

Country-level Sector Information and Monitoring Systems (SIMS) for Water and Sanitation in Africa

Practitioners' Workshop, Nairobi, Kenya, March 27-29, 2007

A regional workshop on Sector Information and Monitoring Systems (SIMS) confirmed that effective SIMS are critical to expanding and improving water and sanitation services, and enhancing the efficacy, efficiency and equity of sector investments. The workshop articulated a framework derived from country experiences in the region, as well as the key principles of SIMS: inclusiveness, integration with country systems and the need to adopt an incremental approach. Development of SIMS guidelines and continued country support were identified as critical for progress.



Summary

A regional workshop on Sector Information and Monitoring Systems (SIMS) for water supply and sanitation was held in Nairobi, Kenya in March 2007. The workshop confirmed that effective SIMS are a critical element of a country's efforts to expand and improve water and sanitation services and enhance efficacy, efficiency and equity of sector investments. The key principles of SIMS agreed were: inclusiveness; integration with country systems; and the need to adopt an incremental approach. The workshop also articulated a framework with five main building blocks (strategic decision-making, sector strategic monitoring, sector implementation monitoring, dissemination and institutionalization) that has been derived from the country experience in the region. Country SIMS also need to be linked better to regional monitoring. Development of SIMS guidelines and continued country support were identified as critical for progress.

Learning, Self Assessment and Action Planning

Over 90 practitioners from African countries and their development partners met in Nairobi, Kenya from 27-29 March 2007 to develop a better understanding of how to effectively develop and implement Sector Information and Monitoring Systems (SIMS) based on emerging regional experiences. The workshop also served as an opportunity to better define and coordinate country, regional and global initiatives aimed at monitoring progress toward the



Millennium Development Goals (MDGs) on water and sanitation.

The workshop brought together teams of practitioners from 13¹ African countries as well as representatives of the African Ministerial Council on Water (AMCOW)'s Technical Advisory Committee, the UNICEF-WHO Joint Monitoring Program (JMP) as well as resource persons from a number of organizations², in addition to the organizing partners, namely the Government of Kenya (GoK), the African Water Facility (AWF) and the Water and Sanitation Program -Africa Region (WSP-AF).

The workshop was designed as a networking and learning event progressing from the sharing of experiences and good practices to self assessment and action planning by

country teams. It contributed to:

- i) reaching a shared understanding of the guiding principles and tools for the development and continual improvement of country SIMS;
- ii) the development of country and regional action plans;
- iii) the identification of support needed at the country and regional levels; and
- iv) demonstrating the benefits of regional cooperation.

Deliberations at the workshop were informed by detailed case studies on SIMS, a background paper on the SIMS Framework, as well as country self-assessments using a SIMS Scorecard³.

¹ Benin, Burkina Faso, DRC, Ethiopia, Ghana, Kenya, Mozambique, Niger, Rwanda, Senegal, Tanzania, Uganda, and Zambia.

² We wish to thank participating resource persons from: The World Bank, The World Water Council, The Global Water Partnership, ECOWAS-WRCU (Economic Community of West African States – Water Resources Coordination Unit), OMVS (Organisation pour la mise en valeur du fleuve Sénégal), CREPA (Centre Régional pour l'Eau Potable et l'Assainissement à faible coût), the London School of Hygiene and Tropical Medicine and WaterAid.

³ As preparation for the workshop case studies were prepared for three country case studies, namely, Benin, Uganda and Senegal. A SIMS framework paper was prepared presenting the SIMS model. During the workshop, countries prepared and self-assessment scorecards providing a subjective overview of the status of sector monitoring and information collection efforts and recommended next steps. All will become available on the WSP website on the thematic site of the finance team for the Africa region.

A Strong Need for Sector Information and Monitoring Systems

The country presentations as well as the group work confirmed that effective sector-wide monitoring and information systems are a critical element of a country's efforts to expand and improve water and sanitation services and enhance efficacy, efficiency and equity of sector investments. Successful country experiences presented at the workshop also highlighted that a shared vision, clearly articulated and laid out in a sector-wide strategy, forms the critical backbone for establishing an effective SIMS.

The water and sanitation MDGs have led to an unprecedented mobilization of resources from within African countries and from their development partners. Many countries have launched sector-wide strategies and programs to revive and accelerate the development of the water and sanitation sector to achieve the MDGs. This has led to increased funding and has brought into sharp focus the strong need to build country capacity for sector monitoring; which should enable the sector to show accountability and efficiency in resource utilization and to demonstrate that concrete results in terms of better access to water and sanitation can be achieved from increased sector investments.

Several interrelated factors drive the need for effective SIMS, including:

- The emergence of Poverty Reduction Strategy Papers (PRSPs) as the overarching framework for country social and economic planning
- The move toward sector-wide approaches (SWAps) and budget aid in the region



- The commitment toward aid effectiveness and aid harmonization
- The strong demand for accountability in the allocation and use of public funds
- The complexity of monitoring competing social, economical and environmental demands required by Integrated Water Resources Management (IWRM)
- The need for greater coherence of country monitoring with regional and global tracking of the MDGs

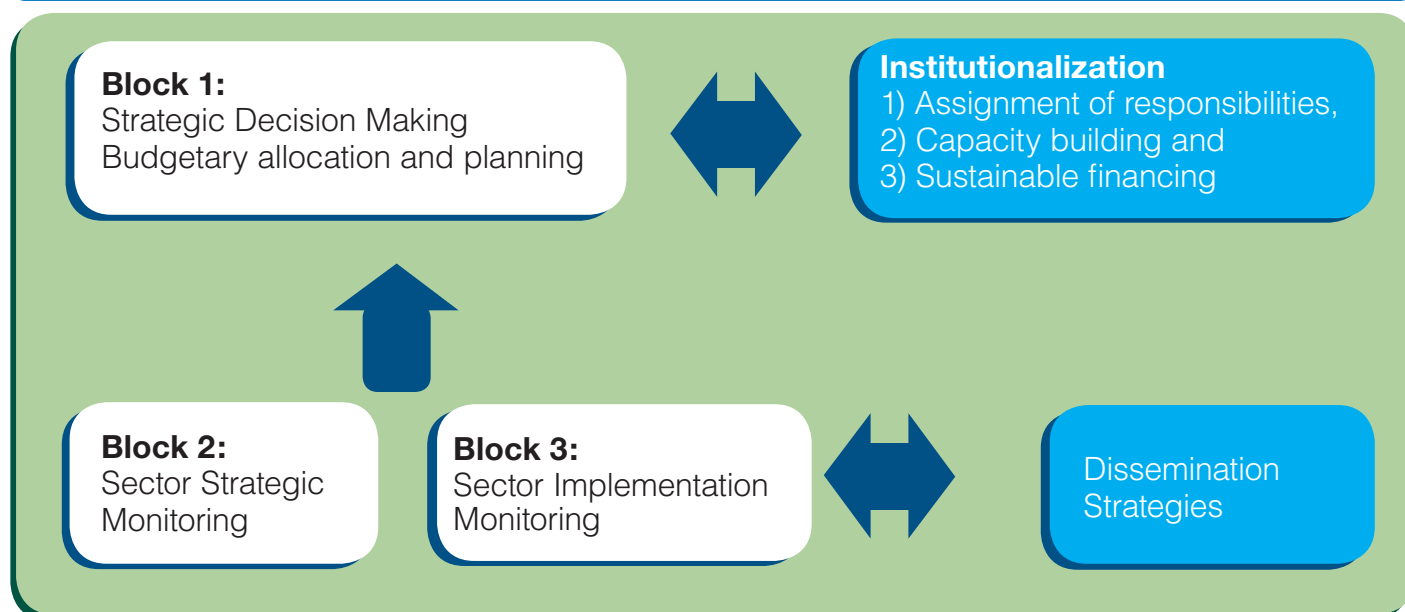
The MDGs have compelled governments and their development partners to develop long-term country-wide visions and roadmaps. At the regional level, the African ministers of water and finance have called for the monitoring of progress toward the MDG targets for water and sanitation services across countries and requested the African Development Bank to support this process. In February

2006, AMCOW mandated the AWF, in partnership with other actors, to recommend a regional approach based on country-level data collection.

The general movement toward decentralization of service delivery has strengthened the need for coherent country-wide planning and monitoring strategies to guide all country actors involved in the development of water and sanitation services.

Reliable monitoring and information systems are also critical for the implementation of the type of institutional reform implemented in many countries, involving a separation of oversight and policy making functions from service provision. Reliable monitoring information is an absolute necessity for the oversight of autonomous operators (public as well as private) regardless of whether the regulatory functions are carried out by a regulatory agency or through contracts.

A Framework for Country level SIMS



Guiding Principles and a Framework for SIMS Derived from the Regional Experience

The country cases reviewed during the Workshop validated and enriched the recommendations outlined in the draft SIMS framework paper arguing for a systematic approach to SIMS by integrating performance monitoring and strategic decision-making. Three principles were identified as important in establishing and strengthening country level SIMS:

Inclusiveness: SIMS should cover the whole chain of inputs, outputs, intermediate outcomes and final outcomes for the entire sector or for a sub-sector such as rural water or sanitation in its entirety.

Integrated: SIMS should be integrated within the country's own planning, budgeting and reporting systems.

Incremental approach: SIMS should be developed and implemented gradually to allow broad ownership within the sector and to institutionalize SIMS within sector decision-making.

A SIMS framework was presented at the workshop, consisting of five building blocks. **Strategic Decision-making** (Block 1) presents strategies for effective integration of monitoring information and reports into sector decision-making – defined as overall sector planning and budgetary allocations.

Strategic Decision-making draws on two types of monitoring, namely: **Sector Strategic Monitoring** (Block 2) and **Sector Implementation Monitoring** (Block 3). Sector Strategic Monitoring facilitates decision-making on sector policy, strategy and policy targets by monitoring final outputs (access to water and sanitation) and intermediate outcomes (such as sustainability, efficiency and equity in service provision).

Sector Implementation Monitoring facilitates improved implementation and accountability of sub-sector policies by analyzing the relationship between inputs (budgetary allocations) and outputs (such as water and sanitation infrastructure constructed or staff trained or hired).

Sector Implementation Monitoring is more narrowly defined as it is concerned strictly with tracking the relationship between budgetary allocations and outputs, whereas Sector Strategic Monitoring examines a broader set of issues, such as efficiency, equity and sustainability of investments.

Effective and sustainable SIMS further requires systematic **Dissemination** (Block 4) through appropriate channels ranging from print media to electronic Web-based systems, and **Institutionalization** (Block 5) of SIMS through appropriate assignment of responsibilities, establishment of sustainable funding mechanisms and capacity building.

Key Messages

The workshop presentations and deliberations deepened participants' understanding of SIMS through country experiences. The workshop also helped to identify success factors and good practices for the various elements of the SIMS framework outlined above:

Resolving and harmonizing definitions of key outcomes and intermediate outcomes across different agencies and donor partners is a critical first step in establishing strategic monitoring in a country.

- One successful approach adopted by many countries is to move towards consultative development of a “golden set” of indicators (e.g. in Uganda, Senegal and Kenya).
- Country experiences suggest that it is critical to start with existing information and improve definitions and quality of data over time. Use of existing data in rigorous analysis, such as in comparative assessment across utilities, districts and agencies, will help in this process as illustrated by the case of the Uganda Sector Performance Report and the Zambian regulator NAWASCO's Information System.

Regional harmonization of outcome indicators needs to follow a “bottom-up” approach starting with country experiences.

- Issues of regional harmonization need to be addressed by first understanding the basis for access definitions used by different countries.
- There is a need to explore approaches to measuring access that enables



countries to capture improvements in quality of service across a number of different dimensions, such as distance/ time, quantity, and quality of water while at the same time allowing for regional comparisons and tracking of process.

Improved implementation monitoring requires a move towards SWAps and harmonization of donor contributions.

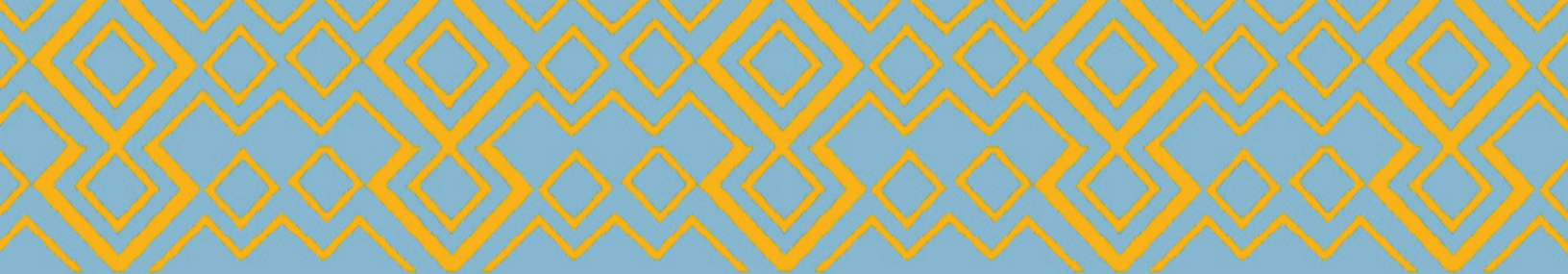
- Most countries carry out implementation monitoring, but given the prevalence of project funding within the sector, such efforts are often fragmented across different agencies and projects. To overcome this fragmentation, programmatic approaches and donor harmonization are critical. Most countries at the workshop have either initiated SWAps or

are exploring the possibility of doing so.

- While in most cases implementation monitoring happens through a Management Information System (MIS), the possibility of monitoring performance contracts (that link resources to commitment on outputs) as used in Kenya also need to be explored.

Use of SIMS is increasingly being linked to a Joint Sector Review process – but potential budget links are less well developed.

- The emerging good practice cases such as those followed in the production of the Uganda Annual Sector Performance Report and in the development of a Unified Data Base in Senegal are important in this respect.



- There is less experience in improving the use of SIMS for budgeting. In general, a better understanding of how SIMS can be linked to budgetary decisions is needed. The possible use of SIMS outcome information for formulae-based allocations in the context of decentralization is another idea which needs to be explored (e.g. as is being done in Mozambique and Tanzania).

Institutionalization requires assumption of ownership by lead institutions that are clearly assigned mandates and incentives for SIMS.

- Country experiences indicate that a key first step in establishing SIMS is to mandate a lead institution (such as the PEPAM⁴ secretariat in Senegal or the special working group on performance monitoring in Uganda) to

coordinate SIMS. In addition, clearly-defined mandates for different types of monitoring (e.g. for urban utilities by the regulators) can help agencies in accessing information and in the use of SIMS.

- By aligning varied sources of information through a unified database managed by a SIMS lead institution (e.g. as in Senegal) is a good way to move forward on improving the systematic use of available information for the whole chain of monitoring indicators (input, output, and intermediate outcomes).
- Successful institutionalization requires appropriate incentives. A number of good practice examples of incentives for the regular provision of monitoring information emerged – such as: a) the monitoring of a performance contract with ONEA in Burkina Faso, b) an awards and sanctions scheme used by NAWASCO, the Zambia regulator,

c) and the Sistema Nacional de Informacoes sobre Saneamento (SNIS) in Brazil that requires that monitoring information be provided before federal funds are allocated.

Institutionalization also requires that the costs of SIMS are as low as possible and that funding mechanisms are sustainable.

- Sustainable funding for SIMS is critical. Interestingly, one participant stated that the “the cost of SIMS is inversely proportional to the level of institutionalization” as illustrated by the case of Annual Sector Performance Reports in Uganda. While the initial costs of setting up SIMS components may be high, as procedures are systemized and internalized, costs can be reduced dramatically.
- Participatory monitoring approaches carried out by village groups, community-managed water users associations or urban utilities may also reduce costs over time. Initial setup costs include the establishment of proper procedures and tools as well as appropriate training activities. Communities and utilities will contribute their participation freely if it is clear that information is utilized in periodic reviews and that good performance is rewarded. Equally importantly, their role can help increase the impact of monitoring information on decision-making as illustrated by experience with water point mapping in Ghana.
- One way to reduce costs of outcome monitoring is to do a “survey of surveys” and make full use of available national surveys (such as the Census, the Demographic and Health Survey (DHS) or the Multiple Indicator Cluster Surveys (MICS)). It may be

⁴ PEPAM - Programme d'eau potable et d'assainissement du millénaire can be translated to "The Program on Safe Drinking Water and Sanitation for the Millennium".



worthwhile exploring special water and sanitation household surveys as discussions suggested that costs may be substantially reduced if carried out in collaboration with country's Bureau of Statistics and if regional agencies assist in developing standardized modules.

- Agencies may also explore appropriate levies or taxes to meet monitoring costs on a sustainable basis. Two successful cases shared at the workshop include: i) ECOWAS (Economic Community of West African States) which taxes countries to finance its operating and project costs, including those related to information collection and monitoring, and ii) the Zambian regulator NAWASCO which mobilizes its operating costs, including monitoring costs from levies imposed on utilities.

Dissemination of reports from SIMS appeared to be the most neglected area. Attention should be given to establish appropriate type of reports as well as the establishment of a two-way flow of information.

- Self-assessments by the participating country teams suggested that the lack

of an adequate dissemination strategy is often the weakest link in SIMS at the country level.

- While there are some good practice aspects in terms of special annual sector performance reports and the use of Web-based portals, in general there is a need to have a more systematic assessment of stakeholder needs and a dissemination strategy.
- A critical aspect of a SIMS dissemination strategy is to establish a two-way flow of information where agencies such as local governments, utilities and community-based providers supply information to a centralized unit which processes the information and sends it back.

Regional information systems can contribute significantly to the improvement of country SIMS.

- The development of regional information system is a way to improve data harmonization for riparian countries through exchange of data on regional protocol definitions as is being done successfully by OMVS (Organisation pour la mise en valeur du

fleuve Sénégal) in West Africa.

- Improving data reliability is essential for meaningful regional comparisons. This also requires capacity building support for all stakeholders responsible for data production at the country level. Use of appropriate information technology as being done by ECOWAS for its regional SIMS development is important for improving data reliability over time and can contribute to building country capacity for improved data collection.
- Monitoring of the water sector through an IWRM approach considers the various uses of water as a resource to allow for the effective mediation between conflicting uses and to enable a sustainable balance. Monitoring IWRM through Global Water Partnership (GWP) tools can assist decision-making in water transfers among basins and contribute to country SIMS.

A consistent message emerging from the workshop deliberations is the need to move gradually and incrementally to match SIMS with the specific country context and capacity.

- Externally-driven complex approaches are not likely to be used well or be sustainable. These can also be perceived as threatening by decision-makers - especially if carried out without clear country leadership.
- Thus, there is a need to establish and develop SIMS in a consultative manner so that "everybody is brought on board and so that SIMS gradually becomes a way of life". This takes time and resources, as illustrated by several successful cases, such as the establishment of SIMS in Uganda and NIS (NAWASCO Information System) by the regulator in Zambia.

The Way Forward

Support to countries in establishing and strengthening SIMS.

- Based on the country action plans initiated at the workshop, countries will initiate a consultative process at the national and local levels to identify priorities in establishing and strengthening SIMS.
- Countries in the region are at different levels of SIMS development. There is a need to promote South-to-South learning by enabling those that have just initiated the process of establishing SIMS to learn from SIMS leaders. Organizing partners (WSP-Af and AWF) will work with other partners and countries to support country processes in setting up and strengthening SIMS.

Development of SIMS Guidelines.

- The workshop validated the basic SIMS framework and approach presented in the SIMS framework paper. The paper was drafted based on the experiences of countries in the region in setting up SIMS. Several additional good practices were shared at the workshop, which will be incorporated in the development of a fuller set of SIMS Guidelines.
- The SIMS Guidelines will be a “living

document” drawing from country experiences as these evolve over time.

Regional Harmonization and Review.

- Based on workshop deliberations, three areas emerge as important and will be taken up for furtherwork: i) developing a better understanding of country processes and rationales for developing outcome definitions; ii) developing a conceptual basis for different parameters of outcome indicators to arrive at a regional codification; and iii) further strengthening regional coordination among various stakeholders to avoid duplication and to identify gaps in support to be provided to countries and other stakeholders.
- AWF has the AMCOW mandate to develop regional monitoring and evaluation (M&E) systems in line with the MDGs, including IWRM. It will initiate the work on improved regional harmonization and the creation of synergies among different global and regional partners through a regional coordination working group. The group will assist with analyses and adapting tools, methods, approaches and experiences developed by international and regional organizations.



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Rasna Warah copy edited the proceedings.

Conceptual framework paper

- *Country Level Sector Information and Monitoring Systems for water supply and sanitation - A systematic approach to integrating performance monitoring and sector strategic decision-making.*

Case documentations

- *Rural Water Supply Monitoring and Evaluation System in Benin.*
- *Setting up the Monitoring and Evaluation Systems for the Millennium Water and Sanitation Program in Senegal (PEPAM)*
- *Water and Sanitation Sector Information and Monitoring System in Uganda.*