

National Rural Water Supply and Sanitation Programme of Zambia

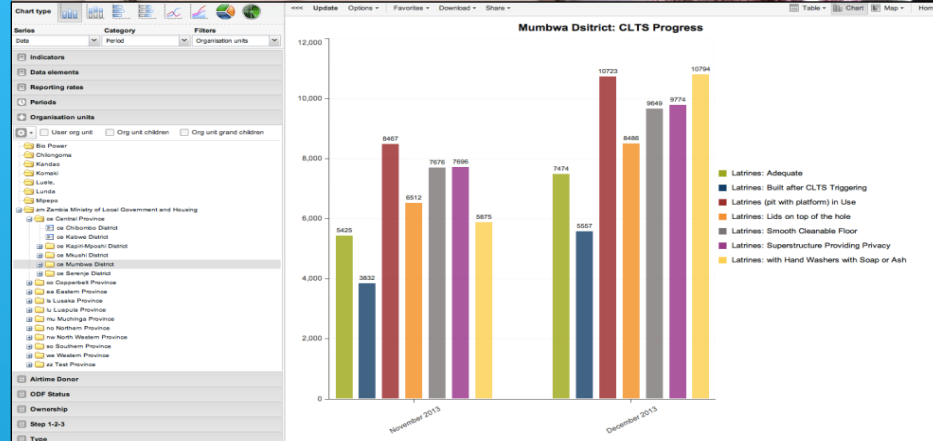
Real time Mobile-to-Web Monitoring, Evaluation and Reporting (MER)

Chinyama K. Lukama, MA

Technical Advisor for Monitoring, Evaluation and Reporting

Ministry of Local Government and Housing, Zambia

Dagmar W. Verbeek-Heemskerk, MA
Regional Manager West-Africa, Akvo, Mali



MOBILE TO WEB SYSTEM SYSTEM

In Zambia the monitoring to web system is based on the DHIS2 system. Water point monitoring data collected using the Akvo FLOW data collection tool is also being automatically integrated in the DHIS2 system.

Data collected with FLOW survey is automatically linked to the DHIS2 system, which can then be processed for further analysis and comparison.

The DHIS2 system used in Zambia for WASHE is an extensive monitoring cloud based database, while Akvo FLOW is a state of the art mobile data collection tool being used to collect WaSH data.

DHIS2 OPEN SOURCE SOFTWARE

- Developed by University of Oslo
- Initially in Zambia used for health data – first time used for sanitation data
- Automatically aggregates data through the geographic hierarchy
- Provides rapid feedback to field staff; identifies slower communities
- Has encouraged additional donor support (extension for EU + AfDB funded programmes in additional districts)
- A risk of high maintenance cost

DHIS2



Collects Data

- When
- Where
- What

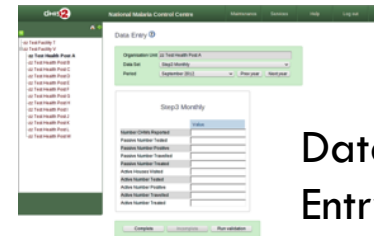
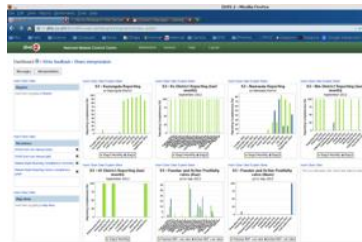
Displays Data

- Charts
- Pivot Table
- Maps

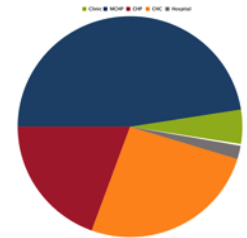
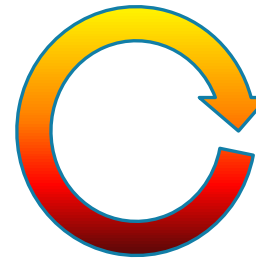
Outputs Data

- Direct Interface
- Automatic Reports

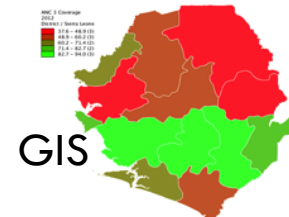
Dashboard



Data Entry



Visualizer



GIS

AKVO FLOW OPEN SOURCE SOFTWARE

- Internationally developed by Akvo Foundation
- Sanitation data was already collected in Zambia with Akvo FLOW in the Kasama District by SNV under the DFID's SSH4A program.
- Enables to collect detailed data with the smartphone at large scale, including geo-location data, pictures, etcetera.
- Data is stored on the web and immediately available: better supervision during the collection process is possible, less errors in data because there is no typing of data: better quality of data.
- Enables to use other integrated tools as CartoDB for visualisations
- Software is not for free, an annual fee is counted for stocking of data and development of the tools

AKVO FLOW

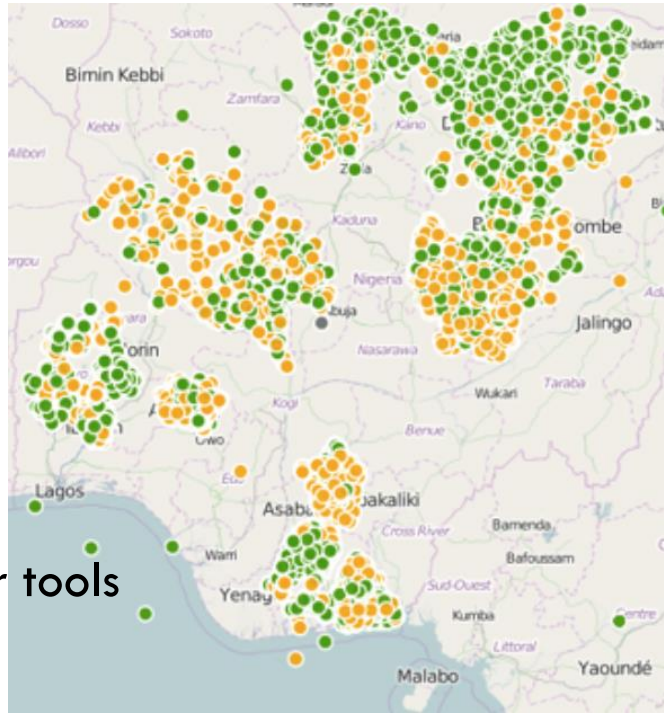
Collects data

- Baseline surveys
- Monitoring feature



Displays data

- Visualisations (maps)
- Analysis (graphs)



Reports data

- Export in Excel
- Integration with other tools

A screenshot of the AKVO mobile application interface. The top status bar shows the time as 12:25 and various system icons. Below the status bar, the app title is "akvo MLGH/UNICEF CLTS For...". The interface has a dark header with three tabs: "HEADER", "CLTS", and "SUBMIT". The "CLTS" tab is selected. The main content area shows a form with the following sections:
1. Organisation unit*
District: Mu Chinsali District
Ward: CHILUNDA
Village: please select
2. Organisation Unit Name*

Strengths with the M2W System

- Improved data collection: faster, better quality, better access.
- Improved reporting speeds: reporting speeds have increased exponentially with the use of the M2W compared to paper trail.
- Enhanced data analysis: data may be **immediately analyzed** using maps, charts, pivot tables, or summarized through dashboards.
- Enhanced data sharing: DHIS2 pulls all Community Facilitator data directly into a Zambian cloud-based system, which can be **simultaneously distributed** to a complex matrix of stakeholders.
- Improved accountability of data and resources among all stakeholders.

Impact of M2W System

- Evidence based planning for sanitation implementation
- Increased reporting rates through feedback loop
- National reliable picture on sanitation status

Challenges with the M2W System

- High cost of capacity building both at national and sub-national levels, especially on trainings and constant surveillance on the initial implementation stage. Once implemented fully, the costs are highly reduced.
- Complexity of harmonizing DHIS2 with other systems e.g Akvo Flow. It needs a high level of IT skills to manage the integration.



**“ WITH CLEAN & SAFE WATER COMES IMPROVED HEALTH, A STEP
TOWARDS BUILDING A STRONG NATION”**