**BASIC INFORMATION**

**A. Basic Project Data**

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madagascar</td>
<td>P159756</td>
<td></td>
<td>Integrated Urban Development and Resilience Project for Greater Antananarivo (P159756)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRICA</td>
<td>Mar 01, 2017</td>
<td>May 31, 2017</td>
<td>Social, Urban, Rural and Resilience Global Practice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lending Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Ministère des Finances et du Budget</td>
<td>Ministère des Projets Présidentiels, de l'Aménagement du Territoire et de l'Equipement</td>
</tr>
</tbody>
</table>

**Financing (in USD Million)**

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Development Association (IDA)</td>
<td>40.00</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>40.00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Assessment Category</th>
<th>Concept Review Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B-Partial Assessment</strong></td>
<td>Track II-The review did authorize the preparation to continue</td>
</tr>
</tbody>
</table>

**Other Decision (as needed)**

Type here to enter text

**B. Introduction and Context**

**Country Context**

Madagascar is an island nation with unparalleled biodiversity and significant natural wealth, which serve as great resources for the country’s economy. Agriculture, including fishing and forestry, accounts for more than 25% of the country’s GDP, which was estimated at $35.49 billion in 2015. The sector also employs roughly 80% of Madagascar’s population. Macroeconomic stability in recent years has also been an asset to the country, with inflation hovering around 6-7% and the fiscal deficit amounting to less than 2% of GDP.
However, with a total population of over 23 million (2015), a vast majority of the Malagasy is extremely poor. Extreme poverty (per capita consumption under US$1.90 2011 Purchasing Power Parity (PPP) per day) hovered around 80% of the population between 2001 and 2012. Over the same timeframe, absolute poverty (US$2 PPP per capital per day) rose from an estimated 88.9 in 2001 to 92.7% of the population in 2005, then declined slightly, but stayed above 90% until 2012. Inequality in Madagascar is similar to that of other low-income countries, but it diminished strongly between 2001 and 2012. The Gini coefficient was 0.41 in 2012, similar to the low-income average at 0.40. Madagascar’s inequality, however, is not due to a steep welfare increase at the top, but due to relatively higher inequality among the bottom 90% than in other poor countries – that is, different levels of deprivation. From a social indicator perspective, the rate of enrollment in elementary school was at 69.4 percent in 2012, and immunization coverage, a proxy indicator for the overall performance of the health system, was at 60 percent in 2013. According to the 2015 Global Hunger Index (GHI), Madagascar also has a GHI score considered to be “alarming” at 36.3, with stunting for under-five year old children rising to close to 50%.

Madagascar is slowly emerging from a protracted period of economic stagnation and political crisis triggered by strong protests and unconstitutional change of power in February 2009. Following a lengthy mediation process, Madagascar held new presidential elections in 2013. Those elections and the international recognition of the newly elected Government of Madagascar brought an end to a political crisis, which lasted five years and had devastating effects on the economy, poverty and social outcomes. It was an event welcomed by all, but only represented the first step towards putting the country back on track for sustainable development.

The political context remains challenging and the current government “fragile”, which is delaying urgently needed reforms. A number of tangible advances have been achieved since 2014, including the elaboration of a new National Development Plan (2015-2019) released in April 2015 and its implementation strategy. The country has, however, encountered difficulties in moving ahead in tandem to implement this new strategy. Many of the urgent reforms that are pending relate to fiscal policies, on both the revenue and expenditure fronts, as a prerequisite for financing public investments and social spending necessary for fighting poverty and pursuing sustainable development. For instance, the low tax revenue, representing only 9.7% of GDP in 2014, which is well below the low-income countries average of 15.6% of GDP (2005-2012 average), does not support public investments necessary for development nor the adequate provision of public services.

Finally, due to its location, topography and socioeconomic conditions, Madagascar is also one of the world’s most exposed and vulnerable countries to climate change, with the most likely risks involving extreme weather events, such as cyclones, flooding, and drought. From 1990 to 2015, at least 65 major climate-related disasters were recorded in Madagascar, with more than 50 cyclones. Greater Antananarivo (GA) was most recently hit by catastrophic flooding in January 2015, which affected an estimated 93,000 people and displacing 40,000, and had an estimated economic impact equivalent to 1.1% of GDP.

**Sectoral and Institutional Context**

**Rapid Urbanization**

**Madagascar and GA are witnessing rapid urbanization.** The country today houses more than 6.9 million urbanites compared to 2.8 million in 1993. Cities account for approximately three fourths of the national GDP, with the capital contributing by 50% (Défi Urbain report). The Commune Urbaine d’Antananarivo (CUA) has a population of about 1.8 million (2011) and is growing exponentially. Due to the lack of recent census, the exact number of new urban dwellers is unknown. However, UN Habitat, amongst others, estimates that the CUA’s population is growing at a rate of 5% a year, or by an additional 100,000 new inhabitants. The GA metropolitan area, encompassing the CUA and 36 other communes, hosts nearly 3 million people. This rapid urbanization is driven by both a population growth, and a strong rural-urban migration and urban-urban migration (secondary cities to GA). The lack of employment opportunities for this growing population has, however, led to a concentration of poverty of more than 66% in GA, compared to a national urban poverty rate of about 51%.
Complicating matters is GA’s urban growth pattern among 12 hills and on a large natural flood plain, which is expected to receive increasing population densities (with people settling on informally backfilled areas) as well as urbanization over the coming years, thereby significantly altering the natural drainage capacity of the environment. Antananarivo is also highly exposed and vulnerable to floods and the large concentration of people and assets in the flood plain of the city is a major concern.

From an institutional standpoint, several key institutions, both at central government and municipal government levels, are designed to play a role in managing the city’s growth and its metropolitan area. The Ministère rattaché auprès de la Présidence en charge des Projets présidentiels, de l’Aménagement du Territoire et de l’Équipement (M2PATE) has a central role related to implementing policies connected to urban development as well as a cross-cutting function designed to coordinate the implementation of relevant urban infrastructure interventions across other departments. The CUA has a special status as the capital of Madagascar (Act N° 2015-011). Its powers and responsibilities mostly cover the challenges and needs related to social issues, roads, water, sanitation, hygiene, waste management, and municipal land management, amongst others. The CUA is run by an Executive Board that is led by the Mayor. The Mayor is also in charge of appointing a delegate for each of the six arrondissements. The Agence d’Exécution des Travaux d’Intérêt Public et d’Aménagement (AGETIPA) was created in 1993 to help execute infrastructure projects across a variety of departments. M2PATE handles technical oversight for both the CUA and AGETIPA. Overall, in practice, the numerous institutions and government agencies that provide services and are in charge of planning and enforcing urbanization norms have not been effective at coordinating across their areas of responsibility. Moreover, a lack of capacity severely limits the management of urban systems. Finally, the rest of the 36 communes included in GA are considered as rural, even though most of them are highly urbanized. As GA continues to grow with almost half of the population living outside of the CUA, the 36 communes and their municipal governments will have an increasingly more relevant role to play in the urban growth patterns of the metropolitan area.

Failing Infrastructure and Deficient Urban Services

Rapid urbanization is increasing the already acute pressure on a limited stock of existing infrastructure and deficient local services. Challenges and shortcomings can most predominantly be observed across the following sectors:

Urban Water Management and Service Delivery. The growth of the CUA on a natural floodplain explains the great challenge of drainage in an increasingly urbanized area and its particular vulnerability to urban flooding. This is further exacerbated by the country’s climate, which has an average rainfall of 1,300 mm per year and intense rainfall events caused by storms and tropical cyclones. The drainage canals in their current state have a greatly reduced ability to discharge surplus water from the urban area due to their poor condition, high pollution levels, lack of regular maintenance, and highly limited capacity throughput (with sediments and waste completely filling the canals in certain places or objects, such as low bridges and buildings, covering the canals and drainage infrastructure). Madagascar also ranks among countries with the lowest access rate to drinking water and sanitation – well below Sub-Saharan Africa average (JMP 2015) – with 12% access rate for improved sanitation and 52% access rate to improved drinkable water source. According to national data, the average access to potable water in urban cities decreased from 63% in 2005 to 61% in 2012. For sanitation, national data shows a decrease in access by 7 percentage points between 2004 and 2012 (from 53% to 46%). This decrease is estimated to be steeper in urban areas (12 percentage points) than in rural areas (2 percentage points). According to the national water and electricity utility JIRAMA, the access rate to drinking water in the CUA is even worse than the urban average at 32%, while the network’s technical efficiency is estimated at 61% (suggesting an urgent need for network rehabilitation works). Poor access to drinking water and sanitation facilities has had negative impacts on public health, education, poverty, nutrition as well as the environment. The diarrheal diseases in the country are the second leading cause of death after malaria, and affect 51% of children under 5 years.

The Ministère de l’Eau, de l’Assainissement, et de l’Hygiène (MEAH) oversees service provision of water supply, sanitation, and flood management for Antananarivo. However, in addition to the MEAH, the water sector includes several other relevant institutions that have limited implementation capacity as well as overlapping responsibilities, which creates confusion over scopes of work. This is particularly true of ANDEA (regulator), JIRAMA, the CUA and other GA municipalities, the SAMVA (public entity in charge of the collection of solid waste, management of the disposal sites, as well as storm water drainage), and APIPA (public organization created in 1995 to focus on drainage canals and flood management), among others. Some of the sector constraints also include institutional instability (periodic change of leadership);
insufficient personnel within the MEAH; failure to budget and plan adequately at the central level without the regional authorities and
decentralized services’ input; and poor awareness, knowledge and uptake of the statutory instruments due to limited dissemination.

**Waste Management.** The solid waste generation rate in Antananarivo is approximately 1,100 tons per day. This rate is projected to reach 1,600 tons per day by 2020 due to population increase and changes in the mode of consumption. The current waste collection rate is approximately 75% but projections show that this rate could drop below 50% if the means of waste collection and disposal remain flat. At the neighborhood level, pre-collection arrangements that rely on fokontany (neighborhood) organizations (RF2, for example) have been set-up and are working well in some but not all CUA neighborhoods. The variance in performance depends on the different levels of engagement between CUA-arrondissement-RF2, funding and equipment, and the presence of support organizations, among others. Finally, the current dumpsite of Andralanitra will be full in less than five years and a new site able to receive solid waste has not yet been identified. The identification and development of a new site will be a timely process that will require significant investment.

The SAMVA was created by the CUA as an autonomous entity to manage urban solid waste within its jurisdiction. However, this service was later transferred to the MEAH. This institutional arrangement is a source of conflict between the central government and the CUA. Financially the SAMVA is funded by a dedicated solid waste fee tied to the property tax and the wastewater treatment fee collected by the JIRAMA. Yet, the collection rate of the solid waste fee is very low due to low property tax rates. Moreover, the JIRAMA has not been transferring the wastewater fee to the SAMVA for many months due to its own financial difficulties. As a result, the SAMVA is underfunded, underequipped and unable to provide a proper service. A large portion of solid waste is thus disposed into illegal dumpsites or drainage channels. The SAMVA is also facing governance issues resulting from institutional instability at its helm as well as non-transparent Board nominations.

**Disaster Risk Management.** The CUA’s high vulnerability to flooding is a significant threat to the high concentration of people and assets in the flood plain. The capital city has experienced a 50% increase of its built environment since 2003 and in some municipalities of GA, up to 50% of the built environment is directly located in flood-prone areas (20-year return flooding). The emergency response capacity mainly relies on 160 firefighters for the entire GA, distributed over 3 stations, which represents about 1 firefighter for more than 18,000 inhabitants (international standards target 1 firefighter for 700 inhabitants). In early 2015, unprecedented flooding caused significant damages in GA, further highlighting the need to increase emergency response capacities, as well as mitigation and prevention interventions. The scarce resources of emergency response services as well as the lack of inter-communality coordination across the GA metropolitan area are also debilitating the city’s ability to respond to emergencies and disasters.

The Cellule de Prévention et Gestion des Urgences (CPGU), a coordination unit within the Prime Minister’s office, was created to provide high-level strategic advice on disaster risk management (DRM), primarily by mainstreaming disaster risk reduction into sectorial planning and programs. Its objectives are to reduce the vulnerability of the country’s infrastructure and build resilience to climate hazards. The Bureau National de Gestion des Risques et des Catastrophes (BNGRC), under the Ministry of the Interior and Decentralization (MID), is in charge of the operational aspects involved in the management of disasters, as well as the coordination of emergency relief. Local Disaster Management Committees have also been established by municipal decree for each fokontany. However, staff turnover has been high due to ongoing changes in political landscapes.

**Expanding Informal Settlements**

The combination of rapid urbanization, high concentration of poverty, failing infrastructure, and deficient service delivery is leading to the massive proliferation of informal settlements on both public and private lands, especially in unsanitary lowland areas that are highly exposed to flooding. Today, it is estimated that about 70% of the CUA’s settlements are informal and below standards (Profil Urbain d’Antananarivo, UN Habitat). Slums dwellers are often unskilled laborers with extremely low revenues whose little economic opportunities contribute to
perpetuating the degradation of their living environment. This precariousness has led to a range of additional issues, such as the growing phenomenon of crime and violence, which threaten citizens’ security and impose huge social and economic costs. Thus, overall, those informal settlements are disproportionately affecting the poor and undermining other poverty reduction and economic development efforts.

In terms of slum areas, no classification and systematic qualification of those areas currently exists. UN-habitat developed an upgrading strategy for two neighborhoods and AFD is financing a large slum-upgrading program covering 78 neighborhoods and approximately 700,000 slum dwellers. However, the types of intervention focus on road access, latrines, and drainage without addressing more complex issue, such as land tenure (or occupation) housing, resettlement and slum prevention. Moreover, actors supporting these approaches are mainly NGOs (e.g.: ENDA OI) who have little resources and coverage.

### Lack of Effective Metropolitan Governance, Municipal Finance, and Urban Land Management

The lack of effective metropolitan governance, municipal finance, and urban land management in GA have also exacerbated the challenges of ill-planned and rapid urbanization, and hampered efficient urban development and service delivery. Strong tensions between the municipal and central governments in today’s political landscape also deeply affect the sound management of the metropolitan area. The history between the opposing political parties governing the central government and the CUA translates into limited, if any, coordination between the central and local levels on issues related to metropolitan governance, financing, and planning. These three issues present the largest challenges for improving metropolitan urban management in the long run.

**Metropolitan Governance.** Legal frameworks to support inter-municipal work have been developed since 1999 and confirmed with the new decentralization texts of 2014. The Act No. 99-952 (1999) established specific mechanisms for inter-communality coordination with the Organisme Public de Coopération Intercommunale (OPCI), which allows municipalities to work together on issues of common interest, such as the management of public services and infrastructure. Several OPCIs, including the currently operating OPCI Ikopa, have since been established around specific themes (solid waste, integrated water management, and financial management) but have not encompassed the larger territorial dimension of the metropolitan area. The large number of actors across each sector is also further hindering the development of a streamlined and well-functioning governance system.

However, the current climate for thinking about inter-communal and metropolitan solutions is promising. In addition to the OPCI initiatives, the Integrated Urban Water Management Platform (IUWM) Platform that has begun to operate (with the support of a Bank Technical Assistance (TA)) as well as the launch of an “Agence d’Urbanisme” (supported by decentralized French development cooperation and AFD) and two key studies that have initiated (the Urban Development Master Plan for GA financed by JICA and the Integrated Sanitation and Drainage Master Plan for Antananarivo financed by the AFD) all point to a convergence of stakeholder opinions that a broader approach is needed to improve urban management. A key challenge of this metropolitan framework will be the capacity of local governments and the coordination that can be achieved between local governments and national ministries that are currently implementing urban projects in Antananarivo as well as providing municipal services (storm water drainage and solid waste management). Another fundamental issue is the limited ability of communes to raise taxes and, therefore, to sustain any urban investment.

**Municipal Finance.** The CUA has a voted annual budget of 35 billion Ariary (about US$11.13 million), of which only 18 billion Ariary (about US$5.72 million) are actually executed due to non-realized fiscal revenue and government transfers. Among the roughly 400,000 properties within the vicinities of the city, only 25% are formally registered and thus the remainder falls outside of the taxation system. Among those, only about 20% actually pay their taxes, which put severe limitations on the CUA’s budget and illustrate the CUA’s weak revenue generation capacity. Hence between 2007 and 2013, each year the CUA collected a mere 15 to 23 billion Ariary (about US$4.77 to US$7.31 million). The commune has roughly 3,500 employees, whose salaries take up to 83% of its executed budget and thus limit its investment capacity. Critical challenges include: (i) limited revenue streams and weak budget management leading to poor service-delivery and undermining public investment management efficiency; (ii) limited transparency and accountability of local governments dis-incentivizing citizens and private sector to pay their taxes; and (iii) political-economy constraints and institutional challenges undermining the efficiency of reforms.
Urban Land Management. GA suffers from deficient land management practices. Those range from (i) outdated and inadequate land policies; (ii) unenforced land use and zoning codes that have been formally adopted; (iii) poorly functioning and incomplete urban land registries that affects the land taxation system; (iv) a large number of undocumented land transactions and an underground land market; (v) a lack of adequate planning tools to operationalize broader planning guidelines; (vi) weak knowledge of the existence of public assets and their best utilization; and (vii) perceived corruption and land capture by the elite and some economic parties, among others. Coupled with an absence of an inclusive housing policy, these factors have led to the massive proliferation of slums on public and private lands with their high concentrations in flood-prone areas. At the moment, three key initiatives are underway: (i) the Government is undertaking the preparation of an Urban Development National Policy; (ii) JICA is financing the updating of the Plan d’Urbanisme Directeur (PUDi) for GA; and (iii) the Government is seeking private financing to prepare detailed land use plans for multi-use zoning of specialized redevelopment districts in the CUA that would include strategic infrastructure.

World Bank Engagement in Urban Development and Water Sector in Madagascar. The World Bank has not been involved in urban development and the water sector in Madagascar for over a decade. The catastrophic flooding of January 2015 provided evidence of the consequences of dysfunctional urban systems and the inability of multiple agencies and levels of government to coordinate on strategic urban management, infrastructure maintenance, and service provision. At the request of the Government of Madagascar, the Bank engaged in some key TA by both the SURR and Water GPs to better understand urban poverty and opportunities for more integrated urban water management of the urban water cycle in GA. This project will provide an opportunity to re-engage with the sector on a larger scale and start introducing required investments in infrastructure as well as capacity building. Urban upgrading is also a priority for both the central and local governments, and this project is an opportunity to support the implementation of solutions to their most pressing concerns. At the same time, due to the complex and structural nature of the reforms needed for the urban development in GA to be i) more resilient in the face of recurrent flooding, and ii) more equitable to benefit a larger percentage of the population, this project is envisioned as the first phase of a longer-term engagement by the Bank and would ideally be followed by a subsequent phase of investment and reforms.

Lessons Learned.

Finding the right balance between in situ upgrading and redevelopment and resettlement. In situ upgrading helps minimize resettlement as well as social disruption and simplifies project implementation. Minimized resettlement leads to lower project costs for land acquisition and supports the social capital of the existing community. Examples from recently closed successful urban upgrading projects in Vietnam and Indonesia also show that resettlement and land acquisition are two leading causes of implementation delays. As we re-engage in the urban sector in Madagascar, in situ upgrading will therefore help mitigate this risk to project implementation.

However, many of the informal settlements targeted by this operation cannot accommodate more people and/or will be extremely difficult or impossible to upgrade. Therefore, in the context of rapid urbanization, this approach would need to be complemented by redevelopment and resettlement on empty, unpopulated lands outside of the CUA, to prevent the proliferation of slums. Recent Bank studies have examined the longer-term benefits of “sites and services” projects, which lay down infrastructure ahead of growth of urban settlements. While these projects have higher costs and require longer preparation, there is evidence that they have beneficial long-term impacts, shaping urban landscapes, and leading to higher land values that are taxable and can finance future investments. This project would prepare strategies for expansion and relocation, which could then be financed under a second phase.

Maximizing synergies with complementary donor-funded activities. Given the reduced availability of donor funding, the project will be designed to complement donor-funded infrastructure projects so as to maximize alignment and synergies. This is also essential for the following two reasons: (i) the Bank is re-engaging in this field and should work closely with other donors such as the AFD which have been active in the urban space in the past decade; and (ii) providing coordinated technical and financial support will be of the upmost importance to ensure that the Government is able to work in a more strategic and coordinated manner across the central and municipal levels.

Community participation and relationship building are crucial to project success and sustainability. Evaluations of recent urban upgrading projects have found higher quality and better maintenance of built infrastructure where community involvement in sub-project identification, prioritization and design is strong. A key aspect of community planning activities is that communities own the information and are able to create
new relationships that make them integral role players in the decisions that affect their lives. To this end, including beneficiaries in needs at the time of identification and M&E is critical. Lessons learned from the Madagascar Urban Infrastructure Project, which closed in 2005, highlight the importance of prioritizing investment and sub-project selection for municipalities and neighborhoods with strong community involvement.

**Accompanying infrastructure investment with capacity building.** Improving infrastructure coverage/rehabilitation requires a concomitant effort to enhance municipal finances. Investments should be accompanied by an adequate capacity building effort to enhance municipal ability to mobilize resources for operation and maintenance. This should be accomplished through improving revenue collection, increasing taxes and fees, and promoting infrastructure in support of local economic development.

Relationship to CPF

While the Country Partnership Framework (CPF) is currently in development, Madagascar’s Systematic Country Diagnostic (SCD) recommends making the protection of the poor against natural disaster-related shocks and increasing investment to improve access to drinking water and sanitation facilities key national priorities. With an estimated 4 million people currently living in zones at high risk of cyclones or floods, the SCD highlights that Madagascar is one of the most climate vulnerable countries in the world and that the poor are the most impacted by natural hazards. Indeed, given the lack of options in the poorly functioning land and housing markets, poor populations tend to settle on lands located in disaster-prone areas and have less ability to efficiently cope with the negative social and economic impacts on their lives. The SCD further points out that Madagascar’s poor access to drinking water and sanitation facilities has a profoundly negative impact on poverty, as well as public health, education, and the environment. With low labor productivity, diarrheal diseases, and malnutrition exemplifying current problems, the country’s long-term development will depend on its ability to invest in higher human capital. Flooding may also further exacerbate water-quality diseases by increasing surface water pollution. On the environmental side, the SCD points out that open defecation and proximity between unimproved latrines and wells increase the risk of contamination of water sources (groundwater, rivers, lakes, etc.). Addressing the issues of water and sanitation, especially in urban areas, is thus fundamental.

**C. Proposed Development Objective(s)**

The proposed Project Development Objective is to improve the living conditions of the poor in selected low-income neighborhoods of Greater Antananarivo through enhancing basic service delivery and flood resilience; and to strengthen the Government’s capacity for integrated urban management and effective response to eligible crises and emergencies.

**Key Results (From PCN)**

- Direct beneficiaries (number), of which female (percentage)
- People in urban areas provided with access to “Improved Sanitation” under the project (number)
- People in urban areas provided with access to regular solid waste collection under the project (number)
- Improved community water points constructed or rehabilitated under the project (number)
- People in urban areas protected against periodic flooding (number)

**D. Concept Description**
The overall design of the project would represent the first phase of a series of projects (SOP) under a long-term programmatic approach around improving integrated urban development and resilience for GA. In light of the depth and scale of the challenges at hand (both in terms of corrective and preventive measures that must be undertaken) as well as the Bank’s renewed involvement in the field of urban development, limiting the Bank’s intervention to this project alone will not be sufficient to both significantly improve current conditions for urban dwellers as well as put in place the much needed physical and institutional structures required for sustainable urban growth in the long run. Moreover, urban development tools required to inform key structural investments (such as the Drainage and Sanitation Master Plan for Greater Antananarivo and the Urban Development Master Plan) are currently being initiated and will only be completed and made available within a year of the project start date. Within this context, it is being suggested that the project should serve as a first phase and help lay the foundation for future investments. Using a two-pronged approach, the project design would focus on: (i) targeting selected neighborhoods that are highly prone to flooding for upgrading basic services and flood resilience; and (ii) initiating key activities that would help the institutions tackle systemic issues of integrated urban development at the metropolitan level. It would thereby finance both corrective (remedial interventions mostly infrastructure and urban upgrading/improved service delivery for existing low-income and highly vulnerable neighborhoods) and preventive actions (covering urban management processes, including planning, strategy, inter-communal and multi-stakeholder coordination, and municipal finance) at both the neighborhood and GA levels. The project would also help improve institutional arrangements (including potential reforms for solid waste management systems, storm water drainage, and flood protection) and capacities for service delivery at a metropolitan level. It would also seek to enhance citizen engagement across all project activities to support social accountability mechanisms.

A harmonized methodology with neighborhood selection criteria would be agreed upon with the Government (M2PATE) and municipalities to identify neighborhoods to be included under the project. The methodology would also be based on approaches recently used by the AFD and UN-Habitat. Those criteria could include, amongst others: (i) level of exposure to flood risk (based on damage assessment from 2015 floods); (ii) priority zones identified in the 2004 urban plan; (iii) potential for complementarity with ongoing or future interventions from other development partners; and (iv) zones with low levels of basic services. The prioritization would also take into account the results from the upcoming household survey, physical characteristics of the zone (as some of them might not be suitable at all for upgrading), and the overall integration of the specific zones into the broader environment (e.g.: if interventions are already carried out in adjacent zones, they would have an impact on the area). It is expected that the selected neighborhoods would be located in the CUA and several other peri-urban municipalities.

Overall, a phased-approach instead of a stand-alone project would allow the Bank to make a more significant impact on the country’s urban development and sustain the required institutional changes. This project would help do the groundwork for future investments by: (i) improving institutional arrangements; (ii) improving the financial efficiency of local governments to ensure service delivery and the sustainability of infrastructures; (iii) developing detailed studies for large-scale interventions across priority areas, such as solid waste; and (iv) establishing a strong rapport with other development partners and gauge the possibility of co-financing larger investments. The next phase would focus on larger structural investments identified and studied under this first phase, most importantly with the development of a new waste site for GA, as well as financing urban expansion through a “sites and services” approach.

**Component 1 - Enhancing the Resilience of Informal Settlements in Priority Neighborhoods ($15 million):** This component would target specific neighborhoods for integrated slum upgrading interventions across the key sectors described below. A Strategy for Urban Upgrading, which would include technical, financial, community, and institutional solutions for slum upgrading, would also support this activity by helping prepare intervention actions in each of the targeted neighborhoods. This component would build on the Bank’s previous experiences in slum upgrading operations in Antananarivo as well as on UN-Habitat and AFD’s ongoing engagements. The effectiveness of the next generation of investment in slum upgrading in the Antananarivo region would be enhanced by ensuring greater involvement of communities in the design and implementation of upgrading activities.

Without being all encompassing, the project would target the following types of interventions:
a) Improve Urban Service Delivery: (i) Improve existing drainage systems through rehabilitation works in critical areas with large-scale impacts on poor people’s living conditions; (ii) build water points and sanitation infrastructure for poor communities (public latrines, standpipes with washing areas) and improve roads and pedestrian footpaths as well as street lighting for better access and security; (iii) organize primary solid waste collection in each neighborhood by strengthening existing community-based organizations to provide this service; (iv) introduce/enhance community-led recycling and composting; (v) organize community cleanup campaigns and conduct education initiatives as well as community outreach; (vi) conduct community mobilization support initiatives to reduce crime and violence and promote youth engagement; and (vii) implement social accountability mechanisms to support the improvement of sanitation service delivery.

b) Enhance Disaster Preparedness: (i) Build several multi-functional structures/spaces that can be used as evacuation shelters/sites in times of emergency and can serve a valuable purpose for the community during the rest of the year; (ii) strengthen and expand to the GA metro area the preparation of preparedness/evacuation plans towards those shelter areas at the fokontany level and build local capacity to execute those plans (including through disaster simulation exercises); and (iii) ensure that preparedness/evacuation plans are gender informed and socially inclusive.

Component 2 - Strengthening the Capacity of Greater Antananarivo to Control Floods ($15 million): The objective of this component is to reduce flood risk in the urban core of GA. This component would support the city in implementing structural measures for flood protection, drainage, and sanitation. Leadership and change management mechanisms would be mainstreamed within the component to support dialogue across entities and implementation of reform processes in key agencies involved.

Sub-component 2.1: Improvements of Canal, Drainage and Sanitation Infrastructure. The sub-component would target: (i) “no-regret” priority engineering solutions identified by the Government, including improvements of canal, drainage and sanitation infrastructure and associated management systems as well as rehabilitation works on selected flood protection infrastructure; and (ii) investments following the development of the Drainage and Sanitation Master Plan for Greater Antananarivo that is currently under development by M2PATE with AFD financing, and scheduled to be completed in the second part of 2017. This master plan would drive the development of additional feasibility studies and investments so as to best leverage and ensure complimentary and consistency with other donor engagements.

Sub-component 2.2: Capacity Enhancement for Integrated Water, Sanitation, and Flood Risk Management. This sub-component would: (i) improve financing mechanisms for better storm water drainage and flood protection service delivery; (ii) establish clearer responsibilities of the key agencies in managing and operating the city flood control and drainage systems; (iii) enhance the capacity of the SAMVA to provide a reliable secondary waste collection service and proper disposal of the waste collected from local neighborhoods; and (iv) encourage behavioral change through communication at all levels – from decision makers to urban dwellers.

Component 3 - Supporting Municipalities of the Greater Antananarivo for Improved Municipal and Metropolitan Governance ($5 million): In an effort to ensure the sustainability and scalability of interventions under this project, this component would seek to build the capacity of local authorities – the CUA and a selection among the other 36 communes that make up GA – to improve inter-communal governance, municipal finance, planning, and collaboration at both a municipal and metropolitan levels. The objective is to institute an integrated approach to municipal governance and urban development so as to better manage existing settlements and urban growth.

Sub-component 3.1: Metropolitan Governance. This sub-component would help provide a framework for effective metropolitan management in order to stimulate more collaborative forms of metropolitan governance; and help communes achieve economies of scale in inter-municipal service provision. As a first step, the project would particularly focus on waste management in order to establish improved management standards in a key sector. This would involve: (i) support the preparation and adoption by all key stakeholders of a waste management strategy for GA, which would also include the identification of a long-term waste disposal solution for Antananarivo; (ii) help communes achieve economies of scale in inter-municipal service provision by strengthening the capacity of the SAMVA and RF2 as well as streamlining roles and responsibilities; and (iii) support leadership and change management to accompany proposed reforms.
Sub-component 3.2: Municipal Finance. This sub-component would seek to modernize public financial management (PFM) systems by supporting the implementation of the Public Expenditure and Financial Accountability (PEFA) Action Plan, including: (i) improving local revenue mobilization; (ii) improving budget strategic planning; (iv) improving budget management and information systems; (iii) rationalizing the use of public funds; and (v) implementing budget transparency, accountability and oversight mechanisms. Though the PEFA focused mostly on the CUA, this project would attempt to expand the scope of support to other communes across GA.

Sub-component 3.3: Urban Land Management: This sub-component would: (i) assess the gap between land information mentioned in the official land registries and current land occupancies; (ii) identify the status and conduct an analysis of urban land tenure in the metropolitan area in order to develop an inventory of the State and Communal domain as well as update the land registry; (iii) define a set of modalities for land tenure regularizations to clarify property rights and to help the slum upgrading process; and (iv) define a strategy for spatial expansion at the metropolitan level, in collaboration with the PUDi for GA under preparation, taking into account land reserves in peripheral communes.

Component 4 - Contingent Emergency Response Component - CERC ($0 million): This component would be providing immediate response to an Eligible Crisis or Emergency, as needed. This would finance emergency works in the case of another disaster event by including a "zero-dollar" Contingency Emergency Response Component (CERC). This would help reduce damage to infrastructure, ensure business continuity, and enable early rehabilitation. In parallel, following an adverse event that causes a major disaster, the Government of Madagascar may request the Bank to channel resources from this component into an Immediate Response Mechanism (IRM). The IRM would enable the use of up to 5% of uncommitted funds from the overall IDA portfolio to respond to emergencies. This IRM has already been established for Madagascar and is now operational. Specific details around this component (including activation criteria, eligible expenditures, and specific implementation arrangements as well as required staffing for the Coordinating Authority) are defined in greater detail in the IRM Operations Manual.

Component 5 - Project Implementation, Monitoring and Evaluation ($5 million): This component would finance the following activities: (i) incremental operating costs; (ii) fiduciary activities; (iii) audit, complaints and grievances mechanism, studies and assessments required under various project components; (iv) communication; and (v) monitoring (including of safeguards processes) and evaluation.

SAFEGUARDS

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

The project will intervene mainly in Antananarivo's urban and suburban communes (CUA and GA) of the Analamaga Region.

B. Borrower’s Institutional Capacity for Safeguard Policies

The Borrower’s safeguards capacity is low. This is a new Bank operation for the sector as it has had limited projects due to the political crisis in the country for several years. The Malagasy Environmental Law mentions that an Environmental Assessment for both private and public developments is regulated under Act No. 2004-167 (MECIE). This is fairly effective but the institutional capacity needs to be developed to ensure more widespread application and improved monitoring of the law. The national Environmental Law will be reinforced by the Bank’s safeguard policies for this proposed project.
C. Environmental and Social Safeguards Specialists on the Team

Paul-Jean Feno, Peter F. B. A. Lafere

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 policy is triggered because of the proposed infrastructure investments. Those include the project’s proposed activities under Components 1 and 2: (i) the construction and rehabilitation of public sanitation infrastructures (wash house, public toilets, etc.), the construction and rehabilitation of pedestrian streets and public roads within the city’s fokontany; the construction and rehabilitation/cleaning of drainage canals and sanitation within the municipality; and the improvement of the pre-waste collection system in the city of Antananarivo to optimize waste collection and transportation to the existing landfill site of Andralanitra. Those types of sub-projects will likely lead to some social and environmental impacts that would require the establishment of appropriate mitigation measures to set up the way forward. Given the localized scale and size of the potential social and environmental risks and impacts, as well as the specific nature of the foreseen project activities, the environmental and social category of the project will be B. Moreover, at this very stage, since the exact locations of these infrastructure investments and activities cannot be determined prior to project appraisal, the Borrower will prepare an Environmental and Social Management Framework (ESMF) that includes an Environmental and Social Management Plan (ESMP). The ESMF/ESMP will outline an environmental and social screening process for future sub-projects to ensure that they are environmentally and socially sound and sustainably implementable. The ESMF report will be publicly disclosed both in the country and on the World Bank Infoshop prior to project appraisal.</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>No</td>
<td>There is no natural habitat site located in the potential sub-project site locations. Pictures showing the current use of the occupied land show human</td>
</tr>
</tbody>
</table>
**For Official Use Only**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Triggered</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td>There is no vegetation in the potential project site locations. Pictures showing the current use of the occupied land show human settlements and degraded land in the surrounding areas.</td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
<td>The project will not purchase or use pesticides.</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>No</td>
<td>This policy is not expected to be triggered. No physical cultural resources are located in the potential project areas.</td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td>There are no Indigenous Peoples living on or nearby the project intervention areas, nor will the project have any direct and indirect impacts on Indigenous Communities. The policy is therefore not triggered.</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
<td>The policy is triggered because of the proposed infrastructure investments under the proposed Components 1 and 2. Since the physical locations of the proposed activities are unknown at this stage, the Borrower will prepare a detailed Resettlement Policy Framework (RPF). The RPF would set forth the basic principles and procedures/directives to be followed by the Borrower for the preparation of the Resettlement Action Plan (RAP) once the physical locations of the proposed activities are known. Like the ESMF, the RPF will be reviewed and cleared by the Bank and then ultimately disclosed both in-country and on the Infoshop prior to the appraisal stage.</td>
</tr>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>No</td>
<td>This policy is not expected to be triggered by any of the project activities as the project will not be financing any activities related to dams.</td>
</tr>
<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
<td>This policy is not expected to be triggered by any of the project activities and Madagascar is an Island.</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>No</td>
<td>This policy is not expected to be triggered by any of the project activities.</td>
</tr>
</tbody>
</table>

**E. Safeguard Preparation Plan**

**Tentative target date for preparing the Appraisal Stage PID/ISDS**

Feb 15, 2017

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 proposed project is classified as a Category B project according to the Bank safeguard policy on Environmental Assessment (OP/BP 4.01). Since the location of the sub-projects to be financed is not yet known, the borrower should prepare an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF). These documents will be disclosed in-country and on the Bank’s Infoshop prior to project appraisal.

**CONTACT POINT**

**World Bank**

Michel Matera, Glenn Pearce-Oroz  
Sr Urban Spec.

**Borrower/Client/Recipient**

Ministère des Finances et du Budget

**Implementing Agencies**

Ministère des Projets Présidentiels, de l'Aménagement du Territoire et de l'Equipement  
Gerard Andriamanohisoa  
Directeur General de l'Amenagement du Territoire  
dgate@mepate.gov.mg

**FOR MORE INFORMATION CONTACT**

The InfoShop  
The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 458-4500  
Fax: (202) 522-1500  

**APPROVAL**

Task Team Leader(s):  
Michel Matera, Glenn Pearce-Oroz
## Approved By

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safeguards Advisor:</td>
<td>Nathalie S. Munzberg</td>
<td>08-Aug-2016</td>
</tr>
<tr>
<td>Practice Manager/Manager:</td>
<td>Maria Angelica Sotomayor Araujo</td>
<td>12-Aug-2016</td>
</tr>
<tr>
<td>Country Director:</td>
<td>Mark A. Austin</td>
<td>16-Aug-2016</td>
</tr>
</tbody>
</table>