Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 14-Mar-2019 | Report No: PIDISDSA23734
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
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<tbody>
<tr>
<td>Ghana</td>
<td>P164330</td>
<td>Greater Accra Resilient and Integrated Development Project</td>
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<td>Region</td>
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<td>AFRICA</td>
<td>Estimated Appraisal Date: 28-Feb-2019</td>
<td>Estimated Board Date: 29-May-2019</td>
<td>Social, Urban, Rural and Resilience Global Practice</td>
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<th>Implementing Agency</th>
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<td>Investment Project Financing</td>
<td>Government of Ghana</td>
<td>Ministry of Works and Housing</td>
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**Proposed Development Objective(s)**

The objective of the project is to improve flood risk management and solid waste management in the Odaw River Basin of the Greater Accra Region and improve access to basic infrastructure and services in the targeted communities within the Basin.

**Components**

- **Component 1:** Climate Resilient Drainage and Flood Mitigation Measures
- **Component 2:** Solid Waste Management Capacity Improvements
- **Component 3:** Participatory Upgrading of Targeted Flood Prone Low-income Communities, and Local Government Support
- **Component 4:** Program Management
- **Component 5:** Contingent Emergency Response Component

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

#### SUMMARY

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#### DETAIL

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B. Introduction and Context

Country Context

1. **Urbanization has played a key role in Ghana’s remarkable economic and social growth.** Starting from 1990s, rapid urbanization together with high economic growth fueled by capital accumulation and rising productivity, a large expansion in education and agricultural production, and political stability supported Ghana’s achievement of middle-income status by 2011. The country made significant progress in poverty reduction—from 52 percent in 1992 to 24.2 percent by 2012. More than 55 percent of Ghana’s total population is now living in urban areas, compared to 36 percent in 1990, and it is projected to reach 65 percent by 2030—by which time 22.6 million people will be living in urban areas. While the economic growth has plummeted after the fiscal crisis of 2013, many measures were taken in the aftermath to stabilize the economy, reduce reliance on natural resource sectors, and transform economy towards urban focused industrialization.

2. **Recognizing the importance of urbanization in achieving Ghana’s vision of an industrialized high-income country, the Government has followed a comprehensive local government decentralization program.** Ghana’s National Urban Policy (2012) promotes efficient urban infrastructure and service delivery, climate change adaptation and mitigation, and spatially integrated hierarchy of urban centers. Ghana’s Long-term National Development Plan (2018-2057) includes support for economic growth, social inclusion, resilient settlements, and environmental sustainability to be achieved through greater administrative and fiscal decentralization. The system and functions of local governments are regulated by the Local Governance Act of 1993 which was updated in 2016. This Act specifies a single tier system of sub-national government, made up of three types of assemblies categorized by population size: Metropolitan, Municipal and District Assemblies\(^1\). Many legislations have been adopted to deepen the range, scope and process of decentralization and local governance, including fiscal decentralization through the Government’s intergovernmental fiscal framework.

\(^1\) Metropolitan Assemblies have a minimum population of 250,000, Municipal Assemblies 95,000, and District Assemblies 75,000 people.
3. **Urban areas in Ghana face unprecedented challenges, including rising disparities and increased vulnerability to disaster and climate change impacts.** Even though national poverty rates have dropped significantly over the last three decades, the number of urban poor have not. Within urban areas, poverty rates vary greatly, with poverty concentrating in those informal settlements that are prone to flooding, with lower school attendance and access to services. It is estimated that close to 20% of people exposed to flood in Odaw River basin, live in low-income informal settlements. Large urban regions such as Greater Accra face major challenges in the provision, maintenance, and coordination of infrastructure and service delivery, and in enforcement of zoning and building codes—which is further exacerbated by perennial disaster shocks such as flooding, fire, and building collapse, and chronic urban stresses such as proliferation of informal settlements and poor sanitation. The effects of climate change is further increasing the frequency and intensity of floods, sea-level rise, and rural-urban migration due to higher drought impacts in the northern parts of the country.

4. **To meet the national vision and address growing challenges, a dedicated program is urgently needed in large cities such as the Greater Accra Region which hosts 20 percent of Ghana’s population, contributes 25 percent to the national GDP, and is exposed to chronic flooding impacts.** Currently home to 4.6 million within the region’s 24 Metropolitan/Municipal/District Assemblies, it is projected to house close to 11 million people by 2050. The region is facing increased disaster impacts including floods, cholera outbreaks, fires and building collapse, which reduced economic and social development potential of the region. For example, the flooding event of June 3, 2015 affected 53,000 people, caused major damages and losses in housing, transport, water and sanitation sectors amounting to US$55 million, with an estimated US$ 105 million reconstruction cost. Flooding especially contributes to an increase in poverty rates in Accra.

**Sectoral and Institutional Context**

5. **The Greater Accra Spatial Development Framework (2017-2037) and City Strength Diagnostics (2017) provides a clear strategic direction for resilient urban development within the Region, building on many existing studies, policies, and plans.** One of the priorities of the Framework is to protect the population against perennial floods, as stipulated in National Flood Mitigation Plan. In the aftermath of June 3rd, 2015 flooding, and as a part of the City Strength Diagnostics, key stakeholders came together and prioritized following challenges that are crucial for resilient urban development and flood mitigation:

(a) **Drainage, Flood Management, and Climate Change Adaptation**

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2 Rain et. Al, 2011
3 A recent World Bank report (Enhancing Urban Resilience in Greater Accra Metropolitan Areas, 2017) identified poor sanitation, proliferation of informal settlements, high unemployment, land and chieftaincy conflicts, and water scarcity as key urban stresses.
5 The Road to Recovery: The Role of Poverty on exposure, vulnerability and resilience of flood in Accra, 2018: found that the households from the poorest quartile are 60% more likely to lose more than 10% of their income than the average household. On average, households lost 50% of their income.
7 Ministry of Works and Housing prepared and submitted to the Cabinet in 2018.
8 World Bank, 2017: Enhancing Urban Resilience in the Greater Accra Metropolitan Area, CityStrength Resilient Cities Programme.
6. The floods in GAR are mostly aggravated by (i) the limited capacity and blockage of primary and secondary drains by solid waste materials and silt; (ii) lack of maintenance of drains, bridges, and outlets into the sea; and (iii) poor storm water regulation, flood zoning and its enforcement. Ghana has invested in recent years and made some progress in setting up effective flood forecasting and early warning systems (for example in the Volta Basin) and has one of the most advanced national disaster management organisations in West Africa. It lacks, however, appropriate disaster and climate risk assessment, contingency planning and contingency funds to appropriately respond to disasters, and an effective early warning system that timely reaches the last mile to the affected population. Lack of funding and technical resources, notably at the local level, forces MMDAs to divert funding from the existing municipal operations for recovery and emergency activities. The challenges call for substantial investments to improve the existing drainage and flood protection network incorporating the impacts of climate change, while managing the urban expansion in a climate sensitive and water inclusive manner.

7. The Hydrological Services Department (HSD) under the Ministry of Works and Housing (MWH) is mandated to operate and manage primary drains and is responsible for operational hydrology and providing flood forecasting, while the Department of Urban Roads (DUR) under the Ministry of Roads and Highways and individual Metropolitan, Municipal, District Assemblies (MMDAs) are responsible for some secondary and tertiary drains. Operation and maintenance (O&M) of the infrastructure is perceived as a common challenge in both central and local governments, due to various reasons such as lack of funds, and challenges related to budgeting, technical capacity, and clarity in roles and responsibilities. Apart from HSD, Water Resources Commission (WRC), and Ghana Meteorological Agency (GMet) have the specific mandate for flood forecasting and precipitation forecasting, respectively, whereas National Disaster Management Organization (NADMO) and local governments coordinate the flood early warnings, preparedness, and response and recovery activities with the local communities.

(b) Solid Waste Management

8. Poor solid waste management has become a significant urban challenge for the GAR in the past decade and contributes to increased health and flood risk. The key issues around solid waste management are (i) lack of community awareness, (ii) absence of effective collection, segregation and recycling systems; and (iii) limited disposal capacity. Due to the lack of adequate collection points and transfer stations, the waste collected commonly ends up in open drains, watercourses and streams or in illegal dumpsites which cause higher flooding impacts. Moreover, the only sanitary landfill (Kpone landfill) in the GAR is nearly full, so the region urgently requires preparing additional capacity either through extension of the Kpone landfill and/or through the development of alternative treatment and disposal sites.

9. The Government has established the Ministry of Sanitation and Water Resources (MSWR) and developed an Emergency Solid Waste Management Improvement Programme in 2015 which identifies actions and investments require to improve solid waste management in the GAR. As part of this plan, the government has identified a site for a new landfill and is currently seeking investments to construct it before the Kpone landfill reaches full capacity. Meanwhile, the government is planning to construct additional cells of the Kpone landfill, which would extend its life span by approximately two years. An Integrated Urban Environmental Sanitation Master Plan (IUESMP) is under preparation, supported by the World Bank Sanitation and Water Project.

(c) Informal Settlements, Low-income and Zongo⁹ Communities

⁹ In Ghana, Zongo means “traveler’s camp” in Hausa. Traditionally, the inhabitants of these settlements were Muslims migrating south from northern territories. Zongos have been socio-economically and spatially marginalized in Ghana.
10. Poor urban households are more affected by flood impacts than the rest of the population in the GAR\(^{10}\). The urban poor in the Region tend to reside in low-lying or unwanted areas, often informal settlements\(^{11}\) associated with overcrowding, sub-standard housing, poor access to basic services, high exposure to natural hazards, cholera, and fire events. For instance, slum dwellers make up 38.4 percent\(^{12}\) of the population within Accra Metropolitan Assembly (AMA)\(^{13}\). Access to basic services is limited and this contributes to increased flood impacts: for example, inadequate solid waste collection/disposal services and inadequate drainage management contribute to blockage of drains and further to flooding\(^{14}\).

11. The Ministry of Inner City and Zongo Development (MICZD) was created in 2017 to address the dire and specific needs of the Inner-city and Zongo communities of the country. The mandate of the Ministry is to facilitate the broad based social and economic development of Zongo and inner-city communities within the context of inclusive, resilient, and sustainable urban development. The Ministry is trying to realize its mandate through collaboration and coordination with the network of other Ministries.

\( (d) \) Metropolitan Level Integrated Planning and Coordination

12. Flood risk management require interjurisdictional integrated planning and coordination as an action in upstream MMDA can affect flooding impacts downstream. Each MMDA, however, is a planning authority with its individual plans, budgets and institutional frameworks. There are no clear coordination mechanisms for integrated urban planning, nor mechanisms for coordinating service delivery that have network or spill-over effects among the 24 MMDAs in the GAR. The fragmentation adversely affects response to flooding, the delivery of essential urban services including solid waste, sanitation, drainage, roads, and land use planning and development controls such as illegal development of buildings and other structures on flood plains or watercourse that contributes to increased flood impacts. Budgetary constraints of governments and agencies further hamper a sustainable maintenance and operation of services. This gap increases the risks of inefficient urban management and inability to resolve challenges during flood events.

13. The Odaw basin in the GAR is identified as the entry point of the intervention given its high flood risk, population and business density. Among the four main catchments in GAR, Odaw-Korle-Chemu catchment, which passes the most urbanized areas of the city, has the highest overall flood risks in the GAR. Over 58 percent of Accra’s population lives in this basin, and 65 out of 82 officially identified informal settlements are located\(^{15}\) here. Close to 40% of $3.2 billion worth of economic assets currently at risk of flooding in GAR are in Odaw basin. If no new measures are taken to mitigate flood risks in the Odaw basin, the Annual Average Loss related with flood impacts will increase four-fold from $36 million to $150 million between 2018 and 2050\(^{16}\). To ensure the development of sustainable flood risk management capacity, an integrated, multi-sectoral and multi-phased approach will be followed to deal with challenges related to drainage and flood management, solid waste management, flood prone informal settlements, and metropolitan coordination.

\(^{10}\) World Bank, 2018: The Road to Recovery: The role of poverty in the exposure, vulnerability and resilience to floods in Accra.

\(^{11}\) Based on UN-Habitat definition that there is at least one shelter deprivation in the form of lack of clean water and sanitation; insufficient living space; low quality, unaffordable housing structures; and/or no security of tenure.

\(^{12}\) This estimate is based on a study conducted by National Research Council in 2007.

\(^{13}\) Accra Metropolitan Assembly (AMA) is one of the local governments in Greater Accra Region.

\(^{14}\) World Bank, 2017: Enhancing Urban Resilience in the Greater Accra Metropolitan Area, CityStrength Resilient Cities Programme.


\(^{16}\) World Bank, 2018: Greater Accra Climate Risk Mitigation Strategy (Draft Report).
C. Proposed Development Objective(s)

**Development Objective(s) (From PAD)**

14. The objective of the project is to improve flood and solid waste management, and provision of public services to targeted communities within Odaw Basin of Greater Accra Region.

**Key Results**

15. The key result (outcome) indicators for this Project are:
   (i) People protected by improved flood mitigation infrastructure (Number of people, of which female)
   (ii) People in targeted low-income communities with improved solid waste collection services (Number of people, of which female)
   (iii) People in targeted low-income communities provided with access to improved public services (Number of people, of which female)

D. Project Description

16. The Project will invest in flood mitigation measures within the Odaw River Drainage Basin of Greater Accra Region for a period of six years (2019-2025). It focuses on achieving one in ten-year flood protection (T10) for the Odaw River drainage basin through a performance-based dredging contract, repair and reconstruction of critical drainage channels and bridges, reconfiguration of the sea outlet, construction of flood detention basins, and an effective flood early warning and response system. The Project will support reduction of solid waste entering Odaw primary channel and key tributaries through a community based Solid Waste Management approach, development of waste transfer stations, capping of old dump sites, and improvements in final solid waste disposal. As a showcase of integrated improvement of living environment within highly vulnerable flood prone low-income communities, the Project will support participatory urban upgrading in three targeted communities at high risk of flooding. The GARID Project is transformational program that will achieve greater developmental impacts through increasing geographic scope, flood protection level, and institutional capacity over the next phases. The Project has five components as described, and detailed information on activities by sub-component is in Annex 1.

17. **Component 1: Climate Resilient Drainage and Flood Mitigation Measures (US$ 92 million):** The component is led by the Ministry of Works and Housing and aims at developing sustainable capacity for flood risk management and achieving a safety level of T10 (10 years flood return period) within the Odaw River Drainage Basin. This will be achieved by the implementation of a flood mitigation strategy that combines structural, and non-structural measures including nature-based solutions.

18. **Sub-component 1.1.** Structural measures to mitigate flood impacts in the Odaw basin (US$ 85 million). The investments under this subcomponent will contribute to the flood safety level (protection against floods) corresponding to a 10 years flood return period in the Odaw River Drainage Basin, focusing on the areas at the highest risk of flooding in the primary Odaw channel (downstream of the confluence between the Odaw and the Onyasia streams). The Project will undertake deferred and periodic dredging of the Odaw drain downstream of Caprice to the outlet to the sea. This

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17 The aim is to achieve protection from ten-year flood return period (T10) in the basin, and to ensure that the Project financed structures such as flood detention basins, bridges and drainage channels are able to withstand higher flood return period (at least T25). Investing in T10 provides highest benefit cost ratio (7) compared to investing in T25 (2.5) or T50 (1.9). Overtime, flood protection level can be increased after sustainable flood risk management capacity is in place.

18 With regards to dredging activities, feasibility study and development of Performance-based contract bidding documents are being supported by the Netherlands Enterprise Agency, Develop2Build (D2B). Detailed information is on Annex 1.
drain has not been properly and consistently maintained and requires the removal of sediments and waste to recover its design cross sections and restore its design hydraulic discharge capacity. To reduce the regular sediment load on the Odaw River, sand traps will be built (one at Caprice on the main channel and others at downstream sections of Odaw River tributaries). The Project will also repair damaged sections of the lined Odaw drain. Flood detention basins will be built to store peak flood waters. In the downstream sections of the basin, vehicular and railway bridges will be reconstructed to greatly reduce hydraulic impediments due to structural abutments in the channel and the low height of the bridges. A weir in Korle Lagoon, which is causing backwater effects during high flows exacerbating the floods upstream, will also be partially rehabilitated to reduce its hydraulic interference, allowing for a freer flows of flood waters to the Korle Lagoons and sea outlet. The sea outlet will be re-engineered and reconfigured to reduce hydraulic interference at this point of discharge to the sea. The Project supports the development and implementation of measures to climate proof the proposed structural flood mitigation measures\(^\text{19}\); while achieving higher flood safety levels (building on T10) including the development of additional flood detention basins, and micro water retention areas (“wadi’s”) following nature-based solutions in available areas such as parks, parking lots, sidewalks, and playing fields. The location of detention basins and wadis are yet to be fully defined and are scheduled for second or third year of the Project.

19. **Sub-component 1.2 Non-structural measures to improve flood warning and preparedness (US$7 million).** Activities under this sub-component are overseen by a technical committee coordinated by Water Resources Commission (WRC), and made up of Ghana Meteorological Agency (GMet), Hydrology Services Department (HSD), National Disaster Management Organization (NADMO) and local government (MMDAs) within GAR. The main focus of the sub-component is the scaling up and modernization of existing flood forecasting, warning and emergency response system for the GAR (“FEWS Accra”), as well as enhanced community awareness and preparedness by providing support to key agencies involved in the hydromet and early warning value chain in Ghana. This sub-component aims at laying the foundation for integrated modernization of hydromet and early warning services, which will inform the modernization of subsequent phases, and strengthening operational collaboration between HSD, GMet, WRC and NADMO to provide early warning services for Greater Accra (FEWS Accra). The development of FEWS Accra will be built on the already existing systems and will be guided by Concept of Operations (CONOPS) for HSD, GMet, and NADMO. As such, the sub-component will support a paradigm shift from hazard-based early warning to impact-based early warning, improve “last mile” communication and community outreach, support contingency planning and community awareness campaigns in a gender sensitive manner. As such, the sub-component will support long term climate resilience for all GAR communities exposed to increasingly frequent and severe flooding.

20. **Component 2: Solid Waste Management Capacity Improvements (US$42.2 million).** This component is led by Ministry of Sanitation and Water Resources and aims at reducing the amount of solid waste flowing into the primary Odaw channel to reduce flood impacts. The interventions include community based solid waste management (SWM) interventions in targeted low-income communities including a major outreach program to sensitize and improve public behavior on solid waste management, improved litter management, construction of a waste transfer stations, capping of old dump sites, and final solid waste disposal capacity improvements. Reduction of solid waste in the drainage channel and improvement in solid waste management will bring climate adaptation and mitigation benefits.

21. **Sub-component 2.1 Community-based solid waste management interventions and communication campaign ($7.9 million):** This sub-component targets low-income or informal communities of the Odaw basin that contribute to

\[^{19}\text{It is estimated that measures, which would achieve a flood protection for 1:10 years by 2015, would be further reduced to 1:9 – 1:4 years due to the effects of climate change and urbanization considering different climate scenarios. Additional measures, including additional flood detention areas will be needed to keep T10 flood safety level by 2070.}\]
highest solid waste in primary Odaw Channel. The low-income communities and businesses will be engaged to improve the management of solid waste including improvements in service delivery and cost recovery. The sub-component supports acquisition of the necessary equipment such as skip buckets, waste bins, tricycles, and handcarts, community cleanup campaigns, community mobilization and awareness raising, and implementing a results-based incentive program which will consist of providing incentives to communities based on independently verified outcomes (improved waste collection and reduction of solid waste disposed into the drainage system). A comprehensive litter management strategy is being developed, based on the characterization of solid waste in the GAMA, to identify and adopt measures to reduce the amount of solid waste that flows from secondary drains into the main Odaw channel. Physical barriers or fences, waste collection bins, and signages along the Channel will be provided to prevent people from deliberately dumping waste into the channel.

22. **Sub-component 2.2. Waste Transfer Stations, Materials Recovery Facility, and Center of Excellence for Solid Waste Management (US$ 11.5 million).** Waste transfer stations are necessary to reduce the travel times for hauling solid waste from the municipalities to the final disposal sites which are located on the outskirts of the metropolis. This sub-component finances solid waste transfer stations including one at the University of Ghana land which will include a Centre of Excellence for Solid Waste Management for supporting research and innovations in material recovery, reuse and recycling. The sub-component includes comprehensive assessment and adoption of cost recovery mechanisms to ensure O&M and financial sustainability of transfer stations.

23. **Sub-component 2.3. Capping of old dump-sites (US$ 2.8 million).** This sub-component finances closing of old waste dumpsites within the Odaw basin which exacerbate the pollution of the Odaw River through the leachate discharged and the disposal of plastics and other materials into the drains and waterways. The sub-component supports capping of dumpsite at Abloragyei in the Ga East Municipal covering an area of approximately 21 acres and will include a post-closure management plan to ensure that the site has a proper landuse and associated O&M and to prevent any further dumping. Other dump-sites or old landfills identified during the Project implementation will be capped after the relevant studies including environmental and social safeguards assessments have been undertaken and disclosed.

24. **Sub-component 2.4. Extending Final Disposal Capacity for the Greater Accra Region (US$ 20 million).** The Project supports extending final solid waste disposal capacity to accommodate the waste from transfer stations. The current landfill at Kpone is almost at its capacity, but there is a possibility to develop additional cells close to the landfill. The Project supports developing additional cells and urgent actions required at Kpone landfill to improve its operation and maintenance. Once a new site with large capacity to accommodate solid waste from the Greater Accra is identified, the Project will support the development of relevant studies including preliminary designs and environmental and social impact studies for the new site to develop additional capacity needed to ensure sanitary solid waste disposal.

25. **Component 3: Participatory Upgrading of Targeted Flood Prone Low-income Communities, and Local Government Support (US$88.8 million).** This component is jointly led by the Ministry of Inner Cities and Zongo Development, Ministry of Local Government and Rural Development, and participating local governments to: (i) reduce vulnerability and strengthen climate resilience to flooding and enhance public service provision in priority low-income communities; and (ii) improve metropolitan planning and coordination, as well as operation and maintenance of drainage infrastructure in Odaw River Basin. The participating communities have been selected based on the following criteria: (i) vulnerability to flooding; (ii) income levels (with priority given to areas where the poorest reside); (iv) access to basic services; and (v) demonstration effects—ability to show tangible results for public support and replication. Based on the above criteria, the following communities are slated for initial interventions: Nima, Akweteman, and Alogbokie (totaling 68 ha). All participatory planning activities and technical studies under this component will consider
the impacts of climate change.

26. **Sub-component 3.1. Participatory community upgrading (US$43.5 million).** This sub-component supports participatory upgrading to reduce vulnerability and strengthen climate resilience to flooding and to improve living conditions in priority communities including: (i) participatory upgrading of tertiary infrastructure and services prioritized by targeted low-income communities. This include, construction or rehabilitation of drains, local roads, pedestrian paths, community sanitation facilities, street lighting, and possibly open spaces and local markets; and (ii) secondary infrastructure to make the tertiary upgrading viable, such as interceptor sewers and storm water overflows, small wastewater treatment facilities, and possibly micro retention/detention ponds and public open space. Provision of serviced plots and re-blocking may be necessary in some of the targeted communities.

27. **Sub-component 3.2. Community engagement and technical studies (US$ 6.8 million).** This sub-component supports: (i) community engagement led by the local governments, supported by the MICZD, through consultations and social preparation activities; (ii) technical studies such as community-surveying and mapping, planning and engineering design and supervision of upgrading works\(^\text{20}\); and (iii) preparation of safeguards instruments for community upgrading.

28. **Sub-component 3.3. Local government support to improve metropolitan planning, coordination, and operation and maintenance (US$ 8.4 million).** This sub-component supports: (i) establishing and institutionalizing inter-jurisdictional coordination among local governments, starting with the local governments (MMDAs) in Odaw River Basin including the development of a joint Odaw River Basin Management plan\(^\text{21}\) that includes roll out of storm water regulation and flood zoning, and its incorporation into participating local government’s annual Capital Investment Plans and budgets; (ii) assessing and improving O&M of drainage infrastructure at local (MMDA) level and coordination with parent ministries/departments- such as improving local budgeting and revenue generation capacity, and geo-spatial asset management system; and (iii) establishing a Local Capacity Support Fund to support annual grants as an incentive to participating local governments who will utilize O&M budget every year. Such activities will strengthen the capacity of climate resilience at local and Metropolitan level.

29. **Component 4: Project Management and Planning for Next Phase (US $7 million IDA).** This component supports Project management activities of implementing entities and preparatory studies for the subsequent phases of the SOP Program. This includes technical assistance, equipment, training and operating costs for the project coordination unit (PCU), project implementation units (PIUs) in implementing agencies, and Municipal Planning and Coordination Unit (MPCUs) in MMAs, including establishing and implementing a comprehensive monitoring and evaluation (M&E) system, training of the implementing agencies in environmental and social management, grievance redressal, procurement and financial management. The component planning for next Project phase through technical assistance, feasibility studies, and impact evaluations. Other donor/partner funds will be explored to help finance needed feasibility and detailed design studies.

30. **Component 5: Contingent Emergency Response Component (CERC) (US $0 million IDA).** A no-cost Contingent Emergency Response Component (CERC) will be included in accordance with Operational Policy (OP) 10.00, paragraphs 12 and 13. CERC will enable rapid reallocation of funding between Project components, following an emergency. By integrating a CERC into this Project, the level of disaster preparedness is strengthened, eliminating the need for time-

\(^{20}\) Planning and engineering design of tertiary and secondary drains will ensure proper alignment to the main Odaw channel.

\(^{21}\) based on integrated urban water shed management principles that incorporates drainage, sanitation, SWM, DRM, transport, economic development & landuse/zoning.
The immediate availability of financing is critically important to support the Greater Accra in the first response, helping coordination in the early recovery phase, and bridging the gap to longer term recovery and reconstruction phases. CERCs can be used for immediate and emerging risks, such as natural and man-made disasters, conflicts, epidemics and economic shocks. The risk of disasters, particularly flooding is increasing with climate change and urbanization; preparedness with emergency action plans and protocols is thus critical and will help to ensure a higher state of readiness should financing under this component be triggered 22.

E. Implementation

Institutional and Implementation Arrangements

31. Implementation arrangement is established in respecting institutional mandates, the decentralization agenda of government, and ensuring local government ownership and commitment. The core institutions that will be directly involved in the implementation of the Project are the following: MWH, MSWR, MICZD, and MLGRD at the national level; and beneficiary MMAs at local level.

Project Leadership and Oversight

32. An inter-ministerial Project Steering Committee (SC) is set up to provide overall Project oversight, strategic and policy guidance and ensure the highest level of coordination and political support. Representatives of the key ministries (Finance, Works and Housing, Sanitation and Water Resources, Local Government and Rural Development, Roads and Highways, Inner Cities and Zongo Development, Environment, Science, Technology and Innovation, and Lands and Natural Resources), GARCC, NDPC and the beneficiary MMAs will constitute the Project SC. The SC will meet once every quarter, and as and when required.

33. A Project Technical Committee is established to assist the SC to provide overall technical direction and guidance to the implementing agencies, ensure multi-sectoral participation in key decision making on technical matters. Inter-sectoral-jurisdictional technical committee comprises of representatives from all relevant Ministries, Department & Agencies (MDAs) – Hydrological Services Department, Environmental Protection Agency, Land Use and Spatial Planning Authority, Water Resources Commission, Environmental Health and Sanitation Department, Department of Urban Roads, Land Valuation Division, Survey and Mapping Division, Public and Vested Lands Division, Ghana Meteorological Agency, National Disaster Management Organization among others), beneficiary MMAs and relevant civil society and professional organizations. The technical committee will meet more frequently to support day-to-day implementation as needed. The formal membership of the technical committee should be restricted to the core technical departments and other institutions co-opted as and when necessary. Ad hoc sub-technical committees will be constituted to deal with specific issues for each Project component as and when needed.

Project Management

22 Government team will prepare a CERC annex to the Project Implementation Manual (PIM) which will set forth detailed implementation arrangements for the CERC including, inter alia: (i) designation of, terms of reference for and resources to be allocated to, the entity to be responsible for coordination and implementing the CERC; (ii) specific activities which may be included in the CERC, Eligible Expenditures required therefore, and any procedures for such inclusion; (iii) financial management arrangements for the CERC; (iv) procurement methods and procedures for Emergency Expenditures to be financed under the CERC; (v) documentation required for withdrawals of Emergency Expenditures; (vi) environmental and social safeguard management frameworks for the CERC, consistent with the Bank’s policies on the matter; and (vii) any other arrangements necessary to ensure proper coordination and implementation of the CERC.
34. The main responsibilities for the day-to-day implementation of the components are as follows: A Project Coordination Unit (PCU) is hosted within the MWH. The PCU is responsible for overall management of implementation, coordination, monitoring and evaluation, reporting, fiduciary, safeguards, and grievance redress. This is the point of contact with the World Bank. To close gaps in the capacity of the PCU, experience consultants are being recruited including Project coordinator, engineer, procurement specialist, finance management specialist, M&E specialist, environmental specialist, social development specialist as well as communication specialist, and should be fully on board before the Project becomes effective. These consultancy positions would be gradually replaced by government officers as their internal capacities improve.

35. Component 1 is implemented by the Ministry of Works and Housing (MWH), specifically by Hydrological Services Department (HSD) for activities related to sub-component 1.1 (drainage infrastructure) and in close collaboration with the National Disaster Management Organization (NADMO), Water Resources Commission (WRC)24 and Ghana Meteorological Agency (GMET) for sub-component 1.2 (early warning system). Component 2 is led by Ministry of Sanitation and Water Resources (MSWR), specifically by the Environmental Health and Sanitation Directorate (EHS) in close collaboration with beneficiary MMAs and communities. Sub-components 3.1 and 3.2 are led by Ministry of Inner Cities and Zongo Development (MICZD), specifically the Project, Planning, Monitoring and Evaluation Directorate (PPMED). The respective beneficiary MMAs are implementing the upgrading works, in close collaboration with the targeted communities. Component 3.3 is led by the Ministry of Local Government and Rural Development (MLGRD), specifically the Project, Planning, Monitoring and Evaluation Directorate (PPMED), in close collaboration with NDPC, GARCC and beneficiary MMAs.

36. Each implementing agency has constituted dedicated Project Implementation Unit (PIU) to manage and facilitate implementation of the component it is leading. The PIUs will work closely with and report to the PCU. PIUs will comprise of government’s internal procurement, accountant, and technical staff as well as environmental specialist and social development specialist. Procurement and contract management for sub-component activities will be undertaken in respective implementing Ministry with support from PCU.

37. At MMA level, implementation management is mainstreamed into the existing Planning Coordinating Units (which is made up of various departments of the assembly) in each MMA. The Planning Coordination Unit (MPCU) within each MMA will implement, operate and maintain the respective Project activities. Procurement and contract management for sub-component activities will be undertaken in respective MMA with support from PCU and Ministries. Detailed implementation arrangements are described in Annex 2, Project Appraisal Document.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The project will focus on structural and non-structural flood interventions and solid waste management in the Odaw River basin, which is part of the larger Korle Chemu catchment, draining the central, densely

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23 More than one area of expertise may reside in an individual. Other specialists, such as dam specialist, are as needed on a part time basis.

24 WRC has been designated to lead the coordination of component 1.2 under the overall guidance of MWH for overall coordination of component 1.
populated and flood-affected areas of greater Accra. The main water body in the basin is Odaw River and its tributaries Nima, Onyasia, Dakobi and Ado draining the major urbanized areas of Accra, including Accra Metropolitan Assembly, Ga East, Ga West and Adentan Municipal Assemblies further upstream. The Odaw river drains to the sea via Korle lagoon, with the Chemu lagoon being a minor outlet. Many of the drainage channels are poorly developed and maintained. Erosion and siltation, sometimes driven by human activities are among the major problems along the channels. Solid wastes are also a major problem clogging channels and significantly contributing to flooding. Consequently, the low-lying areas flood frequently. In the sixties work started in connection with the Korle Lagoon and the Odaw River, but work was eventually stopped, and major watercourses and the lagoon silted up due to lack of maintenance. Planned city developments also play a role: around 2004 a weir with flap gates has been built in the outlet of Odaw river to Korle Lagoon to allow land development upstream eliminating an extensive flood retention area. In recent decades, the infiltration capacity of the basin surface has changed towards highly urbanized nearly impervious conditions with high runoff coefficients and continuously reducing retention capacity. The drains traverse highly built up and densely populated areas without adequate infrastructure for sanitation and waste management. As such, the drains are commonly used as garbage dumps and together with siltation choke the channels, further reducing the discharge capacities as maintenance is generally lacking. Finally, the lagoon outlets to the sea are silted up. The actual storage and drainage capacity is therefore insufficient to adequately drain the storm water. Component 3 activities will occur in informal and inner-city neighborhoods – Nima, Akweteman, and Alogboshie – all located within the greater metropolitan area of Accra. The built environment in these communities are mostly congested and poorly planned. Most households in Alogboshie, for example, live in improvised homes with little or malfunctioning urban infrastructure including access roads, pedestrian pathways, water and sanitation facilities.

G. Environmental and Social Safeguards Specialists on the Team

Josefo Tuyor, Environmental Specialist  
Asferachew Abate Abebe, Environmental Specialist  
Gloria Malia Mahama, Social Specialist  
Anita Bimunka Takura Tingbani, Environmental Specialist  
Alidu Babatu Adam, Social Specialist

<table>
<thead>
<tr>
<th>SAFEGUARD POLICIES THAT MIGHT APPLY</th>
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<tbody>
<tr>
<td><strong>Safeguard Policies</strong></td>
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<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
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</tbody>
</table>
populated areas and consequently potential environmental and social risks and impacts would have broader spatial coverage beyond the physical works.

The project triggers OP4.01 on Environmental Assessment due to the structural investments to be financed under Components 1, 2 and 3, including construction/rehabilitation of drainage, anti-erosion works, retention ponds, dredging of the Odaw river channel, construction of solid waste transfer and/or disposal facilities, capping of an existing dumpsite, and upgrading of some urban infrastructure in selected informal settlements.

These activities have the potential to result in large-scale negative environmental and social impacts such as occupational and community health & safety issues from dredging and solid waste management activities, including transport and disposal of dredge materials and residual solid waste into the final disposal sites. The activities are also likely to cause displacement and involuntary resettlement, although largely temporary (see descriptions of potential negative impacts under section A.1 below based on the ESIAs and RAP and management measures in section A.4). That said, the project is expected to improve the environmental and social conditions of the clogged and polluted drains and the management of garbage served by the project, which would have long term positive impacts on the people in the project areas.

<table>
<thead>
<tr>
<th>Performance Standards for Private Sector Activities OP/BP 4.03</th>
<th>No</th>
<th>There is no private sector involvement in the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
<td>Project activities are located along the Odaw river basin and can impact on Odaw River and a number of tributaries as well as the Korle and Chemu lagoons and eventually the coastal waters of Accra. The negative impacts relate to dredging activities. However, over the medium to long term impacts are expected to be positive as dredging, regular maintenance of drains and improved solid waste management are expected to revive these water bodies and improve their quality.</td>
</tr>
<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td>This OP is not triggered because project activities are located in an urban setting and do not involve</td>
</tr>
<tr>
<td>OP/BP</td>
<td>Yes/No</td>
<td>Details</td>
</tr>
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<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
<td>The project will not involve purchase and/or use of pesticides or pesticide equipment. The policy is not triggered.</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>Yes</td>
<td>This policy is triggered as dredging and rehabilitation works of drains and channels may result in chance finds of physical cultural resources. In addition, a section of the heavily silted Korle lagoon to be dredged is considered sacred by the local Ga community in the area. The chiefs and people of the community were consulted during the the ESIA process on the proposed dredging. It was agreed that dredging will be coordinated with the locals and their leaders to ensure they agree with timing and specific cultural pacification measures prior to dredging.</td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td>The project is located in the greater Accra area, a highly urbanized area without IPs. This OP is not triggered.</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
<td>Based on field assessments and ESIA results, displacement and involuntary resettlement are expected due to the proposed structural interventions such as capping of wastedumps, construction of retention ponds, and infrastructure upgrade and improvement in informal settlements (e.g. construction of pedestrian paths, local roads, and reblocking). In addition, minimal disruption of access and economic activities may occur during bridge replacement and dredging, although alternative access routes will be provided during works (see, ESMPs). Given the potential for social risks and impacts, this policy is triggered. The requirements of the policy combined with the country’s land acquisition laws provide guidance for assessing and mitigating the identified risks. Consistent with OP 4.12, design options and works will be explored to avoid or minimize involuntary resettlement especially from the proposed dredging and urban upgrade activities. As such, physical and economic displacement will be largely temporary. See section A.4 for details on RAPs and RPF for project activities.</td>
</tr>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>Yes</td>
<td>The Project will finance construction of water retention structures with heights between 4m to</td>
</tr>
</tbody>
</table>
5.5m as one of the flood protection measures to retain water during flooding. The structures are considered small dams for which generic dam safety measures will be built into the design to be carried out by a qualified engineer. In addition, the ESIA for each of the retention pond will assess risks and impacts to local communities and assets in case of failure.

<table>
<thead>
<tr>
<th>Projects on International Waterways</th>
<th>OP/BP 7.50</th>
<th>No</th>
<th>The Project is not located in any international waterways. Thus this policy is not triggered.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>No</td>
<td>None of the intervention sites are in disputed areas. The policy is not triggered.</td>
<td></td>
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### KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

#### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The project activities that would have potential to cause adverse environmental and social risks and impacts are (i) the dredging of the Odaw channel that is heavily silted and clogged with garbage; and, (ii) solid waste management involving construction and operation of a waste transfer station (WTS) to segregate and recycle wastes and reduce the residuals going into the landfill, capping of Abloragyei dumpsite in the Ga East Municipal Assembly and improvements at the existing Kpone landfill to re-channel the leaking leachate into the leachate treatment ponds and capping of the cells that are already full. Other project activities to be fully defined during project implementation include urgent repairs of selected sections of the Odaw channel, community-based solid waste management and community-based and participatory slum upgrading activities.

Based on the ESIs conducted for dredging, capping of Abloragyei dumpsite and WTS, the following are main risks and impacts identified:

Dredging of the Odaw basin may involve generation of about 1,084,091 cubic meters of silt accumulating in the basin and the removal of tons of garbage accumulating in the channel, both of which reduce the efficiency of the channel to drain water and thus significantly contributing to flooding in Accra. Based on the results of the analysis, the sediments in the Odaw basin are 80% sand and are basically non-hazardous with levels of pesticides, hydrocarbons and heavy metals below international standards. Based on these qualities, the management plan for the dredge materials will be to recover sand first to reduce the volume of materials going to the final disposal site but also to generate economic benefits from the recovered sand. The residual dredge materials after sand recovery will then be used as covering materials for the Kpone landfill, capping materials for old dumpsites and/or filling/reclaiming materials for low lying areas. That said, there are health and safety issues during dredging, transport and temporary storage of dredge materials due to very foul smell of the dredge sediment and increased traffic resulting from transport of dredge materials that passes through narrow alleys and congested areas. The volume and quality of dredge materials, however, are not a concern as volume going to the final disposal site will be reduced after recovering sand from the dredge materials while sediment quality indicated the absence of pesticides, hydrocarbons and heavy metals at the
levels that will be hazardous to human and ecosystems health.

Solid waste management (WTS, capping of Abloragyei open dumpsite, improving Kpone landfill) while expected to improve the environmental conditions will also have adverse impacts if not carried out properly. The WTS is a temporary transfer station where waste will be segregated and recycled to reduce the volume of residuals going into the landfill. However, if the WTS is not operated and maintained properly it could turn into an open dumpsite and could pose serious health risks to workers. The communities though are quite far from the WTS. On one hand, if improvements to the Kpone landfill are not designed and done properly leakage of leachate will continue and operation of the landfill will go beyond its capacity. For the existing dumpsite at Abloragyei, which is not engineered, the capping works pose the risk of potential failure and resulting explosions if not technically engineered to capture and release the gas being generated at the landfill site. Diversion and collection of leachate is also key in ensuring that the leachate does not pollute surface and ground watersources as well as contaminate adjoininglands.

On social risks and impacts, the construction of retention ponds, bridge replacement and dredging of the Odaw channel (Component 1); Capping of dumpsites (Component 2); and proposed infrastructure upgrade and improvement in informal settlements (Component 3) will result in physical and economic displacement. Works on bridge replacement, dredging and transport of dredge materials and garbage will temporarily disrupt local economic activities and impact vendors, hawkers, squatters, and mechanic stations. Access routes for machinery during dredging may require temporary removal of vendor sheds and shacks occupying the 50m buffer of the channel (e.g. Avenor-Agbogbloshie stretch). On capping, field assessments and ESIA results point to the potential for temporary displacement of 21 PAPs who currently hold adjoining lands to the site. One improvised home (shack) belonging to squatters will be permanently displaced. Designs and specific sites for component 3 activities are yet to be determined. Notwithstanding, infrastructure upgrading activities, and in some cases reblocking/re-organizing of space are expected to induce temporary or permanent physical displacements.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The project activities involve the channel widening and dredging of selected portions of the Odaw river. There is a high risk of erosion occurring in these areas after the project has ended if the project design does not make provisions for river training in these sections. There is also a potential for the siltation rate to increase if project activities are not properly designed to reduce further sediment movement into the river channel.

In terms of waste transfer station there is a potential for transfer stations to metamorphose into unauthorized dump site if O & M of this station fails or is not carried out properly. The activity also has the potential to attract waste pickers and scavengers into the waste transfer station after the project has closed.

On one hand, if project activities are carried out properly and completed facilities are operated and well-maintained and regular dredging is carried based on performance-based contracting, environmental quality and overall living conditions in the project are expected to improve.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Several alternatives have been looked into in terms of dredging, WTS and capping.

For dredging, the following alternatives were studied and considered: (i) dredging methods: mechanical versus hydraulic; (ii) disposal options depending on the quality of the dredge materials: open water disposal, capping & contained water disposal, confined disposal facilities, strip mine reclamation/landfill covering for solid waste, use as fill material and us for habitat restoration; and, (iii) no dredging/no project. Mechanical dredging was selected and
disposal will through strip mine reclamation/landfill covering and use as filling materials. It is expected that the selected dredging and dredge-waste disposal methods will help minimize impacts on people.

For the waste transfer station, the following options were considered: (i) site location: land owned by the Univ. of Ghana versus land owned by Atomic Energy Commission; (ii) WTS versus direct landfelling; and (iii) process options: unloading to storage without compaction, surge pit transfer station and direct tip transfer station; and, (iv) no WTS. The land owned by the Univ. of Ghana was selected for the site of the WTS while unloading to storage without compaction was selected for the process.

For the capping of Abloragyie dumpsite, the following alternatives were analyzed and considered: (i) no project alternative; (ii) types of capping material; (iii) sourcing of laterite for capping; (iv) pre-cap dump heights; (v) thickness of core capping material; (vi) post-cap dumpsite use scenarios; (vii) handling of methane gas produced; and, (viii) on-site and off-site leachate treatment alternatives. The final options are well spelled out in the ESIA.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The project has prepared Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) for activities yet to be fully defined and prepared during implementation (repair works, small retention ponds, community-based solid waste management and community-based participatory slum upgrading. These activities will be screened following the ESMF as soon as their locations and exacts details are known and appropriate assessments will be undertaken and instruments prepared with specific measures included in the Environmental and Social Management Plan (ESMP). Environmental impact assessments (ESIAs) were prepared for the dredging of the Odaw basin, waste transfer station and capping of Abloragyie dumpsite. The ESMP for dredging requires contractors to properly contain and manage dredging operation, including sand recovery from the dredge materials, proper hauling and transport and disposal of residual dredge materials to final disposal site based on the non-hazardous quality of the sediment. Residual dredge materials after sand recovery will be used as covering materials for the Kpone landfill, capping materials for closing dumpsites and filling materials for low lying areas. Likewise, the ESIAs for capping and WTS have comprehensive ESMPs that put forward the management measures to be included in the design, construction and O & M of these facilities. Specifically for both capping and WTS, leachate collection and treatment are included in the design and operation of these facilities. The environmental audit of the Kpone landfill was also updated to inform the final disposal of residual wastes coming from the WTS and to also identify improvement measures that can be financed by the project such as re-channeling the leaking leachate into the leachate pond and treatment system and possible expansion of the engineered cells. Measures to improve operation and maintenance of the Kpone landfill are also covered in the ESMP.

RAP is being prepared to address involuntary resettlement related to capping of dumpsite. The designs, scope, and in few cases specific sites for some activities (under component 3) are not known at this point. As such a Resettlement Framework (RF) has been prepared, cleared, and disclosed both in-country (May 30, 2018) and on the Bank infoSHOP (June 8, 2018). The RF to be used along with the ESMF outline the guiding principles and procedures assessing and mitigating potential adverse social risks and impact of project activities. The ESMF includes a safeguards risks screening sheet. When sites for works are clearly identified, they will be screened, and if appropriate, Resettlement Action Plans (RAPs) will be prepared and implemented prior to commencement of works. The RF includes indicative measures to compensate and support livelihood restoration of PAPs where applicable. Site for the waste transfer station is publicly-owned and incumbrance free. No RAP is required. On a positive note, the construction of new cells for waste dumps at the Kpone landfill site will extend waste picking opportunities for waste pickers. The design for the
site will include specific health and safety consideration for the waste pickers. A Project Coordination Unit (PCU) is hosted within the MWH. The PCU is responsible for overall management of implementation, coordination, monitoring and evaluation, reporting, fiduciary, safeguards, and grievance redress. Environmental specialist and social development specialist are in the recruitment process and should be fully on board before the project becomes effective.

Component 1 is implemented by the Ministry of Works and Housing (MWH), specifically by Hydrological Services Department (HSD) for activities related to sub-component 1.1 (drainage infrastructure) and in close collaboration with the National Disaster Management Organization (NADMO), Water Resources Commission (WRC) and Ghana Meteorological Agency (GMET) for sub-component 1.2 (early warning system). Component 2 is led by Ministry of Sanitation and Water Resources (MSWR), specifically by the Environmental Health and Sanitation Directorate (EHSD) in close collaboration with beneficiary MMAs and communities. Component 3.1 and 3.2 is led by Ministry of Inner Cities and Zongo Development (MICZD), specifically the Project, Planning, Monitoring and Evaluation Directorate (PPMED), in close collaboration with beneficiary MMAs and communities. Component 3.3 is led by the Ministry of Local Government and Rural Development (MLGRD), specifically the Project, Planning, Monitoring and Evaluation Directorate (PPMED), in close collaboration with NDPC, GARCC and beneficiary MMAs. Each implementing agency has constituted dedicated Project Implementation Unit (PIUs) to manage and facilitate implementation of the component it is leading. The PIUs will work closely with and report to the PCU. PIUs comprise of a Project Lead and dedicated officers responsible for Financial Management, Procurement, Environmental Specialist, Social Development Specialist, and M&E.

At MMA level, implementation management is mainstreamed into the existing Planning Coordinating Units (which is made up of various departments of the assembly) in each MMA. Dedicated local government project support units (LPSUs) from among the membership of the Planning Coordination Unit within each MMA carry our project specific activities.

The project has budgeted for the capacity building of the PCU, PIUs and MMAs involve project implementation.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key project stakeholders are the project-affected people and residents served by the project, including the Accra, Metropolitan Assembly, the Ga East Municipal Assembly, Environmental Protection Agency, Tema Engineered Sanitary Landfill, Kpone, Abloragyei Chief, Abloragyei Residents’ Association, Waste Landfill Company Limited, Amanee Waste and General Service Limited, Honest Waste Limited, Tema Metropolitan Assembly, Waste Management Department (TMA, WMD), University of Ghana, Ghana Atomic Energy Commission. These stakeholders are consulted during the preparation of the terms of reference for the assessments and scoping report and when the draft ESIAs become available. The project design (component 3.2) includes activities to facilitate consultation and disclosure. At the government level, the steering and technical committees include representatives from departments and agencies with specific responsibilities for policy and regulation in relation to key project activities (see section E above). At the community level, component 3.2 will support MMAs and community organizations to consult and disclose key project information to PAPs especially in the selected informal settlements.

The ESMF, ESIAs, RPF, ARAP, and Environmental and Social Audit were consulted upon and publicly disclosed both in the Bank’s Intranet website and In-country. The following EA instruments were publicly disclosed: (i) ESMF (Bank’s Intranet website, June 8, 2018; in country, May 30, 2018); (ii) ESIA for capping of Abloragyei dumpsite (Bank’s Intranet...
The World Bank
Greater Accra Climate Resilient and Integrated Development Project (P164330)

website: December 18, 2018; In-country, December 18, 2018); (iii) ESIA for the Waste Transfer Station (Bank’s Intranet website, January 16, 2019; In-country, February 6, 2019); (iv) Environmental and Social Audit of the Kpone landfill (Bank’s Intranet website, February 25, 2019; In-country, February 26, 2019); (v) ESIA for dredging of the Odaw Basin (Bank’s Intranet website, February 28, 2019; In-country, February 28, 2019); (vi) RPF (Bank’s Intranet website, June 8, 2018; In-country, May 30, 2018); and, (vii) ARAP for Capping of Dumpsite (Bank’s Intranet website, February 27, 2019; In-country, February 25, 2019).

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

<table>
<thead>
<tr>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
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<tbody>
<tr>
<td>07-Jun-2018</td>
<td>08-Jun-2018</td>
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For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors

29-Jan-2019

"In country" Disclosure

Ghana
30-May-2018

Comments

Resettlement Action Plan/Framework/Policy Process

<table>
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"In country" Disclosure

Ghana
30-May-2018

Comments

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?
Yes
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

**OP/BP 4.04 - Natural Habitats**

Would the project result in any significant conversion or degradation of critical natural habitats?
No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?
NA

**OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?
Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?
Yes

**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
Yes

**OP/BP 4.37 - Safety of Dams**

Have dam safety plans been prepared?
Yes

Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?
NA

Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?
NA

**The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank for disclosure?
Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

CONTACT POINT

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Yan F. Zhang
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Borrower/Client/Recipient

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APPROVAL

<table>
<thead>
<tr>
<th>Task Team Leader(s):</th>
<th>Asmita Tiwari</th>
</tr>
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<tr>
<td></td>
<td>Yan F. Zhang</td>
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</tbody>
</table>

Approved By

<table>
<thead>
<tr>
<th>Safeguards Advisor:</th>
<th>Maman-Sani Issa</th>
<th>11-Mar-2019</th>
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<tr>
<td>Practice Manager/Manager:</td>
<td>Meskerem Brhane</td>
<td>11-Mar-2019</td>
</tr>
<tr>
<td>Country Director:</td>
<td>Henry G. Kerali</td>
<td>17-Mar-2019</td>
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