Project Information Document/
Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 11-Jun-2018 | Report No: PIDISDSC22415
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.

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

**SUMMARY**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Cost</td>
<td>100.00</td>
</tr>
<tr>
<td>Total Financing</td>
<td>100.00</td>
</tr>
<tr>
<td>of which IBRD/IDA</td>
<td>100.00</td>
</tr>
<tr>
<td>Financing Gap</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**DETAILS**

World Bank Group Financing

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Development Association (IDA)</td>
<td>100.00</td>
</tr>
<tr>
<td>IDA Credit</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Environmental Assessment Category
A - Full Assessment

Concept Review Decision
Track II-The review did authorize the preparation to continue

Note to Task Teams: End of system generated content, document is editable from here.

Other Decision (as needed)

B. Introduction and Context

Country Context

1. Ghana is making strong efforts to regain and sustain its robust economic growth over the last few decades, which has translated into substantial poverty reduction and socio-economic benefits, despite recent challenges. Ghana’s long period of strong and sustained growth since the early 2000s to 2010 was underpinned by positive terms of trade, substantial capital inflows, and a reputation for robust democratic institution. The average GDP growth rate of 5.7 percent from 2001 to 2010 translated into substantial poverty reduction—the national poverty rate fell from 52 percent in 1992 to 29 percent in 2006, and was reduced further to 24.2 percent by 2013. Following the start of oil production in 2011, Ghana had accelerated economic growth, averaging a remarkable 10.2 percent per year which enabled the country to graduate from low-income to lower-middle-income status. In 2014, however, growth fell to just 4 percent as the country was buffeted by a series of macroeconomic shocks giving rise to substantial domestic and external imbalances. While the external shocks are mainly underlined by vulnerability to global commodity and financial markets, deficiencies in macroeconomic and public financial management (PFM) policies choices and outcomes have underscored Ghana’s challenges. The government adopted a multiyear fiscal stabilization plan in 2015, with the support from the IMF, the World Bank and other Development Partners. With proactive measures from the Government, Ghana’s medium-term growth outlook remains positive with 7.5 percent growth projected for 2018, mainly driven by the expected relative strengthening of oil prices and rising oil production.

2. Ghana’s rapid urbanization is linked with better economic performance particularly in large cities including Greater Accra, contributing greatly towards Ghana’s transition into a Lower Middle Income Country status. More than 53% of Ghana’s total population is living in urban areas and it is projected to reach 65% by 2030—by which time 22.6 million people will be living in urban areas. Rapid urbanization over the past three decades has coincided with rapid GDP growth, boosting job creation, increasing human capital, decreasing poverty, expanding economic opportunities and improving living conditions. Ghana’s urban system is concentrated around three main metropolitan areas that constitute more than 50% of the total urban population and are projected to grow at a rate of 5% annually: Greater Accra, Kumasi and Sekondi-Takoradi. The Greater Accra Metropolitan Area (GAMA) alone hosts 20% of Ghana’s population and up to 25% of GDP including critical economic assets. Currently home to 4.6 million, it is projected to house close to 11 million people by 2050.

3. Provision of basic services, infrastructure and housing have not kept up with rapid growth in the Greater Accra Region, contributing to higher urban stresses, disasters and climate change impacts. Greater Accra is one of the
most sprawling cities in West Africa. This inefficient urban expansion coupled with limited local government capacity poses major challenges to the provision, maintenance, management and coordination of infrastructure and service delivery, which is further exacerbated by a complex land tenure and land market system. The proportion of urban residents in Ghana with access to piped water experienced a downward trend within the decade of 2000 to 2010: Accra was the worst off with a decline of −22.2 percentage points in the share of the population with access to piped water, followed by Kumasi (−7.7 percentage points) and Tema (−5.7 percentage points). A recent World Bank report identified poor sanitation, proliferation of informal settlements, high unemployment, land and chieftaincy conflicts, and water scarcity as key urban stresses. These challenges make the city susceptible to many disasters including floods, cholera outbreaks, fires and building collapse.

4. **Ghana has pursued a policy of decentralization since the 1990s; but challenges remain as to enabling effective service delivery at MMDA level.** Decentralization has helped create Metropolitan, Municipal and District Assemblies (MMDAs) that are on the front line of delivering services to their citizens. The intergovernmental fiscal framework provides substantial financing for MMDAs, with the District Assemblies Common Fund (DACF) providing reliable resources to them. However, much needs to be done with regards to political decentralization and accountability, incomplete fiscal decentralization reforms, insufficient fiscal autonomy of local governments, and delays in administrative decentralization. Furthermore, the current local government system does not provide for metropolitan systems of government. There are no clear coordination mechanisms for integrated urban planning in the metropolitan area, nor are there mechanisms for coordinating service delivery that have network or spill-over effects among the more than sixteen local governments that make up the Greater Accra Region. In addition, budgetary constraints of the different agencies further hamper a sustainable maintenance and operation of services. This gap increases the risks - particularly in Ghana’s two metropolitan areas Accra and Kumasi - for inefficient urban management and inability to resolve the urban challenges as cross-jurisdictional planning and project implementation becomes complex with multiple different MMDAs involved. The new Spatial Development Framework, if implemented efficiently, provides a new opportunity for better and more coordinated spatial planning.

**Sectoral and Institutional Context**

5. **The new Government has committed to achieve clean, resilient, and inclusive urban development in Greater Accra.** The thrust of the new government’s agenda on the development of Accra is to facilitate the broad-based social and economic development of deprived communities (including inner city and Zongo communities) through equitable public resource allocation and concerted deployment of pragmatic actions. Another important element of the government’s urban development agenda is to ensure sustainable and effective management of liquid and solid waste to reduce pollution of water bodies, promote behavioral change programs and increase access to safe hygiene practices. To further this agenda and to bring focus to its implementation, the government has created two new ministries, the Ministry of Inner Cities and Zongo Development (MoICZD) and the Ministry of Sanitation and Water Resources (MoSWR). The government is expediting processes for the establishment of a National Sanitation Agency (by end of December 2017) under the MoSWR, with regional and MMDA level management structures, to spearhead its “Clean Ghana” challenge. For the metropolitan region of Accra, flood management and the protection of the population against perennial floods is also a key government priority. The new Government will have to address challenges related with integrated planning and implementation of networked services and

---

1 WB, 2015: Rising through Cities in Ghana: Ghana Urbanization Review Overview Report
2 WB, 2017: Enhancing Urban Resilience in Greater Accra Metropolitan Areas, Accra
3 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.
infrastructure, primarily in low income areas, with focus on following areas:

**Drainage and flood management**

6. About 60% of Accra's population is contained within the Odaw river basin, and is subject to chronic flooding. This flooding is a major drag on the economy and has severe health impacts. The June 3, 2015 flooding and disaster is an example of the on-going problem, and was aggravated by the blockage of primary and secondary drains by non-degradable solid waste materials and silt. Continuous rainfall led to one of the worst flooding events in GAMMA's history, reported as one of the 10 deadliest disasters of 2015 worldwide. The floods affected 52,622 people and also caused leakage at a filling station, resulting in an explosion that left 150 casualties. Beyond the toll on human life, damages across the housing, transport, water and sanitation sectors amounted to US$55 million, while the needs for reconstruction were estimated at US$105 million. Greater Accra Region’s response to flooding has been primarily reactive with the National Disaster Management Organization (NADMO), and individual MMDAs responding with emergency and relief services. However, a lack of proactive efforts on prevention and early warning makes the region constantly susceptible to a wide range of shocks and stresses. This includes a lack of contingency funding and risk insurance to deal with disasters, forcing MMDAs to divert funding from other sectors into the response. Additionally, the effects of climate change will exacerbate Greater Accra's vulnerabilities, increasing the frequency and intensity of floods, sea-level rise, and likely increase in rural-urban migration due to higher drought impacts in the northern parts of the country. All of above challenges call for substantial investments to improve the existing drainage and flood protection network, while managing the urban expansion and rural-urban migration to Greater Accra in a climate sensitive manner.

**Environmental Sanitation and Solid Waste Management**

7. Poor environmental sanitation has become a significant urban challenge for the Greater Accra Region in the past decade. Open defecation and discharge of raw faecal sludge into open drains, river bodies and open spaces are causing health hazards and environmental degradation in Greater Accra Region. These problems have been exacerbated by factors such as poorly managed land use, unregulated development of settlements, and inadequate urban solid and liquid waste management. The key issues around solid waste management are (i) lack of community awareness, (ii) absence of effective collection systems; and (iii) limited disposal capacity. The insufficient waste collection is exacerbated by the dumping of waste around the city by informal collectors who collect waste from householders. These materials end up in open drains, watercourses and streams. Accra's only sanitary landfill (Tema or Kpone Landfill) is full, so the city urgently requires additional capacity either through extension of the Kpone landfill and/or through the development of alternative sites. A number of other disposal sites are active across the city. However, these are currently operated as dumpsites and are causing significant local environmental and health impacts.

**Informal Settlements and Zongo Development**

8. Informal settlements in Greater Accra region are associated with overcrowding, sub-standard housing, poor access to basic services, and high exposure to flooding, cholera, and fire events. Slum dwellers make up 38.4

---

4 Munich Re, 2016
6 Ministry of Environment, Science, Technology and Innovation (2015); June 3,2015 Floods in Accra, Assessment Summary
percent\textsuperscript{7} of the population and occupy 29.6 percent of the built up area within Accra Metropolitan Area (AMA)\textsuperscript{8}. The population density of slums in Accra is 607.8 people per hectare, which is much higher than the population density for the city as a whole (250.7 persons per hectare). In AMA only 5,350 units (21.4\%) of the estimated annual 25,000 housing units need in the metropolis are provided.\textsuperscript{9} The provision of water and sanitation and hygiene services to these areas is inadequate and unable to keep pace with demand. The daily shortfall of water supply to Accra is 130,000 cubic meters and water is relatively costly for the urban poor. (UN Habitat, 2011). Access to basic sanitation and solid waste services is also a challenge. About 46\% of households in GAMA do not have access to improved household toilets (flush toilet or KVIP) and these households are mostly located in the slums. Current solid waste services do not provide adequately for informal settlements, hence the indiscriminate disposal of waste in open spaces and drains.\textsuperscript{10} The urban poor in Accra are more likely to settle in low-lying or unwanted areas of the city and are more exposed to flooding while having relatively less coping capacity than the non-poor. A study conducted by UN Habitat in 2011 to assess the number of census Enumeration Areas (EA) affected by flooding\textsuperscript{11} in and around Odaw River in central Accra found that out of 172,000 exposed to flooding, 33,000 or close to 20\% of the those exposed to flooding live in EAs with highest slum index\textsuperscript{12}.

**Integrated planning process and the need for dedicated investments in Greater Accra Region**

9. **The Government has initiated a number of reforms in institutional arrangements, and planning process to ensure a clean, resilient and inclusive development in Greater Accra Region.** An Integrated Urban Environmental Sanitation Master Plan (IUESMP) is being prepared, under the GAMA Water and Sanitation Project, to solve existing environmental sanitation and drainage challenges, and provide guidance for the implementation of future environmental sanitation and drainage improvements. Proposals for an Emergency Solid Waste Management Improvement Programme\textsuperscript{13} (E-SWMIP) have also been prepared by the Ministry of Local Government and Rural Development. A metropolitan land use and transport plan for Greater Accra Region is being developed with support from African Development Bank and Cities Alliance. At institutional level, the Government is considering setting up a Greater Accra Sanitation to address the major sectoral coordination needs in the metropolitan area. Its scope includes both wastewater and storm water drainage, and solid waste management due to the close interdependencies of these functions for health, sanitation, and flood prevention. Financial and technical support to these reforms will be critical in achieving transformative, effective and sustainable impacts in the Greater Accra Region.

Relationship to CPF

10. **The proposed project contributes to Ghana’s National Development Strategy and Ghana’s CPF.** Ghana’s National Development Strategy has identified the following as a key national priority: sustainable, spatially integrated, and orderly development of urban settlements with adequate housing, infrastructure and services, efficient institutions, and a sound living and working environment for all people to support the rapid socioeconomic development of the

---

\textsuperscript{7} This estimate is based on a study conducted by National Research Council in 2007.

\textsuperscript{8} Accra Metropolitan Area (AMA) is one of the local governments in Greater Accra Region. There are different estimates of number of local jurisdictions in Greater Accra Region ranging from 11 (commonly called Greater Accra Metropolitan Area) to more than 16.

\textsuperscript{9} UN Habitat, 2011: Participatory Slum Upgrading and Prevention, Millennium City of Accra, Ghana

\textsuperscript{10} World Bank, 2017: Enhancing Urban Resilience in the Greater Accra Metropolitan Area, CityStrength Resilient Cities Programme

\textsuperscript{11} Population at risk to flooding in Accra were identified using a simple assumption that only the census enumeration areas (EAs) from the 2000 Ghana Census nearest the stream channels would be affected.

\textsuperscript{12} UN-Habitat Slum Index considers following factors: inadequate access to safe water; inadequate access to sanitation and other infrastructure; poor structural quality of housing; overcrowding; and insecure residential status.

country. This priority is also reflected in the Ghana’s FY 13- FY16 (extended to FY18) Country Partnership Strategy which identifies investments in urban areas among its three strategic pillars. The National Urban Policy, the National Decentralization Policy, the National Spatial Development Framework (2016 – 2035) and the National Housing Policy lays out the Government’s vision for urbanization, for developing viable urban institutions and local governments, and for the provision of adequate housing for its citizens in line with the SDG 11. The Government also envisions a country in which everyone is able to access safe, secure, decent and affordable housing either owned or rented.

11. The proposed project also contributes to the Bank’s Twin Goals of ending extreme poverty and boosting shared prosperity, and to the sustainable development goal (SDG) on cities. Enhancing infrastructure investment is critical to achieving the World Bank’s Twin goals as well as to increasing the resilience of cities. The project will help address inequality by focusing project investments on poor neighborhoods in targeted informal settlements and Zongos. The project will contribute to achieving goal 11 (sustainable cities and communities) of the recently adopted SDGs, particularly the targets on access to services and slum upgrading and the targets related to inclusive urbanization and participatory planning. The proposed project also contributes to the following higher goals: (i) Pillar 2 of the World Bank Strategy for Africa14 ‘Vulnerability and Resilience’ which emphasizes the need to address Africa’s infrastructure deficiencies as essential to achieving long-term sustainable growth; (ii) the Africa Regional Disaster Risk Reduction Strategy which has a main goal of attaining sustainable development and poverty eradication through the reduction of social, economic and environmental impacts of disasters; and (iii) the World Bank African Strategy for Climate Adaption15, namely: “supporting ongoing development efforts while making them more resilient to climatic risks” and “linking development, climate change adaptation, and disaster risk reduction as one integrated agenda”.

12. In addition, the proposed project also supports the Bank’s strategy of “inclusive and resilient cities” by focusing on: (i) social inclusion by improving the integration of informal settlements within the city fabric through better access to services and infrastructure by strengthening mechanisms for participation, and ensuring community involvement in decision-making concerning their living conditions and; and (ii) disaster and climate resilience by channeling investments that minimize the impacts of disasters and other shocks such as flooding, fire, and cholera that particularly affect the urban poor.

C. Proposed Development Objective(s)

Note to Task Teams: The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

The objectives of the project are to (i) strengthen flood and solid waste management and (ii) improve the living conditions of the most vulnerable communities in the Odaw basin in Greater Accra Region.

Key Results (From PCN)

(i) People in the targeted areas benefitting from improved flood protection within the drainage basin (number of beneficiaries, and area of flood protected land in hectares);

---

14 Africa’s Future and the World Bank’s Support to It, March 2011
(ii) Direct project beneficiaries (number) of which female (50 percent);
(iii) Solid wastes collected from targeted communities annually (metric tons per year) and people benefiting from improved waste collection (number);
(iv) Households in most vulnerable communities with access to improved drainage, solid waste management and flood protection (number);

D. Concept Description

**Component 1: Drainage and flood management improvements within the Odaw Drainage Basin (US$45 million IDA and potential $25 million Green Climate Fund):** This will include investments in improving drainage, flood management including upstream water conservation, and development of green spaces and flood retention areas in Odaw drainage basin, as well as improved flood warning and response capacity in Greater Accra Region.

*Sub-component 1.1. Improvements in urban drainage and flood management in Odaw drainage basin (US$45 million IDA and potential $20 million Green Climate Fund)*. This would include, in the first years, urgent actions to prepare for recurrent floods such as dredging, de-silting, rehabilitation of pumping stations, and rehabilitation of damaged drains. In the latter years, measures will include complete improvement of Odaw drainage including widening of Odaw river mouth; rehabilitation of currently inoperable pump station; lining of major drainage channels; construction of secondary channel lift stations to prevent back flooding along with upstream soil and water conservation, development of green spaces (parks and flood retention areas), and climate proofing drainage infrastructure. Enhancements in hazard sensitive land use planning and zoning will also be supported along with modifications in integrated land use planning at metropolitan level (see Component 4). These measures will be based on feasibility studies carried out on priorities identified under Accra Climate Strategy and Integrated Urban Environmental Sanitation Strategy and Master Plan (IUESSMP).

*Sub-component 1.2. Improvement in flood forecasting, warning, and response (potential $5 million Green Climate Fund).* This component will support Flash Flood Guidance and Early Warning & Response System Improvement in Greater Accra Region, which will include improving flood forecasting (observation infrastructure, system integration and IT network, service delivery), and, coordination, warning and response at Greater Accra Region and MMDA levels, as well as last mile connectivity with targeted communities prone to recurrent flooding in Odaw drainage basin. Potential to collaborate with the University of Ghana on mobile based flood alert system will be explored during project preparation.

The team will explore the potential for this component to be co-financed by the Green Climate Fund.

**Component 2: Improvements in solid waste management capacity including minimizing solid waste in waterways (US$20 million IDA with potential partner $20 million co-finance or Private Public Partnership).** Solid wastes that accumulate in waterways significantly restricts the flow of storm water and retention capacities as well as pumping station efficiencies. Activities under this component will focus on community-level activities in the area where the drainage and sanitation (under GAMA water and sanitation project) improvements are located, and to a lesser extent on metropolitan-wide activities.

*Sub-component 2.1. Community-level solid waste management (US$15 million IDA).* In the vicinity of the pumping stations and waterways and drainage channels targeted under Component 1 of the Project, these will include: (i)

---

16 Ongoing W8 project in 11 MMDAs of Greater Accra Region with an objective to increase access to improved sanitation and improved water supply, with emphasis on low income communities.
improving solid waste collection services (provision of equipment, etc.), (ii) community mobilization and awareness raising, and (iii) the application of a results-based incentive approach which will consist of providing incentives to these communities based on independently verified outcomes (improved waste collection). Special Accra Sanitation Board and MMDAs within the designated project areas along waterways may choose a combination of some or all of these three options, based on local needs.

Sub-component 2.2. **Improving solid waste management capacity in Greater Accra (US$5 million IDA with potential partner $20 million co-finance or Private Public Partnership).** Building on the findings of IUESMP and the proposals set out in the Ministry of Local Government and Rural Development’s E-SWIMP, this sub-component will include a large scale metro-wide information, education and communication campaign. It will also support the identification and technical assessment of one or more new waste recycling, treatment and disposal facility in the Greater Accra to replace the current Kpone Landfill which is near capacity. Such a facility will not be financed under this project. The team will explore the potential for such infrastructures to be financed by other donors or as a Private Public Partnership.

**Component 3: Support to most vulnerable communities within the Odaw Drainage Basin (US$25 million IDA).** In conjunction with the improvements in drainage, and solid waste management investments, highly flood prone informal settlements and Zongos will be identified in Odaw drainage basin to benefit from participatory community upgrading and participatory resettlement. This component aligns with the current government efforts to mobilize and dedicate funds and resources towards supporting infrastructure development and income-earning opportunities in low-income ‘Zongo’ and inner-city communities through the following specific activities. (see detailed description below).

Sub-component 3.1. **Participatory community upgrading (US$20 million IDA).** This will support those communities that are located in the most flood prone areas within the Odaw drainage basin. It will finance participatory community upgrading to reduce vulnerability to flooding and to improve living conditions. Concretely it will likely support: (i) upgrading of basic infrastructure and services prioritized by most vulnerable communities and supported by geospatial, social vulnerability, risk information and asset management diagnostics. This will likely include, construction or rehabilitation of tertiary drains, local roads, pedestrian paths, schools, health centers, community sanitation facilities and open spaces, street lighting, informal markets, and support to incremental and safe housing improvements; (ii) measures to integrate the targeted informal settlement and Zongos with surrounding settlements and primary city infrastructure through access roads and other measures identified by the targeted communities; and (iii) community based disaster (flood and fire) warning and preparedness activities including identification of safe shelters, and flood preparedness through awareness campaign, training and appointment of emergency volunteers.

Sub-component 3.2. **Participatory resettlement (US$5 million IDA).** Resettlement will be minimized through structural designs, and only for households residing in areas which are still considered extremely prone to floods even after project interventions, or in right of ways for infrastructure investment proposed under Component 1 and 2. Resettlement support will target informal settlers living in makeshift residential units along the channels of the Odaw basin; and aims to strengthen the affected people’s resilience to external risks by providing access to housing on safer grounds and with basic services. Resettlement support will not be used as mechanism to compensate for land acquisition’ rather, it is designed to facilitate voluntary relocation away from extremely hazardous flood-prone areas. A menu of options for shelter support, including one-off rental support, will be provided. Extensive consultations will be held with Project Affected Persons (PAPs), to allow flexibility, ensure minimal economic dislocation, and cater to varying needs of PAPs.

**Component 4: Strengthening capacity for planning, coordination, monitoring and evaluation (US $10 million IDA)**

Sub-component 4.1. **Support for Metropolitan Planning, and Coordination for MMDAs (US $3 million IDA):** This will
include support for creation of Joint Development Planning Areas (JDPA). It will support the possible future Greater Accra Metropolitan Sanitation Authority, with initial focus on planning, coordinating, and monitoring flood risk management, sanitation (liquid and solid waste management) sectors. This could serve as models for planning and management of other services that have network and have spill-over effects across MMDAs. Concretely, it will finance (i) urban planning and management aiming to integrate multi-sectoral analysis and flood risks into metropolitan, and local urban planning and management tools; (ii) data collection (geo-spatial), and asset management information system at metropolitan level, and measure to improve vertical and horizontal coordination (such as through performance contracts).

Sub-component 4.2. Strengthening the organizational capacity of implementing units and project management support (US $7 million IDA): This will finance the management activities associated with project implementation, including establishing and implementing a comprehensive monitoring and evaluation (M&E) system and training of the implementing agencies in environmental and social management. The project would furthermore provide support to institutionally strengthen some of the agencies and departments to better address and manage operation and maintenance of flood and waste management. This component will also provide funds to undertake feasibility studies and prepare detailed designs for implementation and other studies identified and agreed during implementation.

Potential Contingent Emergency Response Component

A potential component on Contingent Emergency Response Component (US $0 million) will be considered during project preparation. When triggered (following a national or local declaration of emergency in Greater Accra), this component will provide immediate response to an emergency by diverting unused project funds to finance eligible expenditures based on a positive list of goods, both domestic and imported, and/or specific works, goods, services and emergency operation costs required for Greater Accra’s emergency recovery.

Note to Task Teams: The following sections are system generated and can only be edited online in the Portal.

SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project will focus on structural and non-structural interventions in the Odaw River basin, which is part of the larger Korle Chemu catchment, draining the central, densely populated and flood-affected areas of greater Accra. The main stream 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, the Chemu lagoon is a minor outlet.

Many of the drainage channels are poorly developed and maintained and erosion and siltation is reported to be a major problem. 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 have changed towards highly urbanized nearly impervious conditions with high runoff coefficients and continuously reducing retention capacity. Furthermore, the drains are
commonly used as garbage dumps/collectors 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.

B. Borrower’s Institutional Capacity for Safeguard Policies

Ghana is politically stable compared to its peers in the West Africa sub-region, with stable democratic institutions, including those that are constitutionally responsible for regulating environmental and social risks associated with development projects. The country's Environmental Protection Agency (EPA) is familiar with Bank-requirements for safeguards, although poor resourcing and logistical challenges turn to impact their performance negatively. In addition, the Lead Implementing Ministry, the Ministry of Works and Housing has implemented earlier Bank projects and is aware of Bank safeguards policies. However the Ministry of Sanitation and Water Resources and the Ministry of Zongos and Inner-city Development are the new ministries and Accra Sanitation Authority is yet to be established. A borrower capacity assessment will be conducted prior to appraisal and the borrower supported to recruit qualified environmental and social safeguards officers to enable effective safeguards supervision. The responsibilities of these officers will be reflected in the implementation arrangements for the project.

C. Environmental and Social Safeguards Specialists on the Team

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

D. Policies that might apply

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>The project environmental assessment category is proposed as A because project risks and impacts are likely to be large scale, irreversible and possibly unprecedented. The project activities are subject to full environmental assessment due to major infrastructure investments to be finance under Components 1, 2 and 3, including rehabilitation/construction of drainage, anti-erosion works, dredging, construction of waste transfer stations, capping of existing landfills sites and other urban infrastructure and solid waste disposal. There is a likelihood of resettlement under Component 3. The general area of influence of the project is along the Odaw river basin. An Environmental and Social Management Framework (including Environmental and Social Management Plans) covering the general area will be conducted to guide the project's impact assessment and mitigation planning process for investments whose exact locations, scope and designs...</td>
</tr>
</tbody>
</table>
are not yet defined at the stage of preparation. In the light of the project context and the nature of component 3, the terms of reference (TOR) for ESIA, will include initial assessment which will inform the design of Resettlement Actions Plans (RAPs). At this stage the project will prepare an ESMF for project investments which remain unknown at time of preparation and in addition the project will prepare and disclose 3 ESIA studies as follows: (i) an ESIA for the construction of two waste transfer stations, (ii) an ESIA study of the capping of two existing landfill sites and (iii) an ESIA for the dredging works to be undertaken along some sections of the Odaw river channel. All four instruments will be prepared and disclosed for 120 days before appraisal of the project.

<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 activities at this stage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
<td>Project activities will be located along the Odaw river basin and can potentially impact on a number of tributaries within the river basin as well as the Korle and Chemu lagoons. The ESIA process will assess the risks such as alteration of the natural system through siltation and pollution as a result of project activities and propose mitigation measures and design alternatives to avoid or minimize potential negative impacts.</td>
</tr>
<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td>The project activities do not involve forests.</td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
<td>The project activities will not involve the use of pesticides and pest management.</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>Yes</td>
<td>This policy is triggered as the proposed works might involve dredging and rehabilitation in inhabited areas, which may result in chance finds of physical cultural resources. The ESMF will include a chance find procedure with detailed guidance on how to handle and transfer any found physical cultural resources to the appropriate government authorities.</td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td>This OP is not triggered. Reference to the definition of IPs in paragraph 4 of OP 4.10, there is no ethnic or social groups with distinct cultural features and interest that are consistent with the scope of the policy in the project area.</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
<td>This policy is triggered considering the urban footprint for the project and the likelihood that the proposed works/activities will induce significant land acquisition, population displacement, physical relocation, as well as disruption and loss of livelihood activities and</td>
</tr>
</tbody>
</table>

Jun 20, 2017
private economic holdings. Component 1 of the project includes construction, rehabilitation and dredging of primary drainage systems and flood retention ponds to reduce flooding; Component 2 involves construction of waste transfer stations, capping of two landfills sites and other associated infrastructure to enhance solid waste disposal; and Component 3 focuses on identifying and upgrading secondary and tertiary infrastructure in four urban slums/settlements to reduce vulnerability to flooding. At this concept stage, the scope of works and sites for some activities, i.e. waste transfer stations, capping of waste dumps and dredging have been determined. For these activities, ESIsAs will identify and outline mitigation measures for anticipated social and environmental risks and impacts. The sites for waste present negligible risks relating to involuntary resettlement. Base on preliminary assessments the proposed capping of waste dumps will result in temporary displacement of few homes and disrupt livelihood activities of scavengers during works. An abbreviated RAP will be commissioned, disclosed and implemented to address the adverse impacts of the capping exercise.

The proposed activities in component 3 - provision of water and sanitation facilities, paving of access roads and street lightning - will require spatial adjustments and reorganization in selected urban slums with limited or extensive impacts depending on subprojects. Four target slums have been selected using a pre-determined criteria but the activities to be implemented in each community are not determined at this stage. Notwithstanding, implementation of the proposed activities in these slum communities are expected to trigger temporary displacement, disruption of access to homes and economic activities and loss of income. A community profiling and social assessment will be carried out to determine basic social data and ground conditions in the selected communities. The results of this assessment will inform the selection and prioritization of subprojects for community upgrading. For subprojects where engineering designs and sites are unknown, a Resettlement Policy Framework (RPF) and an ESMF will be prepared and disclosed prior to project
appraisal, and will outline the key principles and guidelines for identifying and mitigating potential adverse social impacts of subprojects as the project unfolds. The RPF will include indicative measures for livelihood restoration in case of loss of income or livelihood resources.

<table>
<thead>
<tr>
<th>Safety of Dams OP/BP 4.37</th>
<th>No</th>
<th>The project activities do not involve dams.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
<td>The Project is not located in any international waterways.</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>No</td>
<td>None of the intervention sites are in disputed areas.</td>
</tr>
</tbody>
</table>

**E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

Apr 30, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The environmental and social category will be confirmed during PCN review and preparation. All safeguard related studies will be initiated immediately and completed before Appraisal. This includes an assessment of the resettlement and compensation of current procedures, an in-depth social assessment of the potential beneficiary areas and the preparation of the RPF.

**CONTACT POINT**

**World Bank**

Asmita Tiwari, Yan F. Zhang  
Senior Disaster Risk Management Specialist

**Borrower/Client/Recipient**

Government of Ghana  
Mr. Ken Ofori Attah  
Ministry of Finance  
ken.ofori-atta@mofep.gov.gh

**Implementing Agencies**
Ministry of Works and Housing
Solomon Attim Asoalla
Chief Director
sasoallat@yahoo.com

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

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

Approved By

<table>
<thead>
<tr>
<th>Safeguards Advisor:</th>
<th>Maman-Sani Issa</th>
<th>18-Jun-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Manager/Manager:</td>
<td>Meskerem Brhane</td>
<td>18-Jun-2018</td>
</tr>
<tr>
<td>Country Director:</td>
<td>Henry G. Kerali</td>
<td>15-Oct-2018</td>
</tr>
</tbody>
</table>

Note to Task Teams: End of system generated content, document is editable from here.