

# PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC27082

<b>Project Name</b>	Lilongwe Water Project (P153205)
<b>Region</b>	AFRICA
<b>Country</b>	Malawi
<b>Sector(s)</b>	Water supply (80%), Irrigation and drainage (10%), Public administration-Water, sanitation and flood protection (10%)
<b>Theme(s)</b>	Urban services and housing for the poor (20%), Water resource management (80%)
<b>Lending Instrument</b>	Investment Project Financing
<b>Project ID</b>	P153205
<b>Borrower(s)</b>	Republic of Malawi
<b>Implementing Agency</b>	Ministry of Agriculture, Irrigation and Water Development
<b>Environmental Category</b>	A-Full Assessment
<b>Date PID Prepared/ Updated</b>	17-Jun-2015
<b>Date PID Approved/ Disclosed</b>	17-Jun-2015
<b>Estimated Date of Appraisal Completion</b>	15-Feb-2016
<b>Estimated Date of Board Approval</b>	18-May-2016
<b>Concept Review Decision</b>	Track II - The review did authorize the preparation to continue

## I. Introduction and Context

### Country Context

Malawi is a small, peaceful and democratic country, with one of the lowest per capita incomes in the world. In 2013 Gross National Income per capita (Atlas Method) was US\$268. With a population of 16.3 million (WDI 2013), it is also one of the world's most densely populated countries. Malawi's young and growing population is expected to reach 23 million by 2025. With over half of its total population living in poverty, Malawi is one of the world's poorest countries and is ranked 174 out of 187 countries on the United Nations Human Development Index (UNDP, 2013).

External budget support was suspended by development partners in the wake of a 2013 financial management scandal, popularly referred to as 'Cashgate'. Budget support, which finances many critical expenditure items, fell from a high of 4.5 percent of GDP in 2009/10 to zero by 2011/12.

Consequently, 2014-15 budget estimates were prepared in an environment of considerable pressure.

Poverty levels have remained stubbornly high. 50.7% of the population remain poor with one quarter in extreme poverty (IHS3, 2010/11), a marginal decline from 2004/05 when poverty was 52.4 percent. Around 85 percent of Malawi's population lives in rural areas, with the majority engaged in smallholder, rain-fed subsistence agriculture.

Lilongwe, the capital city, is growing very fast. While Malawi is still predominantly rural, it is urbanizing at a rapid rate of 5.3% per year (NSO). Lilongwe is growing at 5.5% per year, the fastest in the country (and the region), albeit from a low base. The current population is estimated at 1 million, based on projections for the last census (in 2008 the population was 669,000) and is expected to grow to 2.2 million by 2030 (NSO, 2010). Along with this rapid growth, the city is experiencing a rise of informal settlements and a strain on the cities services, including water supply and sanitation.

### **Sectoral and Institutional Context**

Despite having over a third of the country's land area occupied by Lake Malawi, the country has high and increasing demand for water due to a growing population and economic development, both agricultural and industrial. As a result, water has become a scarce resource, and demand exceeds reliable supply. Until recently the water demand for agriculture and industry was modest compared to resources available. Water supply exceeded demand and water was not a high priority in the national planning scenarios. The situation is changing rapidly because of the high population growth (3% per year), especially in urban and peri-urban areas, as well as economic development which results in a higher water demand.

The provision of adequate water supply and sanitation services to Malawi's population and businesses remains a significant constraint to growth and is key to poverty reduction. Malawi has made significant progress in improving access to reliable water supply and sanitation: access rates for water supply have increased from 35 percent in 1995 to 83 percent in 2010 (as measured by the WHO/UNICEF Joint Monitoring Program) and is on track to meet and even surpass the MDG target of 70 percent. However, high population growth, lagging infrastructure development and aging water systems create large demand/supply gaps, and communal water points and sanitation facilities increasingly underserve market centers and small towns.

The Ministry of Agriculture, Irrigation and Water Development (MAIWD) leads the water sector. Urban and small town water supply is under the responsibility of the two urban Water Boards (Lilongwe and Blantyre) and the three regional Water Boards (Northern, Central and Southern); however as per the Waterworks Act of 1995, bulk water supply remains the responsibility of MAIWD. At present, the regulatory framework for the water sector in Malawi is fairly informal, and there is no independent regulator for the water sector; however, discussions are underway to potentially establish a new Water Services Regulator. In the absence of a regulator DSC has taken regulatory responsibilities and reviews and approves tariff increase requests from the water boards. The Government has recently established the National Water Resources Authority (NWRA) which is responsible for issuing water abstraction and wastewater discharge licenses.

Lilongwe Water Board is a statutory corporation responsible for water services in Lilongwe City, and was established under the Waterworks Act (1995). The Public Health Act and the Environmental Management Act state that residents should have access to potable water. With an

existing water reticulation system of about 1,800 km, LWB currently supplies 64,000 m<sup>3</sup>/day to customers. LWB estimates that this serves around 68% of the population, however recent estimates (ECA's analysis in the tariff review, 2014) suggests that the coverage rate could be far lower. LWB is in relatively good financial health with a current operating ratio of 2.1 and a collection rate of 84%. Poor collections are due to primarily to delayed payment by Government agencies. This situation is exacerbated by the low average tariff of \$0.48/m<sup>3</sup> resulting in 2013 billings of \$6.4million and operating costs \$5.9million. The tariff has only recently adjusted to \$0.72/ m<sup>3</sup> for the Kwacha devaluation in 2012. This is low by regional standards and the tariff in Malawi's second city of Blantyre is significantly higher.

Lilongwe is currently facing water shortages which will become severe over the coming years. LWB's current water production of 95,000 m<sup>3</sup>/day does not meet the city's water needs and is implementing water rationing. LWB estimate that there is currently a production shortfall of approximately 14,000 m<sup>3</sup>/day. With the projected rapid growth in water demand over the medium to long term there is an urgent need for a new water source. LWB have embarked on a number of measures to increase current production but by 2020 a new bulk water source will be needed.

The most feasible new water source is from the Diamphwe River. The Bank has financed a feasibility study to look at potential new bulk water sources for Lilongwe which concluded that the Lower Diamphwe Dam is the most feasible new water source based on all hydrological, technical financial, economic, social and environmental factors. The Government has accepted this recommendation and has included the development of a bulk water scheme from the Diamphwe River as a key investment priority.

However, the project by itself is too large for any single financier. The estimated cost of the bulk water supply from Diamphwe is \$200 million. In addition, in order for the city to fully utilize the additional water supply, the water distribution system needs to be expanded estimated to cost an additional \$68 million. This size of project, given the Malawian economy and the financing limits of the various IFIs is very difficult for any single financier.

IFC has been requested by the Government to act as transaction advisors for a potential PPP. In November 2012 the IFC was invited by the GoM to undertake a scoping mission to assess opportunities for private sector participation in the urban water sector. The study conclusions included that new water sources for Lilongwe and Blantyre could be taken forward on a PPP basis, albeit with significant public/concession funding. In September 2013 the Ministry of Finance, Economic Planning and Development (MFEPD) and Ministry of Water Development and Irrigation requested IFC support for developing Diamphwe Dam, the Lilongwe water source, on a PPP basis.

Significant preparatory work has been supported for the proposed project under NWDP. As part of the NWDP, the Bank supported a Water Sector Investment Plan (2011) that identified Lilongwe Bulk Water Supply as a priority investment for the sector. NWDP financed a feasibility study and preliminary design of a new water sources for Lilongwe (Sogreah, 2011), Multi-purpose Investment Framework (Atkins, 2012) which identified the project and is currently financing a detailed design (Studio Petrangeli, due September 2015) and Environmental and Social Impact Assessment (WAPCOS, due September 2015). A PPIAF trust fund was also mobilized to complete a Tariff and Willingness to Pay Study (ECA, 2014).

### **Relationship to CAS**

The proposed Project is aligned to the Country Assistance Strategy (CAS). While the proposed Project is not specifically mentioned in the CAS (FY13-FY16), the document acknowledges that inadequate water supplies in Malawi are expected to remain a constraint for economic development for a number of years, that water resources management and infrastructure are not sufficient for growth in critical sectors, and that adequate water supply and sanitation services for Malawi's citizens and businesses are needed to reduce poverty. The project is listed as a FY16 lending operation in the Performance and Learning Review of the CAS (March 2015). The proposed Project is listed as contributing to theme 1 (Promoting Sustainable, Diversified and Inclusive Growth) and theme 2 (Enhancing Human Capital and Reducing Vulnerabilities).

The Government passed a PPP Act in 2011 to promote further use of PPP, and transformed the Privatization Commission into the PPP commission. The CAS promotes a close partnership between the Bank and IFC to improve the business climate, diversifying the economic and export base and enabling PPPs to meet investment gaps and deliver better infrastructure services. Under a PPIAF grant in 2012, the PPP commission screened projects for potential PPPs, and the Lilongwe Bulk Water Supply Project was identified as a priority PPP in the water sector.

## **II. Proposed Development Objective(s)**

### **Proposed Development Objective(s) (From PCN)**

The Project Development Objective is to improve water supply to Lilongwe, and improve the operational and financial performance of the Lilongwe Water Board. This will be achieved through targeted investments in the Lilongwe Bulk Water System and technical assistance to LWB and MAIWD to improve the efficiency and sustainability of water services and to support the Lilongwe Water Program.

The Project will support the Lilongwe Water Program with the objective to expand access to water services in Lilongwe through improved bulk water supply, improved distribution and improved capacity of MAIWD and LWB to better manage water services. The Program will be supported by a number of Development Partner through discrete projects. These projects will either be co-financed or parallel financed.

### **Key Results (From PCN)**

The proposed key indicators are:

- a) Volume of additional water supplied to Lilongwe (m<sup>3</sup> / day);
- b) Contracting a PPP operator for the bulk water supply
- c) Establishment of an adequate water regulatory regime
- d) Development of a water and sanitation master plan for Lilongwe

## **III. Preliminary Description**

### **Concept Description**

Lilongwe Water Program: The Government is embarking on the Lilongwe Water Program. The Program will expand access to water services in Lilongwe through improved bulk water supply, improved distribution and improved capacity of MAIWD and LWB to better manage water services. Individual Development Partners may finance projects under the umbrella of the Program, in a similar manner in which the National Water Development Program is being implemented. The Government has requested the Bank to play the role of lead Development Partner in the Program in

addition to financing an investment component. Financing from the Bank will be through the Lilongwe Water Project.

The Program is expected to include three components, as follows:

**Component 1: Lilongwe Bulk Water Supply:** The objective of this component is to secure a new water source for Lilongwe to meet the city's water demand until 2045. Water requirements has been developed based on the 2011 Sogreah feasibility study. However, given recent rapid population growth and expansion of the city, this will need to be reviewed during project preparation. Physical investments cover the capital requirements for the bulk water supply system, comprising the Diamphwe Lower multipurpose dam, raw water transmission system, water treatment plant, and treated water transmission main to the city. The detailed design and the ESIA for the bulk water system are currently underway, and will impact the final dimensions of the system, but based on the feasibility study, the following are the main components:

- Diamphwe multipurpose dam
- Water treatment plant (WTP)
- Transmission mains
- Diamphwe Catchment Management

**Component 2: Lilongwe Water Distribution System:** The objective of this component is to improve access to water supply for customers in Lilongwe, particularly the poor. The water supply reticulation system in Lilongwe is old and requires rehabilitation and expansion to meet the growing needs of the city. A feasibility study is being commissioned to consider priority rehabilitation and expansion needs of the city to expand coverage to unserved parts of the city, in particular, poor areas and reduce leakages. Preliminary cost estimates are that \$68 million is required for this component. Government is seeking financing from AfDB for this component. AfDB have shown interest in this component – subject to a formal letter of request from Government – and indicated that a provision amount of UA 40 million (US\$ 55 million equivalent) may be considered.

**Component 3: Technical Assistance and Program Management:** The objective of this component is to enhance the capacity of MAWD and LWB to provide efficient and sustainable water and sanitation services and to support the management of the Program:

- Technical assistance to MAIWD
- Institutional strengthening of LWB
- Water and Sanitation Master Plan
- Program Management

**Preliminary costs and financing:** As the scope for the Program is more clearly defined, and the detailed designs are concluded, costs for the program will be refined. Current likely financers are IDA (\$71 million), European Investment Bank (EIB) which has confirmed to the Government that it can cover up to 50% of the total project financing. AfDB has also expressed interest in the water supply distribution aspects of the project with a nominal funding envelope of \$55 million equivalent (UA 40 million). From IFC preliminary analysis it has been estimated that approximately \$40 million of commercial finance could potentially be attracted to the project and funded through a bulk water tariff to LWB. MoFEDP has confirmed that it is likely that the Government can finance up to 10% of the total cost of the Program, mainly through land acquisition and resettlement costs, and forgone taxes.

**Fiduciary issues:** The proposed Project will have the same fiduciary arrangements as NWDP.

Procurement and Financial Management have been consistently rated as satisfactory throughout NWDP and it is assumed that the fiduciary capacity of the proposed PCU will be equivalent to the PMU. However, in light of the country-level fiduciary risks, the project design will pay sufficient attention to building in adequate mitigation safeguards.

#### IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04	x		
Forests OP/BP 4.36			x
Pest Management OP 4.09			x
Physical Cultural Resources OP/BP 4.11	x		
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37	x		
Projects on International Waterways OP/BP 7.50	x		
Projects in Disputed Areas OP/BP 7.60		x	

#### V. Financing (in USD Million)

Total Project Cost:	290.00	Total Bank Financing:	71.00
Financing Gap:	0.00		
<b>Financing Source</b>			<b>Amount</b>
BORROWER/RECIPIENT			23.00
International Development Association (IDA)			71.00
African Development Bank			55.00
EC European Investment Bank			101.00
Foreign Private Commercial Sources (unidentified)			40.00
Total			290.00

#### VI. Contact point

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