I. Project Context

Country Context

Mozambique has seen substantial economic growth since the end of its devastating 15-year-long civil war in 1992. On average between 1993 and 2010 real Gross Domestic Product (GDP) has grown eight percent annually, and real GDP has nearly doubled since the end of the war. The early years of this growth was the result of post-conflict investment in infrastructure and agriculture. More recently, this growth has been the result of high foreign direct investments in large, rapidly expanding extractive industries and related infrastructure investments.

Despite this strong economic growth, Mozambique remains one of the poorest countries in the world, ranking 184th out of 187 countries in the 2011 Human Development Index. In terms of per capita GDP, at US$441 in 2010, it ranks 197th out of 210 countries. The overall poverty rate is estimated at 54 percent of the population and it has not changed over the last decade, an indication that recent economic growth has not contributed to poverty alleviation. The relative poverty of the country is also reflected in child mortality rates – in 2010, the child under-5 mortality rate was 108 per 1000 live births, slightly better than the sub-Saharan African average of 112 but significantly higher than the global average under-5 mortality rate of 54. The World Health Organization (WHO) estimates that approximately 17 percent of under-five deaths in Mozambique were the result of
diarrheal diseases, the largest single cause of childhood deaths, and primarily caused by poor water and sanitation.

**Sectoral and institutional Context**

Urban water supply in Mozambique has improved dramatically over the last ten years. The government began to undertake serious water policy reforms in 1998, when it first set out its policy of a delegated management framework. Under the policy, water supply assets remain the property of the government, to be managed by a state-owned asset holding company, while water supply systems are operated under contract by independent providers operating on a commercial basis. Under the first phase of these reforms, the Government established an asset holding company – the Fundo de Investimento e Patrimonio de Abastecimento de Agua (FIPAG) – for the water supply assets of large urban areas, and established an independent regulator, the Conselho de Regulação de Aguas (CRA). Under the delegated management framework policy, operation of water supply systems of urban areas are intended to be contracted out to private-sector operators. In the case of Maputo, operations were leased to Águas de Maputo (AdeM), a joint-venture of domestic and foreign investors.

The government recently updated the water supply policy and strategy with the National Urban Water Supply and Sanitation Strategy (2011 – 2025), which was approved by the Council of Ministers in November 2011. The strategy reaffirms the delegated management framework, while promoting commercial sustainability in the operational regions of FIPAG, local private sector involvement in water supply, and capacity building. Towards those objectives, the policy supports the grouping of water supply assets in secondary and tertiary cities into operational regions, with operations on a commercial basis, and gradually transforming operators into public-private companies. The policy encompasses the professionalization of operations in the secondary systems and support to operators through technical and financial assistance. Finally, the policy envisions service coverage of 80 percent of the population by 2025.

The institutions and reforms outlined above have contributed to service expansion and improvements in the four largest secondary cities and, more recently, in the nine strategic tertiary cities, where the number of hours of service and population served have increased, and the percentage of unaccounted-for water (UFW) has decreased. For example, between 2000 and 2012, connections in the secondary city of Beira grew from less than 11,000 to nearly 47,000, a 427 percent increase. Connections in Nampula increased from 6,300 to nearly 27,000, a similar increase. Between 2010 and 2011, UFW in those cities have decreased from highs of 60 and 44 percent to 29 and 29 percent, and hours of supply increased from less than 10 hours per day to between 21 and 24 hours per day.

The picture is more problematic in Mozambique's largest urban area – Greater Maputo that suffers from decades of lack of repairs and investments. The water system faces challenges in meeting the needs of a metropolitan area of more than 2 million people, growing at a rate of 2.7 percent per year. However, investments in the existing system and expansion to peri-urban areas, in particular since 2010, have resulted in significant increase in service coverage for the Greater Maputo Area (GMA). Active connections from the water service provider – AdeM – have increased from 98,000 in 2010 to 173,000 in 2012, a 75 percent increase, and the system now serves over 1 million people. In addition to AdeM, FIPAG has invested in core infrastructure for 16 small, privately operated systems in GMA. These systems use water from wells and serve 59,000 connections. The present
gap of households not served by either AdeM or the small providers is estimated be about 152,000 households.

The focus of FIPAG and AdeM over the last several years has been on filling the gap in service by increasing household connections and production capacity. As a result, connections have rapidly increased over the last several years, with over 30,000 new domestic connections per year in 2011 and 2012. However, production capacity has not improved to the same degree, and the increase in connections has therefore come at a cost of a reduction in hours supplied, from 14 hours a day in 2005 to only 9 hours a day in 2011. Supply in some areas had been limited to only 5 hours per day. These stresses on the system have been alleviated, however, by the recent expansion of treatment capacity and rehabilitation works on the treatment plant, and the number of service hours per day has improved to 15. AdeM’s financial results have shown improvement over the last several years, with operating revenues increasing with the addition of new customers, while operating expenses have held relatively constant. AdeM currently generates an operating surplus, and is able to cover its financing and depreciation costs. Current consumption is constrained by supply, and the ability to treat and deliver additional water is expected to further improve performance as customers will be able to consume water above the base tariff rates.

Diversification of water sources, as well as an increase in total water supplied has become a key priority of FIPAG to reduce the risks to water supply caused by weather variations that are increasingly affected by global climate change. Water for the formal (FIPAG/AdeM) water supply system comes from a single source, the Umbeluzi River, 25 km south of Maputo. The sole water treatment plant serving Maputo is located on the riverbank at the same location. The river and the treatment plant are subject to the variable climatic conditions of the southern coast of Mozambique, in particular, to periodic tropical cyclones during the summer months. The intake and treatment plant are regularly flooded, sometimes resulting in a breakdown of the systems and lack of access to the plant. In 2000, devastating flooding throughout southern Mozambique resulted in a complete closure of the plant for one day, damage to the pumps, and limited site access for 14 days thereafter. In 2006, severe damage to the treatment plant was caused by flooding, and the water treatment works could not be accessed for five days, and the pumps were again damaged and had to be replaced a second time. In addition, periodic droughts affect the southern region, causing saltwater intrusions into the river. While these have not yet affected the quality of water entering the Umbeluzi works, they may affect water quality in future.

International donors and agencies have supported Mozambican water supply over the last two decades and are actively working with FIPAG to expand and improve piped delivery of water. Recently, the European Investment Bank (EIB), the European Commission (EC), Agence Française de Développement (AFD), and the Ontwikkelingsrelevante Exporttransacties, or Development-Related Exports (ORET) program of the government of the Netherlands provided financing to rehabilitate and expand the water treatment works and intake at the Umbeluzi River, the main source of raw water for the GMA as well as the expansion to new areas of GMA. The African Development Bank (AfDB) is currently financing improvements and expansions in two secondary cities. AFD is also providing financing for the reduction in physical water losses in the system through the rehabilitation of existing water supply and network assets in GMA. Vitens is providing technical assistance to AdeM to reduce commercial loses. In late 2010, FIPAG received the support from the International Finance Corporation (IFC) to acquire the shares of Aguas de Portugal in AdeM. Continuing the engagement, IFC Advisory Services will provide technical and transactional advice to FIPAG in the identification of a new private sector partner to operate the GMA.
AdeM currently produces approximately 200,000 cubic meters (m3) per day; AdeM estimates that approximately half of that amount is lost – half to leakage, and half to commercial losses. As the network continues to be repaired, and as new connections are made, AdeM estimates that non-revenue water will be reduced to around 35 percent by 2018-2019, and the Umbeluzi treatment works will be able to operate at its full capacity and full river abstraction license quantity of 240,000 m3/day in 2015-2016. That level of production is expected to be fully absorbed by demand from existing connections and additional connections expected to be made between 2012 and 2015, and additional supply will be needed at that time. In the long-term, demand is expected to continue to grow, due to population increases, to an estimated 560,000 m3/day by 2035.

The Master Plan for the Greater Maputo Water Supply System, completed in April 2011, identified the Corumana Dam as the first choice for augmentation of water supply for Maputo. A memorandum of agreement between the regional water authority – the Administração Regional de Aguas do Sul (ARA-Sul) – and FIPAG was signed in early 2011, guaranteeing the near-term supply of 60,000 m3/day of raw water from the Corumana Dam. This amount is to be increased to 120,000 m3/day in 2015. The dam – located approximately 93 kilometers northwest of Maputo – currently has a designed storage volume of 1,240 Mm3, but has been operating below the designed full supply level due to incomplete installation of spillway gates. A separate World Bank-financed project – the SDR 43.8 million (US$70 million equivalent) National Water Resources Development Project (NWRDP), approved by the Board of Executive Directors on September 15, 2011, includes financing for the completion of the spillway gates and the raising of the maximum operational water level to the original design criteria. This will allow for the full abstraction of 120,000 m3/day for treatment and domestic use.

II. Proposed Development Objectives
The project development objective (PDO) is to increase access to clean water for residents in the Greater Maputo Area.

III. Project Description

Component Name
Component A: Investment in Water Supply Production
Comments (optional)
This component includes the construction of a water treatment plant with a treatment capacity of 60,000 m3/day, and approximately 93 kilometers of transmission pipeline.

Component Name
Component B: Investment in Water Supply Distribution
Comments (optional)
This component includes the installation of approximately 100,000 new connections and associated meters in Greater Maputo. In addition, the component will install up to 300 kilometers of network.

Component Name
Component C: Technical Assistance to FIPAG
Comments (optional)
This component will provide technical assistance to FIPAG, including the supervision of works as well as implementation of Environmental Management Plans (EMPs) and Resettlement Action Plan (RAP).
Component Name
Component D: Capacity Building and Operational Support to CRA
Comments (optional)
This component will provide resources for operating expenses and technical assistance to CRA to support the implementation of existing regulation including to other water systems in the country.

IV. Financing (in USD Million)

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For Loans/Credits/Others

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V. Implementation

Components A, B, and C of the project will be implemented by FIPAG, the asset holding agency responsible for investments in urban water supply in the largest cities in the country; Component D will be implemented by CRA, the water regulator.

Since its establishment in 1998, FIPAG has been directly involved with the implementation of numerous projects financed by the World Bank and other development partners. There will be a specific Project Agreement between IDA and FIPAG and a subsidiary loan agreement signed between FIPAG and Ministry of Finance (MOF). The fiduciary, safeguard, and monitoring and evaluation systems used by FIPAG are integral parts of the agency and are acceptable to the World Bank. The project will be implemented by the Maputo Water Supply Department (MWSD), a unit of FIPAG established in 2007 which include eight professional FIPAG employees supported by two international technical advisors. This department has major project experience, including the EU-financed Maputo Water Supply Project (Euro 95 million). FIPAG is the implementing agency of the project being financed by ORIO, and the projects financed by AFD, under subsidiary loan arrangements.

Component D will be implemented by CRA, the water regulator. CRA currently implements two components under the World Bank-supported Water Services Institutional Support Project (WASIS) and, as is the case with FIPAG, is highly familiar with World Bank rules and requirements. There will be a specific Project Agreement between IDA and CRA and a subsidiary financing agreement signed between CRA and MOF. For the purposes of progress reporting and monitoring and evaluation, CRA will submit progress reports separately to the World Bank.

VI. Safeguard Policies (including public consultation)

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VII. Contact point

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