# PROJECT INFORMATION DOCUMENT (PID) APPRAISAL STAGE

Project Name	Coastal Region Water Security and Climate Resilience Project (P145559)	
Region	AFRICA	
Country	Kenya	
Sector(s)	Water supply (50%), General water, sanitation and flood protection sector (25%), Public administration- Water, sanitation and flood protection (15%), Irrigation and drainage (10%)	
Theme(s)	Water resource management (40%), City-wide Infrastructure and Service Delivery (30%), Climate change (20%), Rural services and infra structure (10%)	
Lending Instrument	Investment Project Financing	
Project ID	P145559	
Borrower(s)	THE REPUBLIC OF KENYA	
Implementing Agency	Ministry of Environment, Water and Natural Resources	
Environmental Category	A-Full Assessment	
Date PID Prepared/Updated	08-Jul-2014	
Date PID Approved/Disclosed	10-Jul-2014	
Estimated Date of Appraisal Completion	08-Sep-2014	
Estimated Date of Board Approval	16-Dec-2014	
Decision		

# I. Project Context Country Context

# Over the past 50 years, Kenya has established itself as an important regional player on the African continent, and especially in East Africa, and has achieved successes on multiple fronts. The country is currently emerging from a strong, yet uneven, decade of growth. From 2000 to 2009, annual growth rates in the Gross Domestic Product (GDP) averaged 3.9 percent, a notable increase from the previous decade's average of 2.3 percent. In 2008, the country's economic performance declined dramatically, with post-election violence, drought, the global financial crisis, and high food and fuel prices contributing to a negative per capita GDP growth rate. And yet the economy—underpinned by structural reforms, a new Constitution, and a spur in infrastructure investment—recovered in 2010, climbing to a growth rate of 5.6 percent. Since then, a series of domestic and external shocks reversed this momentum, decreasing growth rates to approximately 4.5 percent in 2012.

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However, the desire of Kenyans for a prosperous society has not yet been achieved. The economy remains in the bottom group in the World Bank's income classification, and poverty is high at around 40%. Kenya is among the world's poorest countries, ranking 152 out of 177 countries on the 2006 Human Development Index. Kenya has a set goal to become an upper middle-income country by 2030. In 2012, Kenya was a low income country with per capita income of US\$840. If is to achieve its Vision 2030 goal of transforming into an upper middle-income country, a rapid and sustained increase in per capita income (to 10%) is needed.

Tourism and agriculture, followed closely by industry and services, are the main drivers of growth. The performance of these sectors is significantly conditioned by the progress in the water sector. Kenya's economy is vulnerable to erratic climatic patterns and a fragile natural resource base, including limited water availability. It is estimated that climate variability costs the country an average of 2.4 percent of GDP per year and water resources degradation, another 0.5 percent, seriously affecting the country's competitiveness. Climate change threatens to result in additional stresses related to rising temperatures (increasing system evaporation and irrigation requirements) and uncertain changes in rainfall. Other environmental threats are numerous, as evidenced by unsustainable water abstractions, poor land use practices, deforestation, encroachment in recharge areas, and pollution – which have already seriously degraded many critical watersheds.

While national absolute poverty has declined, the Kenyan profile reveals strong regional disparities in the distribution of poverty. Inequalities in the distribution of incomes in urban areas continue to rise. Differences in share of income and social services are observed across regions, genders and even specific segments of the population. Inequality is observed not only in incomes, but also in terms of social exclusion and the inability to access social services and socio-political rights by different population groups.

The coastal region (i.e. areas that were part of the Coast Province prior to devolution in 2013), in particular, is faced with complex challenges that may hinder the realization of its full development potential, including rampant poverty, youth unemployment (which may lead to religious radicalization and insecurity), gender disparity, food and nutritional insecurity, natural resources degradation, climate change and variability, and inadequate infrastructure. Five of the six counties in the coastal region are among the fourteen counties regarded as most marginalized nationwide due to historical injustices and other factors. This area is also particularly susceptible to climate variability and change, not only from changes in upstream hydrology, land degradation, and water quality but also from sea-level rise.

In 2009, the population of the coastal region was estimated at 3.3 million, of which about 80% reside in just three counties, namely Mombasa, Kwale and Kilifi. The population of the coastal region is estimated to more than double to about 8.0 million in 20 years. The historical pattern of Kenya's regional inequality is still evident. Today, the coastal region experiences a range of socio-political and economic problems including widespread poverty combined with a very high degree of inequality. Among the population of the coastal region, there is a persistent feeling of economic and political marginalization in post-independence Kenya. The coastal region has the second-highest rural poverty levels in Kenya (after North-eastern Province), and urban poverty levels in Mombasa have been found to be somewhat higher than in other major cities in Kenya. The coastal region appears as one of Kenya's most deprived regions, especially as regards health services, education, water supply, sanitation, and food security.

Kenya's Vision 2030 aims to transform Kenya into a newly industrializing, middle-income country providing a high quality life to all its citizens by the year 2030. The coastal region promises significant economic potential for Kenya as a whole. The province harbors several flagship projects, including the US\$ 20 billion Lamu Port and Southern Sudan–Ethiopia Transport Corridor (LAPSSET), as well as a grand plan to create a Mombasa Free Trade Zone (similar to Dubai). Mombasa is the largest seaport in East Africa, and plays an important role in both the country's and the region's economy because the commercial imports and exports of its neighboring land-locked countries transit through Mombasa. The city is also a popular tou rist destination, attracting the majority of tourists to the country. This generates significant pressure on infrastructure, housing, transport and social services, as well as on the environment and water resources.

### Sectoral and institutional Context

Water security is a key issue given that Kenya's people and economy are highly vulnerable to erratic climatic patterns and limited water availability due to their reliance on key sectors (agriculture, tourism, hydro-energy, etc.) that depend on rainfall and wateravailability. In the last two decades from 1992-2012, Kenya tops Africa in terms of people affected by droughts (~46m people) and stands fifth in terms of those affected by floods (~2.8m people). Kenya has limited freshwater endowments and is classified as a chronically 'water scarce' country in absolute and relative terms. It faces the additional challenge of high inter-annual and intra-annual rainfall variability. Climate variability and hydro-climatic shocks (droughts and floods) impact disproportionately on the poor, and climate change is projected to exacerbate existing climate risks and water resource constraints. Kenya has yet to adequately manage its highly variable hydrology to improve climate resilience, as evidenced in decades-long underinvestment in water infrastructure. The government has planned a large-scale water investment program to address these challenges and to close the massive water infrastructure gap that has been estimated at US\$ 5-7 billion. This is planned to be supported by the establishment of a strong and modern institutional and legal structure that aligns the water sector to the Constitution of Kenya, 2010 (with a Water Bill under to fit with the new devolution principles discussion in Parliament).

Nationally, access to safe water and sanitation facilities is limited. In 2008, the proportions of Kenya's urban and rural populations with access to improved water supply stood at 83% and 53%, respectively. Currently, the proportions of urban and rural population with access to improved sanitation facilities are 27% and 32%, respectively, or a national rate of 31%, is very low. Generally, coverage in both water and sanitation is highly variable across the country. Projections indicate that by 2015, around 14 million Kenyans will lack access to improved water sources, which is about 6% more than the MDG target of 11.5 million people, a difference of about 2.4 million. As for sanitation, projections indicate that 26.6 million people will lack access to improved sanitation services in 2015. This is about 12 million people more than the 14.7 million targeted in the MDG. From these trends, therefore, it is unlikely that Kenya will meet the MDG target by 2015.

In the coastal region, the water situation is generally serious. Demand largely exceeds water supplied into the systems, non-revenue water is high, revenue collections are low, and the utilities (MOWASCO, KWAWASCO, and others) are technically insolvent, with expenditure obligations exceeding cash income. The total water demand for the coastal region has been projected at 364,243 m3/d for 2015, and is expected to more than double by 2035 (887,253 m3/d). About half the demand is from Mombasa County. To address the significant shortage of bulk water supply to Mombasa and other coastal towns, the GoK has explored a number of different options as part of

the Water Supply Master Plan for Mombasa and Other Towns in the Coast Province prepared under the Water Supply and Sanitation Improvement Project (WaSSIP), financed jointly by the World Bank and AFD. This and other studies have confirmed that the coastal region has water resources available to satisfy the water demand of the region at least until 2035. Those studies have also confirmed that the Mwache Dam is a key investment to meet demand and increase water security for the coastal region, and particularly for Mombasa County.

The devolution process and new Water Bill constitute an important opportunity to foster reforms and change. Mombasa County has already started to explore options for establishment of a sound water sector institutional and service provision framework at the county level and has identified certain key success factors, including key political accountability with sound policies and good governance, effective professional leadership and management, establishment of tariff levels that recover costs and generate revenues to support service improvements, and strong attention to serving customer. With these principles as departing points, Mombasa County has identified regional planning, the relationship between bulk water supply and service delivery functions, and institutional reforms as key issues. On the other hand, Kwale County is in a more rudimentary situation, given the low capacity of its water service provider (KWAWASCO) and the predominantly rural nature of the county. Under the KWSCRP-1, the MEWNR and Kwale County are currently preparing a comprehensive support program to strengthen the service provider and put in place a sound policy, institutional and legal framework at the county level.

# **II.** Proposed Development Objectives

The development objective of this project (KWSCRP-2) is to sustainably increase bulk water supply to Mombasa County and Kwale County, and increase access to water and sanitation in selected communities in Kwale County.

# **III. Project Description**

### **Component Name**

C1- Mwache Dam and Related Infrastructure

### **Comments** (optional)

Sub-Component 1.1 (Mwache Dam Civil Works and Related Infrastructure) will finance the construction of the main dam (Mwache), two check dams, raw water transmission lines (gravity-fed) to the treatment plant, transport infrastructure (approach road to dam site and bridges), electromechanical equipment and buildings related to the dam site i.e. all of the infrastructure needed to supply water (raw water, before treatment works) to the water supply system in the coastal region. This includes implementation of the environmental management plan and dam safety plans.

Sub-Component 1.2 (Mwache Catchment Management) aims to improve sustainability of the Mwache catchment, integrating conservation activities with the needs of local communities to develop sustainable economic activities.

### **Component Name**

C2- Kwale County Development Support

### **Comments** (optional)

Component 2 will support development in Kwale County, where the Mwache Dam is located, through investments in water supply and sanitation in rural communities and small towns; a demonstration irrigation scheme to inform design and establish viability of a large scale irrigation

program in Kwale in the future, and livelihoods investments. By supporting these activities, Component 2 will bring near-term and medium-term benefits to Kwale County. Sub-Component 2.1 will support water supply investments, Subcomponent 2.2 will support investments in sanitations, Subcomponent 2.3 will support sustainable livelihoods improvement, and Sub-Component 2.4 will support an irrigation demonstration project.

### **Component Name**

C3- Project Management

### **Comments (optional)**

Component 3 will support effective project implementation through the completion of KWSCRP-2. Specifically, this component will finance the required office space, goods (e.g., vehicles), equipment (e.g., computers), staff, consultant services, travel, training and operating costs that will allow for the successful implementation of project activities. These responsibilities include project management and coordination, procurement and financial management, project monitoring and evaluation (including impact evaluation), social and environmental safeguards management and oversight, and strategic project communications and outreach.

# IV. Financing (in USD Million)

Total Project Cost:	200.00	Total Bank Financing:	200.00
Financing Gap:	0.00		
For Loans/Credits/Others		Amount	
BORROWER/RECIPIENT		0.00	
International Development Association (IDA)		200.00	
Total		200.00	

### V. Implementation

The Ministry of Environment, Water and Natural Resources (MEWNR) will serve as the implementing agency of the project through the Project Management Unit (PMU) established under KWSCRP-1 and supported by Component 3 of this project. The PMU will report to the Principal Secretary (PS), MEWNR, and will be granted a high degree of autonomy to ensure efficient implementation of the project, including through the application of rules, criteria, and procedures agreed with the World Bank. The PS, as the Accounting Officer of MEWNR, has appointed the PMU as a procuring unit and has delegated financial management responsibilities to the PMU, within the Legal Framework stipulated in the procurement law of Kenya. Notwithstanding these provisions, the PMU will be accountable to the Principal Secretary, MEWNR.

The core functions of the PMU will be coordination and facilitation, fiduciary (procurement and financial management), environmental and social safeguards supervision, monitoring and evaluation (M&E) and impact evaluation, annual work programming and budgeting, and reporting. The PMU will undertake procurement, financial management and reporting for all project activities. The PMU will also be responsible for supervising the implementation of the social and environmental safeguards instruments prepared for the project. In addition to responsibility for overall project implementation, the PMU will directly execute sub-component 1.1. In order to carry out these functions for KWSCRP-2, the PMU will establish an office in the coastal region that is fully devoted to the implementation of the Project and close coordination with the executing agencies.

Executing agencies, that execute investments or other project-related activities under their mandate, will work closely with the PMU to execute Component 2 (Kwale County Development Support). Initially these will be Kwale County and The Coast Water Services Board (CWSB).

Implementation arrangements for each sub-component of the project are summarized below.

Sub-component 1.1 (Mwache Dam Civil Works and Related Infrastructure) will be executed by the PMU, who will contract an Owner's Engineer (OE) which could be a consortium of firms with relevant national and international experience, to oversee the preparation, procurement, and implementation of the works contract

Sub-component 1.2 (Mwache Dam Catchment Management) will be executed by the PMU, and carried out in partnership with: the affected communities; local governments, including Kwale and Mombassa counties; and relevant agencies, including Water Resources Management Authority (WRMA), Kenya Forestry Service (KFS), and the Coast Water Services Board (CWSB).

Subcomponent 2.1 (Water Supply Investments) will be executed by the CWSB through a Project Implementation Unit (PIU) to be established under the CWSB's authority in Kwale County.

Subcomponents 2.2 (Sanitation Investments) will be executed by Kwale County through a PIU to be established within the Kwale County Government and the CWSB.

Subcomponent 2.3 (Sustainable Livelihoods Improvement) will be executed by the PMU the establishment of a Livelihoods Fund to support local communities. The fund will sub-projects in local communities based on an agreed upon framework with strict eligibility and selection criteria that are acceptable to the Bank.

Subcomponent 2.4 (Irrigation Demonstration Project) will be executed by Kwale County through a PIU to be established within the Kwale County Government and the CWSB.

# VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
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

### **Comments** (optional)

# VII. Contact point

### World Bank

Contact:	Gustavo Saltiel
Title:	Program Manager
Tel:	473-8586
Email:	gsaltiel@worldbank.org

# **Borrower/Client/Recipient**

Name: THE REPUBLIC OF KENYA

Contact:Dr. Kamau ThuggeTitle:Principal SecretaryTel:254-20-2252299Email:ps@treasury.go.ke

# **Implementing Agencies**

Name:Ministry of Environment, Water and Natural ResourcesContact:Robinson GaitaTitle:Director of Irrigation, Drainage, and Water StorageTel:254-20-2716103Email:rkgaita@gmail.com

# VIII. 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 Web: http://www.worldbank.org/infoshop