youth or community centers) and other public spaces (including public squares, leisure/social sports spaces, parks and green areas, streetscapes). Specific investments are driven by the needs of each beneficiary community.

34. **Sub-component #3c: Support to local initiatives focusing on urban services and economic inclusion (US$4 million):** To complement the larger infrastructure works, and have early results during the study period for sub-components 3a and 3b, this sub-component will finance (a) fast-disbursing grants to local associations to develop temporary micro-projects to support economically inclusive neighborhood improvement initiatives with a priority on the inclusion of young people, particularly young women, and (b) the provision of technical assistance and training to beneficiary communities.

Component #4: Strengthening Institutional Capacity (US$18 million)

35. This component, operating interdependently with components 1, 2 and 3 will be implemented under the management responsibility of the Project Coordination Unit (PCU). It will support capacity building to strengthen targeted entities at both local and central levels to enable them to more effectively carry out their respective mandates as part of project implementation, including development of appropriate and sound strategic urban planning as well as administrative, financial and technical management systems, tools and capabilities to effectively deliver local services. Such activities will include, inter alia, support for: (a) operationalization of the newly created Inter-collectivity Syndic or Grand Bamako; (b) elaboration of the Grand Bamako master plan; (c) setting up of a digital platform for resilience, including developing capacity to better identify and increase own-source revenues, including from public assets, and (d) provision of additional support for investment promotion.

Component #5: Project Coordination Unit (US$12 million)

36. This component will finance incremental project management costs, financial and technical audits, monitoring and evaluation of project activities (including gender disaggregated data), oversight and implementation of environmental and social safeguards, communication, technical assistance and consultant services, training, and knowledge exchange. The PCU will take in charge the overall project implementation, and component management in coordination with relevant sector, central and local agencies as identified for technical implementation of project components 1, 2, 3, and 4. Component 5 will also finance a TA package to strengthen capacity of the PCU. Consultants will be hired to support implementation of various components, including supervision engineers. Implementation of specific sub-components related to large infrastructure may be delegated to qualified sector agencies.

Component #6: Contingency Emergency Response Component (US$0 million)

37. This component is a 'zero-assignation' CERC that will provide funding for immediate response in the event of an eligible crisis or emergency, defined as an event that has caused or is likely to imminently cause a major adverse economic and/or social impact associated with natural or man-made crises or disasters.

Table 1: Project Cost (US$, millions)

Components and Sub-Components	IDA financing
Component #1: Improved Solid Waste Management	**60**
Sub-component #1a: Development of Solid Waste Management infrastructure	**55**
– ***Redevelopment of Noumoubougou landfill; Retrofit of existing cell; Construction of new cell; New landfill on the right bank, near Mountougoula***	*35*
– ***Sorting and recycling facilities, landfill gas use in Noumoubougou***	*5*
– ***Construction of transfer points***	*13*
– ***Cleaning of dumpsites***	*2*

Sub-component #1b: Performance improvement of solid waste management services	**5**
– ***Framework for effective private sector participation***	*0.7*
– ***Enhancing efficiency and effectiveness of the solid waste sector***	*0.5*
– ***Upstream policy development***	*0.3*
– ***Community level and job creation activities***	*3.5*
Component #2: Improved Water Supply, Sanitation and Hygiene	**70**
Sub-component #2a: Fecal Sludge Treatment Plants	**18.0**
– ***Construction and supervision of 2 fecal sludge treatment plants***	*18.0*
Sub-component #2b: WASH in schools and health centers, domestic latrines and behavior change	**15**
– ***Construction of WASH facilities in schools***	*1.7*
– ***Construction of WASH facilities in health centers***	*0.8*
– ***Provision of domestic latrines***	*12*
– ***Behavior change communication campaigns***	*0.5*
Sub-component #2c: Strengthening institutional framework of the sanitation sector and capacity building for DNACPN and ANGESEM	**4.3**
– ***Support to sector agencies***	*1.8*
– ***Support to service providers***	*1.3*
– ***Studies for the development of Bamako sanitation systems***	*1.2*
Sub-component #2d: Urban Water Supply	**32.7**
– ***Construction of water storage infrastructure***	*11.0*
– ***Construction of water distribution networks***	*15.7*
– ***Provision of social household connections***	*4.0*
– ***Consultant services and support to SOMAPEP***	*2.0*
Component #3: Investments in Resilient Infrastructure	**90**
Sub-component #3a: Investments in Drainage	**56**
– ***Investment in Niamakoro catchment area***	*18*
– ***Investments in catchment areas to-be-determined***	*37*
– ***Institutional mapping and strengthening of O&M***	*1*
Sub-component #3b: Neighborhood Upgrading	**30**
Sub-component #3c: Support to local initiatives focusing on urban services and economic inclusion	**4**
– ***Grants to be awarded to local initiatives in 4 neighborhoods***	*4*
Component #4: Strengthening Institutional Capacity	**18**
Sub-component #4a: Support for Operationalization of Grand Bamako	**3**
Sub-component #4b: Digital Platform for Resilience	**6.5**
Sub-component #4c: Support the Urban Master Plan	**3.5**

Sub-component #4d: Municipal finance and asset management for service delivery	**5**
Component #5: Project Coordination Unit	12
Component #6: Contingency Emergency Response Component	0
Total costs	**250**

Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

Note to Task Teams: This summary section is downloaded from the PAD data sheet and is editable. It should match the text provided by E&S specialist. If it is revised after the initial download the task team must manually update the summary in this section. ***Please delete this note when finalizing the document.***

38. The key project activities include the rehabilitation of Noumoubougou landfill, the clearing of existing dumps, primary and secondary drainage network, neighborhood upgrading, construction of the Mountougoula landfill and two fecal sludge treatment plants, public WASH facilities and water storage infrastructure and distribution networks. Some activities will operate in dense and sensitive urban areas with the potential to generate significant environmental and social impacts. The project will use the environmental and social standards to assess and manage risks and impacts of these activities. The Borrower has limited experience or capacity to implement a project under the World Bank Environmental and Social Framework (ESF). As part of project preparation, the PCU has already hired two qualified specialists: one (1) in Environment and one (1) in Social development. They will work on the project's environmental and social instruments with support from the Bank's environmental and social specialists. The project's risks and impacts have been rated as high.

39. Based on site visits, the main environmental and social issues are related to negative impacts on water, traffic management, waste management, health and safety of workers and urban communities, restrictions on land use, gender-based violence, stakeholder's engagement. The areas that will be impacted by the project, are considered of high value to the local population because of the economic activities. In addition, urban ecosystems and natural habitats in these areas are considered fragile because of the ever-increasing urbanization. The PCU has prepared following environmental and social documents: (i) Environmental and Social Management Framework (ESMF), including a Sexual Exploitation and Abuse and Sexual Harassment (SEAH) Mitigation and Response Action Plan as an annex, (ii) Resettlement Policy

Framework (RPF), (iii) Environmental and Social Commitment Plan (ESCP), (iv) Stakeholder Engagement Plan (SEP), (v) environmental and social audit of Noumoubougou landfill, and (vii) a preliminary environmental and social assessment for the construction of the fecal sludge treatment plants.

40. **The GBV/SEAH (sexual exploitation, abuse, and harassment) risk level for this project is rated as Moderate**. Drivers of risk include context-specific risks, such as high rates of child marriage and female circumcision, general social acceptability of GBV, conflict, high risks of human trafficking, and lack of legislation on domestic violence and sexual harassment. In response to these realities and aligned with the requirements outlined in the SEAH Good Practice Note, the ESF requirements, and a survivor-centered approach, the project will further assess risks of GBV/SEAH as part of the social assessment and reflect them in key safeguard instruments, contractual obligations and other key documents regulating project implementation.

E. Implementation

Institutional and Implementation Arrangements

41. **This project will build on the successful implementation of the recently closed Projet d'Appui aux Communes Urbaines du Mali (PACUM) under the leadership of the former Ministry of Housing, Urban Planning, and Social Shelter (MHULS), now Ministry of Land Affairs, Urbanism and Housing - (MAFUH).** The relative complexity of the project, its institutional and implementation arrangements will need to ensure the proper involvement of other line ministers, especially MEADD as oversight body of the solid waste and sanitation subsectors, as well as targeted local entities (District, six Bamako communes, 18 neighboring communes, etc.) that are primary institutional beneficiaries of the project. As a result, the institutional framework of the project will rely on (a) a Project Steering Committee, (b) a Project Monitoring and Technical Committee, (c) a Project Coordination Unit, and a set of specialized agencies for technical support for the implementation of specific activities.

42. **The Project Steering Committee (PSC) will be chaired by the Minister in charge of Urbanism (MAFUH), seconded by the Minister of Territorial Administration and Decentralization (MATD) as first vice-chair and the Minister in charge of Sanitation (MEADD) as second vice-chair**. It will include, among others, the following members: the Ministers in charge of Economy and Finance and Water; the President of the Syndicat Mixte Intercollectivités' Grand Bamako' (SMI-GB), and the President of the Conseil National de la Société Civile. The PSC will provide overall oversight and strategic leadership of the project, ensure coherence of activities with sector strategies, and ensure intersectoral coordination with other ministerial departments. The PSC will also validate the project annual budgets and work plans.

43. **The Project Monitoring and Technical Committee (PMTC) will be chaired by the Secretary General of MAFUH and seconded by the Secretary General of MEADD as first vice-chair and the Secretary General of MATD as second vice-chair.** Membership will comprise of, among others, the Heads of the relevant ministerial Directorates -- e.g. Direction Générale des Collectivités Territoriales, Direction Nationale de l'Urbanisme et de l'Habitat (DNUH), Direction Nationale de l'Assainissement et du Contrôle des Pollutions et Nuisances (DNACPN) – and Heads of beneficiary agencies and local authorities, including the Director of ANGESEM, Mayor of the District of Bamako, Governor of the District of Bamako, Permanent Secretary

of the Syndicat Mixte Intercollectivités 'Grand Bamako' (SMI-GB), and Director of ADR for the District of Bamako. The PMTC will be responsible for following up on the implementation of PSC recommendations and decisions, ensuring timely and effective implementation of activities and reporting at PSC meetings.

44. **A PCU coordinating overall project implementation and involvement of the stakeholders for each subsector will be set up within the MAFUH and rely on the former PACUM PCU expertise,** which has been tasked to lead the project preparation**.** The PCU will manage the project, coordinating overall project implementation, , monitoring and evaluating program implementation and impacts, and reporting results to various stakeholders as detailed in the Project Implementation Manual (PIM). It will be headed by a competitively recruited project coordinator who will lead the day-to-day project management, communicating with the Government, IDA, and all stakeholders of the project and overseeing project M&E, and supported by qualified and experienced staff.

45. **While the PCU will retain the overall administrative, fiduciary and safeguards responsibilities, it will also rely on technical support provided by specialized agencies for the implementation of specific sub-components or activities across sectors.** During preparation, an assessment of the entities involved in the project has been carried out to determine the level of implementation responsibilities they could assume according to their mandates, capacities and performance in similar activities. On this basis, given the number of key beneficiary agencies with limited capacities and only a few others with proven experience in equivalent project management, it has been agreed to maintain the PCU as sole responsible for project management, but to ease coordination and enhance collaboration and ownership through agreements to be signed between the PCU and those agencies, defining their respective roles, responsibilities including needed resources to perform adequate implementation support. Specified parts of the operation related to infrastructure (solid waste landfill, water supply, drainage) may be implemented on behalf of the PCU to agencies with proven experience and capacity in similar programs, through delegated management contracts.

46. **The estimated project disbursement schedule demonstrates overall implementation readiness of the project**. While limited disbursement is expected in the first year of implementation due to the time required for the project to become effective, cumulative disbursement rates are expected to exceed 35 percent by year 3. These disbursement projections are in line with large-scale infrastructure projects, which have more extended procurement timelines. The preparatory activities for each of these components are being largely undertaken under the project preparation advance and many will be completed before effectiveness, providing strong foundations to launch procurement processes and start key activities early in implementation.

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