



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 31-Jan-2019 | Report No: PIDISDSC24349

**BASIC INFORMATION****A. Basic Project Data**

Country Eswatini	Project ID P166697	Parent Project ID (if any)	Project Name eSwatini Water Access Project (P166697)
Region AFRICA	Estimated Appraisal Date Apr 01, 2019	Estimated Board Date May 30, 2019	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Swaziland Water Services Corporation	

Proposed Development Objective(s)

To improve access to improved water supply and sanitation services in targeted areas in eSwatini and strengthen the regulatory framework for national rural water supply and sanitation service provision.

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

Total Project Cost	35.00
Total Financing	35.00
of which IBRD/IDA	35.00
Financing Gap	0.00

DETAILS**World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	35.00
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Environmental and Social Risk Classification
Moderate

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



Other Decision (as needed)

B. Introduction and Context

Country Context

1. The Kingdom of eSwatini is a landlocked, small open economy in Southern Africa, with a land area of 17,364 km² and a population of 1.34 million. The country is largely mountainous with 78 percent of the population living in rural areas, an overall population growth rate of 1.8 percent, and a per capita Gross Domestic Product (GDP) of about US\$2,776. Although the Kingdom is classified as a lower middle-income country, an estimated 63 percent of its population lives below the poverty line, with a Gini coefficient of 0.51 in 2009/2010. The level of income inequality is not expected to have fallen since then, given findings that growth has not been pro-poor. Poverty and inequality pose major challenges, especially in rural areas¹, with approximately 38 percent of the total population living below the extreme poverty line.
2. The country has four administrative regions: Hhohho (25.3% of total households reside), Manzini (39.4% of total households reside), Shiselweni (15.1% of total households reside) and Lubombo (20.3% of total households reside). Lubombo and Shiselweni regions have the highest poverty prevalence with 33.6% and 21.1% of the population living below the extreme poverty line and the highest poverty gap measured by area and region.
3. The surface water resources of eSwatini are estimated at 4.5 km³/year with 42 percent originating from South Africa. The five main river systems in the country are the Komati, the Lomati, the Mbuluzi, the Usutu and the Ngwavuma. The Komati and the Lomati river systems are found in the north of the country and both originate in South Africa and flow out of eSwatini back into South Africa before entering Mozambique. The Mbuluzi River rises in eSwatini and flows into Mozambique. The Usutu River, together with a number of major tributaries originate in South Africa, and flows out into Mozambique, forming the border between Mozambique and South Africa. The Ngwavuma River lies in the south of the country. It rises in eSwatini and flows into South Africa before entering Mozambique. The sixth river system contributing to surface water in eSwatini is the Pongola River, which is found on the South African side south of Swaziland. The Jozini dam, built on the South African side, floods some land on the eSwatini side and its water is available for use in eSwatini.
4. eSwatini's development challenges are exacerbated by its vulnerability to external and climate-related shocks, including floods, droughts and wild fires which negatively impact on health, food security and productive economic activity while disproportionately affecting the rural poor. Mitigation and adaptation measures are important given the strong role of the agriculture sector, as well as the large share of the population in rural areas relying on subsistence agriculture.
5. Most recently, in 2015/16 eSwatini experienced a severe El Niño-induced drought, characterized by below normal rainfall, prolonged dry spells and above normal temperatures. The drought was the worst experienced by the country in 50 years, leading to a 30-40 percent drop in production of maize (the staple food crop), extremely low water levels in the main Hawane dam serving the capital, drying up of rural boreholes and forcing the closure of many schools (affecting nearly 200,000 students and teachers, in rural and urban areas).
6. During the drought, persistent severe water shortages both in rural and urban areas (affecting many of the 300,000 people facing food shortages) caused the Government to ration water and many communities to rely on external water supply support. The drought had long-term impacts on ground water supply (of which 78 percent of the rural population depends on) due to the poor recharge of aquifers. Health facilities and schools experienced compromised service delivery or temporary closure due to lack of water, and an increase in the number of diarrhea cases was reported



by health centers. There were also negative impacts on the use of flush toilets with 6 percent of flush toilets in schools having no water for their use.

7. In response to the drought, the Government declared a national emergency in early 2016 and developed the National Drought Mitigation and Adaptation Plan 2016-2022 with an initial budget of US\$3 million for implementation. An estimated total budget of US\$80 million is required for further mitigation and long-term recovery measures.

Sectoral and Institutional Context

7. The Ministry of Natural Resources and Energy (MNRE) is responsible for sustainable water management as well as sustainable provision of water services in the Kingdom of eSwatini. The Department for Water Affairs (DWA) is an agency of the MNRE tasked with management and oversight of water resources and with the rural water services provision in eSwatini, including regulation. The DWA has three units: Water Resources; Rural Water Supply; and Hydrogeology and Drilling. The Rural Water Supply unit has four deconcentrated regional Rural Water Supply Branches (RWSB) in charge of both new construction and responsible to provide back-up support for communities and technical assistance with larger, more complex repairs for which the Government of eSwatini covers the costs. However, in practice the RWSBs have a very small number of staff dedicated to long-term maintenance and back up activities (typically only three per region); they work with very limited resources and effectively have no direct control, or decision-making power over any budgets. All procurement orders for both essential spare parts and simple office supplies have to go via the Mbabane-based DWA for approval and processing. In terms of coordination, the RWSBs do not seem to get regular support from the Regional Administration and see their direct line for supervision and decision making to MNRE/DWA.

8. The MNRE is also responsible for the Swaziland Water Services Corporation (SWSC), who has a mandate to provide water services in the largest urban centers of the country (water supply, and sewage treatment and disposal) and to control the abstraction of raw water from boreholes in those areas for which it is responsible. SWSC is a Public Enterprise wholly owned by Government. For operational purposes, SWSC has divided its areas of supply into four regions being Central, Northwest, Southwest and East.

9. Universal access to safe water and sanitation is part of eSwatini's National Development Strategy, but the country remains far behind its established goal of achieving 100 percent coverage by 2022.

10. The country's Central Statistics Office indicated in 2014 that improved sources of drinking water are used by 96 percent of the urban population. Accessibility is high with 95 percent of the urban population having access on premises. Improved sanitation is accessed by 94 percent of the urban population, with 32 percent sewerage, 18 percent using septic tanks and 44 percent using latrines and other improved facilities. A total of 49 percent shared their improved facilities.

11. In rural areas, improved sources of drinking water are used by 63 percent of the population⁶. Sources of water vary in rural areas, with tap water making up 44 percent of rural supply, groundwater 31.5 percent and surface water up to 21 percent. Countrywide, for most households (62 percent), an adult female usually collects drinking water when the source is not on premises, usually the case in about 50 percent of the rural households in eSwatini.

12. Of the 78 percent of the rural population with access to improved sanitation, 2 percent are connected to sewerage systems, 4 percent use septic tanks and 72 percent use latrines and other improved types of facilities, of which 29 percent are shared⁶. The remaining 22 percent of the rural population has either access to unimproved facilities (8 percent) or practice open defecation (14 percent). In addition, only 25 percent of the population in rural areas have handwashing facilities⁶. Levels of water access, sanitation access and hygiene all correlate to wealth quintiles of the population, with



the lowest quintile having the least access.

13. The Rural Water Supply unit within the DWA is mandated to provide new infrastructure, but also is responsible for providing support to on-going management of water supply facilities. The DWA relies on the community-based management model and employs a five-stage approach to working with communities and includes the formation of water supply and sanitation committees (WSSC), which are then responsible to administer, operate and maintain the scheme. DWA uses a typical project cycle with community mobilization and sensitization stages as well as construction and training, i.e., communities are involved in planning, decision making, construction and maintenance of their water supply scheme. In addition, there is close operational coordination with the Department of Environmental Health (DEH) of the Ministry of Health (MoH) around the construction of latrines in the same communities, as well as hygiene awareness programs.

14. eSwatini's rural water sector faces several challenges. Poor sustainability of eSwatini's rural water services has been attributed to operational causes, such as: poor facility design and lack of construction oversight, partly due to a poorly resourced support agency; low levels of tariff payment; ineffective voluntary (community) management of complex reticulated systems; and an absence of an information system to provide systematically organized baseline data about rural water facilities/services. In addition, the balance in budgetary allocation from the Ministry of Finance has placed greater emphasis on new scheme construction, rather than rehabilitation.

15. Numerous institutional and policy causes of poor sustainability for the rural water sector also exist. The lack of a finalized National Water Policy exacerbates the issues, causes uncertainty and a lack of legality for its contents to be applied. The existing draft policy does not provide specific guidance on key issues of alternative management models, the constitution and nature of water service providers and asset ownership. Whilst implementation and technical guidance, standards and documents exist at DWA, they are not formalized (or in some cases finalized) and so cannot be enforced on NGOs or other entities working in the sector. They are also not widely known about or recognized by other stakeholders. The lack of an asset database or management plan means there is nothing to inform strategic planning or to prioritize and plan capital and maintenance requirements.

16. In light of these challenges there is a need to reconsider the institutional framework under which rural water supply and sanitation is managed. Currently, the rural water supply unit within the ministry has reached an agreement with SWSC, in which SWSC receives their rural water investment budget and provides technical and procurement expertise for the timely completion of quality rural water supply schemes. SWSC is following the community-based management model (explained above). Once investments are completed, the systems are handed over to WSSCs. There is coordination between the two units on the implementation of the investment projects and monthly progress reporting is done jointly.

Relationship to CPF

17. The Kingdom's National Development Strategy of 2013 articulates the country's development vision: "By the Year 2022, the Kingdom of eSwatini will be in the top 10% of the medium human development group of countries founded on sustainable economic development, social justice and political stability." The strategy is currently under review, and the Government has identified three ongoing priorities: (i) maintaining macro-economic stability and accelerating economic diversification; (ii) boosting strategic infrastructure; and (iii) unlocking human capacity.

18. The Country Partnership Strategy (FY2015-2018) is aligned to eSwatini's National Development Strategy and its Vision 2022. Universal access to safe water and sanitation is part of eSwatini's National Development Strategy, but the country remains far behind its established goal of achieving 100 percent coverage by 2022. This project would support the government towards achieving this ambitious goal. The project aligns with the two pillars of the Country Partnership Strategy (CPS): (i) promoting growth and job creation and (ii) strengthening state capabilities, through the delivery of



improved water supply and sanitation services and increased skills development in the targeted area and the DWA/SWSC at large.

19. The Performance and Learning Review undertaken in May 2018 proposes a two-year extension to the CPS, and changes to the results framework in response to evolving country priorities. Since the drought, the declaration of a national emergency in early 2016, the National Drought Mitigation and Adaptation Plan 2016-2022 that was developed detailed an initial budget of US\$3 million for implementation. An estimated total budget of US\$80 million is required for mitigation and long-term recovery measures. This forms part of the rationale for Government's request to the WBG to support rural water interventions to address medium-term issues and provides a strong rationale for this project.

20. The proposed operation would support the Bank's Twin Goals as investments in water infrastructure and improved water supply in this rural, low income region would be a catalyst for local development and economic activity, and help reduce extreme poverty and promote shared prosperity. It would also create an opportunity to improve women's empowerment by reducing the time spent collecting drinking water, a role which is predominantly undertaken by women. Lastly, the project entails potentially significant climate adaptation co-benefits given the impact it could have on improving the management of increasingly scarce water. More detailed calculations of the climate adaption co-benefits of the project (including Greenhouse Gas Accounting) will be developed as part of the project appraisal document and will be finalized by project approval.

C. Proposed Development Objective(s)

21. To improve access to improved water supply and sanitation services in targeted areas in eSwatini and strengthen the regulatory framework for national rural water supply and sanitation service provision.

Key Results (From PCN)

22. Progress towards the achievement of the project's development objective will be measured by:
- a. People provided with access to "safely managed or basic water sources" (number)
 - i. Number of pupils in schools with access to "safely managed or basic water sources" (number)
 - ii. Number of health centres with access to "safely managed or basic water sources" (number)
 - b. People provided with access to water through piped connections (number)
 - c. People provided with access to "safely managed" sanitation facilities (number)
 - i. Number of pupils in schools with access to "safely managed" sanitation facilities (number)
 - ii. Number of health centres with access to "safely managed" sanitation facilities (number)
 - d. Establish a rural water supply monitoring and evaluation system.

D. Concept Description

23. The project will target improved access to water supply and sanitation in the Shiselweni region of the country. This region is characterized by high poverty indices as well as recurrent dry spells and is prone to water scarcity. Only 56 percent of the population in Shiselweni region have access to an improved source of drinking water and to improved sanitation. Approximately 35 percent of this target group use piped water, 13 percent use tube well/borehole, 10 percent use an unprotected well (an unimproved source) and most of the remainder use surface water (24 percent). The majority of the population (68 percent) does not have access to drinking water on their premises and a total of 31 percent must travel more than 30 minutes to collect water (both improved or unimproved source). A total of 12 percent of the population openly defecate and 83 percent of households were observed as having no place for handwashing.

24. The Government expressed interest in World Bank financing for investments that would allow the conclusion of



the Nhlangano Water Supply System, including the connection of the Nhlangano Water Main to the Matsanjeni-Somtongo-Lavumisa Water Main, aiming to increase the security of the Matsanjeni-Somtongo-Lavumisa area. These households would also be provided with sanitation services.

25. The Somtongo–Matsanjeni water supply system is at risk of raw water shortage and inadequate supply from its source, as it depends on the Jozini dam (located in South Africa) through a small holding dam in eSwatini. The holding dam receives water through pumping as per agreements between eSwatini and South Africa. Due to climate change and recurring droughts, the holding dam is prone to depletion which severely compromises potable water supply. It is expected that linking to the Nhlangano supply and therefore utilizing Mkhondvo River, will provide a backup supply of water and further give potable water to communities along the transmission pipeline. The proposed system will further improve water supply at Hluthi town and reduce reliance on groundwater that is depleted in the dry season.

26. The project will focus on the southern portion of the Shiselweni Region, notably the corridor from Nhlangano to Matsanjeni-Somtong, and a transmission pipeline that will interconnect the Nhlangano water supply system to the existing Somtongo–Matsanjeni water supply system. Currently, the region has two separated water supply systems operated by the SWSC, the Nhlangano Water Supply System and the Lavumisa Water Supply System, serving limited areas. The Nhlangano Water System was conceived to supply the entire area from the city of Nhlangano up to Matsanjeni, including the Hluthi town, encompassing most of the southern portion of the Shiselweni Region. The first phase of the Nhlangano System was concluded recently. The system is operating utilizing about one quarter of the installed capacity. The water treatment plant is operating about 4 hours a day, producing approximately 3,500 m³/day, versus an installed capacity of the 15,000 m³/day. The system is supplying 18,000 people, mostly in the cities of Nhlangano, Maseyisini and Mathende, close to the Mbukwane Reservoir. The WTP has a permit issued by the River Basin Authority, which ensures that its total allocation is within the overall eSwatini's water resource allocation.

27. The project would finance the conclusion of the Nhlangano Water Supply System, including the connection of the Nhlangano Water Main to the Matsanjeni-Somtongo-Lavumisa Water Main, aiming to increase the security of the Matsanjeni-Somtongo-Lavumisa area. The connection would allow water transfers in case of water shortages in the Jozini Reservoir. However, the Project will not finance any intervention in the Matsanjeni-Somtongo-Lavumisa Water System.

28. The proposed project is an IPF of a total of US\$35 million. The project will include 3 components:

29. Component 1: Water Supply Extension - Nhlangano to Matsanjeni-Somtongo-Lavumisa Water Main the Shiselweni region (USD \$18 million). The overall objective of this component is to increase potable water supply coverage for domestic, institutional and commercial consumption to populations in Matsanjeni-Somtongo-Lavumisa area, Shiselweni region of the country, through the construction of a transmission pipeline and distribution network. The component will aim to provide populations with safely managed or basic water access. The existing Nhlangano WTP has excess capacity that will be used to expand services through the project-funded transmission pipeline and distribution networks. The component will finance engineering designs and the construction of the transmission pipeline and distribution network. The findings of a concept paper prepared by SWSC recommended the installation of a total of 61 km of gravity main, 3 km of pumping mains at various stages along the route, 3 ground reservoirs, and 1 pumping station. The intention is for the mains to be connected to 154 km of laterals which supply homesteads, offices, clinics, schools and kiosks. The interconnection of these systems would not only provide increased water security to the region but would also enable a substantial increase in potable water coverage to urban and rural areas to an additional 23,0610 people, mostly rural and low income¹¹. During project preparation, the team will explore the potential for maximizing the number of beneficiaries and overall benefits of the investment.



30. Component 2: Improved Sanitation Access in Shiselweni region (\$10 million). The overall objective of this component is to achieve increased access to safely managed sanitation and basic hygiene management in the Shiselweni region. This will be implemented in conjunction with improved potable water access through the project (focused on populations in Matsanjeni-Somtongo-Lavumisa area. It will also aim to provide improved access to sanitation services in health centres and schools in the Shiselweni region. During project preparation, the team will explore the potential for maximizing the number of beneficiaries and overall benefits of the investment. The Joint Monitoring Program defines basic hygiene as “availability of a handwashing facility on premises with soap and water” . As the region has high levels of open defecation, which can be associated with the lowest wealth quintiles and is shown to have an impact on child malnutrition/stunting, this component will target interventions at those households/areas with the highest prevalence of open defecation and poor hygiene management. During project preparation, the level of impact the project investments can have on reducing open defecation, in the target project area, will be confirmed. A range of onsite sanitation and hygiene management solutions will be considered, given the low density and remote areas of most of the households. The component will finance a baseline assessment of the current sanitation service delivery situation as well as a sanitation strategy to be implemented in the region (aligned with the institutional strengthening to be provided under component 3), as well as engineering designs, construction of onsite sanitation and hygiene management solutions, behavior change campaigns and a sanitation marketing campaign.

31. Component 3: Project Management and Institutional Strengthening (USD \$7 million). The overall objective of this component is to support project management and strengthen sector institutions and policies for rural water to improve the long-term sustainability of rural water and sanitation service provision. This component will update existing assessments of current challenges on rural water supply and sanitation and bring to bear relevant international experience that can be adapted to the eSwatini context. This will likely include a focus on institutional reforms to strengthen the rural water supply and sanitation sector, targeting issues of policy, including roles and responsibilities (e.g. strengthening the Rural Water Supply Unit’s capacity to formulate policy and monitor the sustainability of services and the potential for increasing the role of SWSC in the management of rural water supply and sanitation services), adequate financing, operation and maintenance, alternative management models and asset ownership. This component will also support consultancies that will support the National Disaster Risk Management Agency to undertake risk assessments and put in place early warning systems and contingency planning (e.g., drought monitoring and management).

32. The SWSC has received numerous community requests to extend the potable water coverage in the project-targeted areas. Citizen engagement will be sought during project design and further incorporated into the project. This will include consultation and feedback mechanisms, such as focus groups and satisfaction surveys, on the proposed project design and management models. The development of community management committees to support operation, maintenance and sustainability of the infrastructure will further strengthen citizen engagement towards the project and also support the sustainability of the proposed hygiene management and sanitation marketing work.

33. The project will explore opportunities to address specific gender and/or social inclusion gaps identified around the four strategic objectives of the WBG Gender Strategy (Human Endowments, Jobs, Ownership and Control of Assets and Voice and Agency). SWSC has a gender strategy and draft policy, which the project can further build on through collaboration with in-house staff. Through improved access of water (i.e. located closer to home, adequate volume of supply, better quality of water and regularity of supply) the project will directly improve the situation of women, elderly and youth in the targeted areas of eSwatini. In particular, as women and youth will be able to focus on other activities (e.g. schooling and livelihoods) than collecting water. Further discussions on gender gaps, proposed specific actions and results indicators will be conducted during project preparation. For identified actions a strong logical results chain between a baseline analysis, actions, and monitoring and evaluation will be developed.



Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

Key environmental risks and impacts will largely occur during the construction phase of the project and will be related to (i) pollution of water quality from excavation of trenches, accidental hydrocarbon spills from machinery and equipment and from chlorine from cleaning of the new pipes, ii) erosion and sedimentation from earthworks and run-off, (iii) traffic during the construction phase, (iv) disposal and management of waste/spoil from earth works and construction equipment and machinery, (v) occupational health and safety of workers, (vi) nuisances related to air and noise emissions during construction, and (vii) community health and safety. Key social impacts are related to land acquisition, restrictions on land use and involuntary resettlement. . The project will ensure early, continuous and inclusive stakeholder engagement and the findings of the ESIA and the Bank's GBV Risk Assessment Tool will guide the identification of GBV risks and the subsequent development of mitigation plans, if required.

Note To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document.

CONTACT POINT

World Bank

Lizmara Kirchner, Ruth Jane Kennedy-Walker
Senior Water Supply and Sanitation Specialist

Borrower/Client/Recipient

Ministry of Finance

Implementing Agencies

Swaziland Water Services Corporation
Nontombi Maphanga
Technical Services Director
nontombi.motsa@swsc.co.sz



FOR MORE INFORMATION CONTACT

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

APPROVAL

Task Team Leader(s):	Lizmara Kirchner, Ruth Jane Kennedy-Walker
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Approved By

Practice Manager/Manager:		
Country Director:		