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## Towards a Service Delivery Approach to Rural Water Supply and Sanitation

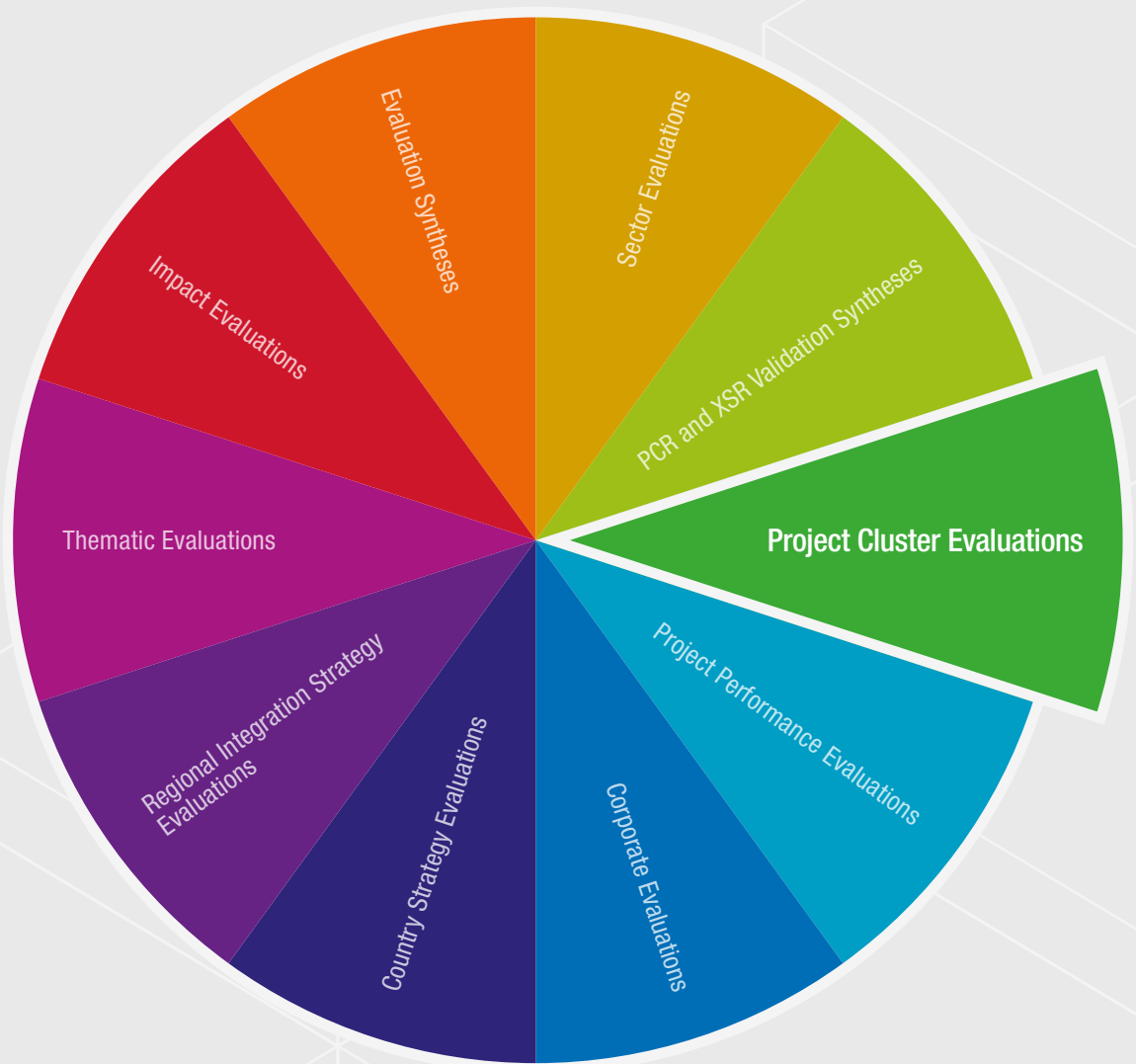
Executive Summary



AFRICAN DEVELOPMENT BANK GROUP

January 2020

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# Executive Summary

## Introduction and Evaluation Purpose/Scope

This report synthesizes key findings of the evaluation of a cluster of sixteen Rural Water Supply and Sanitation (RWSS) projects that were approved and implemented by the African Development Bank Group (AfDB, or “the Bank”) in 2000-2017.

This cluster evaluation aims to (i) assess the relevance, effectiveness, efficiency and sustainability of RWSS projects; and (ii) draw lessons from what worked and what did not work.

This evaluation report is expected to inform the design and implementation of future RWSS projects under the Bank’s High 5s priorities related to improving the quality of life for the people of Africa.

The Bank approved 223 Water Supply and Sanitation (WSS) investment projects (amounting to UA<sup>1</sup> 3.71 billion of net loans and grants) in the period 2005-2016. Of this, 39% (or UA 1.42 billion) financed investments in rural areas, aimed at improving the lives of the rural poor.

Sixteen RWSS projects, with a total net approval amount of UA 365 million, were purposively selected for this cluster evaluation. These projects are located in 13 countries including Burkina Faso (1), Burundi (1), Chad (1), Ethiopia (1), Ghana (1), Mali (1), Mauritania (1), Rwanda (2), Senegal (1), Tanzania (1), Uganda (2), Zambia (2), and Zimbabwe (1).

## Project Cluster Performance

### Development Outcomes

#### *Overall performance*

The project cluster was relevant but was ineffective and inefficient in delivering results, which are not likely to be sustained. Only the relevance criterion reported more than 75% of projects with a satisfactory rating.

#### *Relevance*

**The project cluster objectives were relevant. However, there were weaknesses in some design aspects including (i) assumptions and risk assessment; and (ii) use of some RWSS guiding principles including demand-driven approach, building partnerships, and coordination.**

The project cluster objectives aligned with the Bank’s priorities and strategies, which view water supply and sanitation as a crucial component of development. The objectives were also in line with the development priorities expressed in the national development policies, plans and strategies for the 13 project countries, which were committed to achieving the Millennium Development Goals (MDGs) by 2015, including “halving the number of people who do not have access to safe drinking water and basic sanitation”.

The projects were coherent, given the extensive demand for water supply and sanitation in rural areas. However, the link with waterborne diseases caused by contaminated drinking water and poor sanitation was not always highlighted in the project cluster documents.

Project designs had some weaknesses including (i) insufficient incorporation of some RWSS guiding principles such as participatory and demand-responsive approaches, and partnership; and (ii) some risks were not adequately addressed including inadequate maintenance and sustainability of projects, and insufficient behavioral change.

### *Effectiveness*

**There were significant accomplishments of project cluster outputs, although less for sanitation. However, the achievement of outcomes was threatened by several issues including (i) limited functionality of water schemes; (ii) poor water quality; and (iii) limited adoption of key hygiene practices among beneficiaries.**

The projects delivered the essential physical infrastructures necessary for improving access to reliable and affordable water supply in rural areas. All the projects, with the exception of Uganda Water Supply & Sanitation Project (WSSP), accomplished more than 75% of their expected water outputs. Scaling down projects, mainly due to financial constraints and change in technology choice depending on available water sources, had adverse impact on the quantity and the quality of outputs and on reaching the expected outcomes. Project outputs achieved in capacity development and awareness campaigns were also commendable. However, physical outputs achieved for sanitation components were lower than for water components.

The project cluster had limited achievement on outcomes. It made progress in increasing access to improved water sources, which reduced drudgery of fetching water. However, beyond the headline success in providing first-time access to water lie a number of factors that inhibit the full achievement of the main outcomes related to **sustained** access to safe drinking water. These include (i) limited functionality of water schemes; and (ii) poor water quality. This, coupled with the poor achievement of sanitation outputs and insufficient adoption of key hygiene behavioral practices among beneficiaries, limited the achievement of project cluster outcomes.

### *Efficiency*

**The projects were economically viable, with moderate cost variations. Nevertheless, they experienced substantial implementation delays.**

The projects were found to be viable economically, although data constraints limited the evaluation of the projects' Financial Internal Rate of Return (FIRR).

The cluster projects did not follow their implementation timetables nor their initial cost plans, with project loans and grants taking 32 to 101 months to fully disburse.

Implementation delays were mainly due to procurement issues at the early stages of the projects or during implementation (nine out of the 16 projects), start-up delays (Burundi, Ghana, Mauritania and Zambia National Rural Water Supply and Sanitation Program (NRWSS)), and capacity constraints of contractors (Ghana, Mali, Mauritania and Zambia). Other reasons included slow payment of government counterpart funds (Uganda WSSP and Zambia), poor quality of execution studies (Burundi), land acquisition issues (Uganda), and increased scope of water technologies (Ghana).

## Sustainability

### Low likely sustainability of RWSS projects

Technical viability was sound for water supply infrastructures, but less for sanitation facilities. Ownership and partnership were effective but there were shortcomings related to (i) capacity to operate and maintain the facilities, mainly when using community-based management models; (ii) financial viability; (iii) institutional capacity endangered by limited capacity; and (iv) environmental and social sustainability. In addition, high water demand, owing to rapid population growth and climate change, is likely to increase the challenge of obtaining sufficient water to meet needs.

### Project M&E Performance

#### *Significant shortcomings of monitoring and evaluation (M&E) systems*

The Project Evaluation Reports (PERs) highlighted important shortcomings in monitoring and evaluation systems, suggesting that both RMC governments as well as the AfDB could implement improvements.

Specific reference to a general lack of data was made in Rwanda, Senegal, Tanzania, Chad, and Zambia, as well as to inappropriate monitoring and evaluation systems, which prevented the systematic collection of relevant data with clear responsibilities and well-defined frequency. Instead, Objectively Verifiable Indicators (OVIs) were provided for the entire population (Zimbabwe), or for all rural populations (Ethiopia, Ghana, Mali, Senegal, and Rwanda 2). Finally, beyond the availability of data, reports were not always accessible due to high staff turnover resulting from changes in government.

## Key Issues and Lessons

### Quality of project design

**Lesson 1:** Projects need to pay sufficient attention to design studies, procurement-related issues, and capacity in order to minimize implementation challenges.

- Issues with the quality of the project design were highlighted in Burkina Faso, Burundi, Mauritania, Senegal, and Tanzania.
- Project design often did not optimally address efficiency, such as procurement-related issues. This resulted in substantial implementation delays that lowered project efficiency in Burkina Faso, Burundi, Ghana, Mali, Tanzania, Uganda RWSS, Uganda WSSP and Zimbabwe.
- There were also implementation challenges, which were due to insufficient capacity within companies that were contracted to execute work.

### Community-based management model

**Lesson 2:** Community-based management (CBM) under a demand-driven approach is more impactful when it is effectively applied during the whole RWSS project life cycle.

- Insufficient implementation of CBM under a demand-driven approach during the RWSS project life cycle created challenges that led to limited effectiveness and low sustainability. These challenges manifested themselves as poor performance of service providers, limited functionality of infrastructures, and a low level of services. Insufficient stakeholder participation in the project life cycle limited the achievement of outcomes and lowered sustainability, as was the case in Burkina Faso, Burundi, Mauritania, Senegal, Uganda, Zambia and Zimbabwe.

- Projects' effectiveness was jeopardized by inappropriate technological choices due to insufficient community participation during project conceptualization, as was seen in Burkina Faso, Burundi, Mauritania and Zambia. In this respect, community structures were insufficiently mobilized to maintain the functionality of the water system, as beneficiaries were not sufficiently consulted during the project conceptualization phase.

### Capacity development within a decentralized system

**Lesson 3:** Capacity development for service delivery is needed in both the private and public sectors, at all levels of implementation, if RWSS projects are to maximize water results and solve chronic sanitation issues.

- There was insufficient attention given to service delivery capacities relative to infrastructure development. Moreover, the competencies of the service provider, including CBM and private operators, were sometimes taken for granted.
- Skills and management capacities at both the operational and strategic planning levels, inside and outside of the government, were often limited.
- Limitations in technical and management capacity gave rise to low cost-recovery and poor governance, as well as low willingness of customers to pay for poor quality services. These aspects jeopardized the successful implementation of projects.
- Capacity support to local governments is critical to enable them to fulfill their role (planning, monitoring, regulation, etc.) of sustaining rural services, specifically when using the Public-Private Partnership (PPP) model as was seen in Rwanda.

### Fostering an RWSS service delivery approach

**Lesson 4:** RWSS projects need clear strategies to ensure good service delivery, quality sanitation infrastructure and sufficient behavioral change, if they are to achieve substantial outcomes.

- Beyond headline success in providing first-time access to water, the project cluster was characterized by poor service delivery, weak sanitation infrastructure and inadequate behavioral change. This situation was due to the pressure to expand coverage, which resulted in a strong focus on infrastructure development and less on service delivery.
- Moving towards Sustainable Development Goal (SDG) 6<sup>2</sup> will require a clear strategy to address these risks and ensure effective service delivery, quality sanitation infrastructure and sufficient behavioral change to maximize the achievement of RWSS projects' outcomes. These strategies should be developed in collaboration with key stakeholders including federal, regional and local administrations, and water users' associations. Such a strategy should address (i) water quality, (ii) sanitation facilities and services, and (iii) local operational capacities.
- Some outcomes, such as the reduced incidence of water-borne diseases, required profound behavioral change among stakeholders, especially the beneficiaries. This failed to occur despite awareness campaigns undertaken by the project cluster. Therefore, much remains to be done in terms of (i) hand-washing with soap at critical times in Burkina Faso, Chad, Ethiopia, Uganda, Tanzania, Rwanda, and Zambia; (ii) reducing open defecation in Chad, Ethiopia, Tanzania, Uganda and Zimbabwe; (iii) increasing the willingness to pay in Uganda; and (iv) improving water storage for some households in Burkina Faso, Ethiopia, and Tanzania.

## Sustaining RWSS projects' benefits

**Lesson 5:** The adoption of a wider range of contextually-appropriate service delivery models, beyond community-based management, in RWSS projects is critical if they are to sustain project benefits.

- CBM supported by a system of local decentralized service is the dominant service delivery model in the project cluster in Burkina Faso, Burundi, Chad, Ethiopia, Tanzania, Uganda RWSS, Uganda WSSP, Senegal, Zambia Central Provinces Rural Water Supply and Sanitation Project (CPRWSS) and Zambia NRWSS. However, evidence shows that while this service delivery model was effective in providing some level of first-time access to improved water supply services, it failed to provide sufficient quality and reliable services, except in Senegal and Chad.
- The project design did not incorporate appropriate cost recovery and financing mechanisms to address all cost components for ensuring sustainable service delivery, particularly capital maintenance for replacement of assets, rehabilitation and major repairs. With the exception of Ghana, Mauritania, Rwanda and Senegal in the water supply system, the project countries did not establish the means to ensure the financial viability of both water and sanitation systems in rural areas.
- One of the differences between the SDGs and the MDGs in the WSS sector is that with the SDGs, the emphasis is no longer on access only but also on the service that people receive in terms of equity, safety and affordability. This new paradigm changes the definition of success for all RWSS interventions and the way the M&E system is conducted and used, from reporting to management and learning.
- Given the lack of baseline data as in Chad, Senegal, Rwanda, Tanzania, and Zambia, and of effective M&E as in Chad, Ghana, Mauritania, Rwanda, Senegal, Tanzania, Zambia CPRWSS, Zambia NRWSS and Zimbabwe, the project cluster often missed opportunities to learn and support the achievement of expected RWSS outcomes.
- Caution with respect to a focus on M&E contributing to administrative needs as opposed to management systems is advised. In this respect, project implementers may be overly focused on outputs without sufficient attention to service delivery and behavioral change.
- This suggests that both RMCs governments as well as the Bank could implement improvements through development and implementation of an effective monitoring, evaluation and learning system to ensure regular, relevant data collection, analysis, reporting and feedback, especially on RWSS community Water, Sanitation and Hygiene results. Partnerships between the Bank and RMCs could support the implementation of this effective M&E system at decentralized and national levels. The use of emergent technologies, methods and data-sharing platforms for results measurement will be critical towards improved RWSS service delivery.

## Refining the M&E system towards service delivery and sustainability

**Lesson 6:** A comprehensive M&E system focused on rural service delivery and sustainability is critical to foster project development results.



## About this Evaluation

This report synthesizes the results of a cluster evaluation of 16 AfDB-funded Rural Water Supply and Sanitation (RWSS) projects that were implemented in 13 countries over the period 2000-2017. The evaluation assessed the performance of the projects and drew pertinent lessons for the policy and practice of designing and implementing future RWSS projects. It examined the extent to which the intended project results were achieved, and the factors that facilitated or limited their achievement.

The evaluation paid particular attention to key issues related to quality of project design; viability of the community-based management model; level of capacity development within a decentralized system; strategies to foster RWSS service delivery; and mechanisms to sustain benefits from RWSS projects. Lessons on what worked and what did not work for the projects were distilled from multiple sources of evidence using both quantitative and qualitative data collection approaches including desk reviews of relevant Bank documents and literature; interviews with key internal and external stakeholders; and field visits of purposively selected project sites.

Six key lessons emerged from this evaluation, including the importance of sufficient attention to project design studies and capacity strengthening to minimize implementation challenges; that community-based management under a demand-driven approach is more impactful if applied throughout the project cycle; the need for clear strategies to enable quality sanitation infrastructure and sufficient behavioral change; and the criticality of a comprehensive monitoring and evaluation system focused on rural service delivery and sustainability.



IDEV

Independent Development Evaluation  
African Development Bank

African Development Bank Group  
Avenue Joseph Anoma, 01 BP 1387, Abidjan 01, Côte d'Ivoire  
Phone: +225 20 26 28 41  
E-mail: [idevhelpdesk@afdb.org](mailto:idevhelpdesk@afdb.org)

