

BREAKING BARRIERS: A SIMPLE SUCCESSFUL MANAGEMENT INFORMATION SYSTEM EXCITES WASH SECTOR STAKEHOLDERS IN ETHIOPIA

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Country: Ethiopia

Sector: Water, sanitation and hygiene

CHALLENGE

Ethiopia is a large country with over 35 million people without access to safe and sustainable water, sanitation and hygiene (WaSH). Since 2005, the Government of Ethiopia (GoE) and key WaSH stakeholders have been implementing the Universal Access Program (UAP) to achieve 100% access to WaSH by 2015. One persistent difficulty they have faced has been putting in place a simple and reliable information system to generate, update, process and make reliable WaSH information available for planning, monitoring, evaluation and decision making at the *Woreda* (district), regional and national level that is acceptable and usable by key stakeholders. Several attempts have been made, the latest being one started in 2008 by the GoE supported by the World Bank and DFID which has ended up with a complex draft MIS system that does not capture the interest of stakeholders.

In May 2010, six *Woredas* (Kedida Gamela, Boloso Sore, Shashego, Halaba, Misrak Badewacho, and Demboya) located in the Southern Region of Ethiopia finalized the development of a simple management information system (MIS) that captures, stores, updates, analyses and generates relevant WaSH information that is required for decision making. The *Woredas* are now using the system and are very excited with the new experience. They are now able to generate critical information on the *Woreda* WaSH coverage in households, schools, markets and health centres with a push of a simple computer key. They are producing digital maps showing the uneven distribution of the WaSH facilities in the *Woreda*.

CLIENTS

Development of the MIS system is done through a participatory process started in Mid 2009 when the Water Resources development Bureau (WRDB) and six *Woredas* in the southern region of Ethiopia requested SNV to support them design and develop a simple MIS for easy storing, managing, updating and reporting of WaSH data at the Regional and lower levels. After consultation with Regional and *Woreda* officials, SNV Ethiopia contracted Hawassa University-Institute of Technology, a local capacity builder (LCB) to support in the development of a computer based MIS system.

METHOD / SNV INTERVENTION

The new MIS that is exciting stakeholders is basically a computer based system installed on the computers in the *Woreda* offices. It has a capacity to be linked and networked to computer systems at the Regional and National level. The stakeholders have classified the system as simple and exciting based on the following four considerations. The system:

- addresses both inventory and governance aspects of WaSH with a focus on only a few critical variables.
- generates WaSH information on key strategic target groups: house holds, schools, market places and health institutions.
- generates information on WaSH service delivery by actors.
- is linked to a simple geographic information system to generate spatial data.
- the system can be linked and networked from the *Woreda*, region up to the national level

- The system is simple to learn and operate at all levels.

SNV engaged Hawasaa University and together they facilitated the *Woreda* WaSH sectors to establish Woreda MIS team members from education, health and water offices. The MIS team was tasked to organise the available WaSH information and was later trained on how to input the data into the system, operate and manage the system and update information on regular bases. In the course of the training the WaSH MIS was installed in the Woreda WaSH sector offices and the trainees were supported to enter the existing WASH data of their respective Woredas. With supervision from SNV and Hawassa University, the team was monitored and coached on how to use the system.

The system was later shared with major stakeholders at Regional and National level which included the National WaSH Coordination Office, UNICEF, World Bank, National WaSH inventory taskforce and other major WaSH actors. The stakeholders were quite happy and they recommended upgrading of the MIS to align with the National WaSH inventory framework. The system was upgraded by Hawassa University and is now ready to be scaled up to cover 94 *Woredas* in four regional states (about 15-20 % the country) with a prospect to cover all the 730 *Woredas* in the country.

The specific roles and responsibilities of the different actors are as shown in the table below:

Major actor	Roles and responsibilities
SNV	<ul style="list-style-type: none"> • Designed the MIS framework (data and information to be captured, stored, analysed, generated) • Identified and engaged the LCB • Supported <i>Woredas</i> to organise WaSH data • Shared the system to major players in the sector at all levels • Facilitated the <i>Woreda</i> staff training • Facilitated upgrading of the MIS
Hawassa University- Institute of Technology	<ul style="list-style-type: none"> • Designed the <i>Woreda</i> WASH MIS • Tested the system • Trained Woreda staff • upgraded the system
WASH coordination office/MoWR	<ul style="list-style-type: none"> • Availled the necessary information required for upgrading the system • Committed to upscale the system at national level • Facilitated implementation of the system in the region
UNICEF	<ul style="list-style-type: none"> • Financed the cost required for upgrading the system • Availled necessary information to upgrade the system
SNNPR WRDB	<ul style="list-style-type: none"> • Committed to upscale the system at regional level • Use the system to compile water supply inventory data of the southern region
Woredas WASH offices	<ul style="list-style-type: none"> • Organised data required for the system • Generated, entered and have committed to regularly update WaSH information in the system • Used the MIS outputs for planning and decision making • Shared the system to major players and availled all the required WSSH information for stakeholders

OUTCOME

SNV and LCB interventions in the development of the MIS system have resulted in five major outputs:

- a functioning MIS installed in the six pilot *Woredas*
- *Woreda* WASH MIS teams trained in data inputting and organising, data analyzing, reporting and updating
- *Woreda* staffs with knowledge and skills to manage, and use the system for evidence-based planning and resource allocation
- 80 sector professionals at national and regional level with knowledge on the WSH MIS.
- An upgraded MIS that is ready and planned to be scaled up in 94 *Woredas*

IMPACT

An excited Ato Arega Arkiso of Shashego Woreda education office remarked: “When I start the training I was afraid even to touch the computer keys because it is my first time to get introduced to the technology. Now I am capable of entering my respective sector data into this MIS and clearly see the analysis it makes with simple touch of the right key.”

The *Woreda* WaSH members are quite up beat that the MIS system will reduce duplication of efforts in data collection and analyses and generate information that will influence politicians to address WASH issues in most deserving places

The *Woredas* have gone ahead and shared this new MIS experience with stakeholders at the Regional and even at the National levels. The response has been quite positive and inspiring. The Ministry of Water Resources (MoWR), UNICEF, World Bank and other stakeholders were quite happy with the MIS and supported upgrading of the system and its application to 94 other *Woredas*, with a prospect to upscale to the whole country

The success of this project is attributable to four factors:

- The high demand by WASH stakeholders for a reliable and up to date WASH data and a management information system at national and lower levels.
- The ability of the MIS system to combine both inventory and governance information types that is demanded by the WASH sector
- The simplicity of the system that allows stakeholders at the *Woreda* level to operate and manage the system with minimal external support
- The evidence based approach that allowed the clients to participate and see the benefits of the system. The MIS was developed, piloted, upgraded and implemented gradually to allow broad ownership and institutionalization within the sector.
- The system was integrated into the governments own planning, budgeting, monitoring and evaluation, and reporting systems.

LESSONS LEARNED

Despite the achievements outlined above, there were several challenges faced during the development and implementation of the MIS. These were:

- The available WaSH information in the *Woredas* was not all generated in a format compatible with the MIS framework. A lot of effort was required to re-format the data and enter it in the system.
- Agreeing on the minimum number of critical variables to be entered in the system was difficult. Different stakeholders put emphasis on different variables. A give and take approach was adopted in the process to agree on what should be included.
- Staff with basic IT knowledge and hardware (computers with accessories) at *Woreda* level were unavailable in some of the *Woredas*. The LCB had to create more support to upgrade the capacity of the *Woreda* staff to be able to work with computers. Luckily, UNICEF was ready to support with computers
- How to ensure protection of the data base and the MIS system is not yet clearly worked out considering that *Woredas* have a history of high turn over and those responsible could easily leave without replacement.

The lesson learned from this project is that WASH stakeholders in Ethiopia are quite eager to adopt and use MIS that are simple and generates critical information required for management decisions. To develop such a system, involvement of all key stakeholders is crucial. This experience suggests that in developing an MIS, those who will use the system should be involved and institutionalization of the system in the government framework appears to be the

SUSTAINABILITY

key for success. Sustainable funding during development of an MIS also turned out to be quite important.

Involvement of the local Hawassa University also paid good dividends because the University has increased its capacity on development of MIS and is available to support the system and guarantee its sustainability.