

### Introduction to WaterAid's PIMS

#### What is the purpose of PIMS?

The Post-Implementation Monitoring Survey (PIMS) is an internal monitoring process used to raise red flags about the sustainability and effectiveness of our work. PIMS triggers further study into the causes of issues raised. Once issues have been flagged and further investigated, approaches and programmes can be adapted to be more effective in the future.

#### Why did WaterAid decide to do PIMS?

In line with our latest Global Strategy, we strive to deliver sustainable services. In order to ensure our work is sustainable and effective long after the end of a project, it is essential that we monitor our work. By collecting information that can highlight sustainability issues we are better able to improve the quality of our programmes.

#### What's our approach?

A statistically representative sample of WaterAid's activity in a country over the past 10 years is visited during PIMS - the sample is selected from the Country Programme inventory. Information is collected on all three areas Water, Sanitation and hygiene including data on management, finances and access to external technical support. Four surveys have been developed to collect relevant data (Water point, Household, Community and Institution).

#### Where have PIMS been carried out to date?

Since the introduction of PIMS in 2012, 14 countries have completed PIMS. Four countries are carrying out PIMS in 2016 and testing the newly developed indicators.

#### How has PIMS information been used so far?

PIMS findings prompt further study and explore how future programmes could be altered as a result. One country found that there were a large number of non-functional water points in a particular district, and further investigations were undertaken to find out why. The research found issues with non-functional WASH committees, lack of availability of spare parts, and dry water tables, the latter prompting the country programme to consider the potential impacts of climate change on ground water levels.

One PIMS study found that functioning WASH committees were present in just under half of communities visited, the team subsequently changed their approach to WASH committee training. It is now a longer and more in depth process. Four years on, this country is in the process of conducting another PIMS and the initial results so far from 112 communities in one area are showing much higher functionality rates for WASH committees.

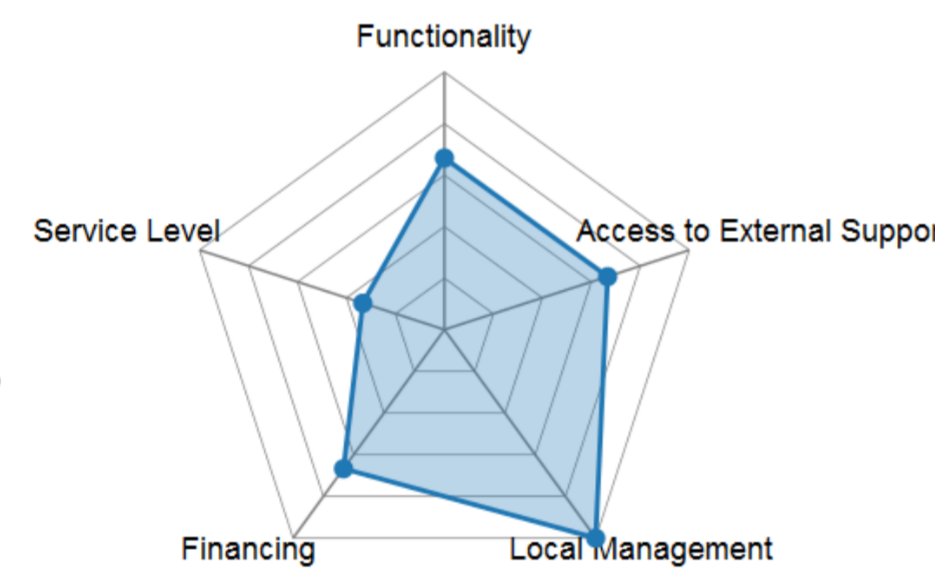
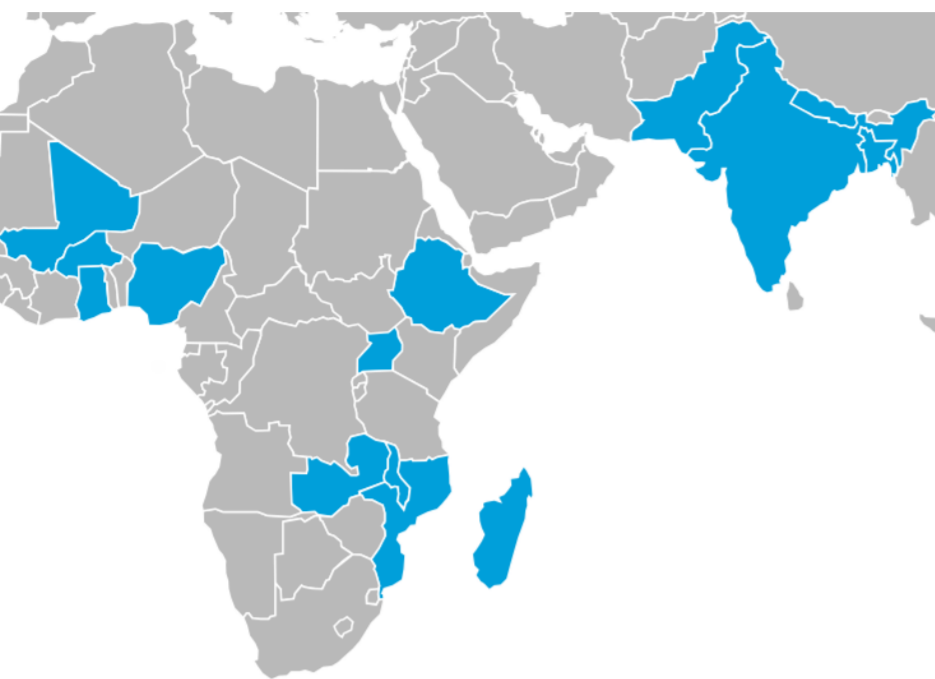
Based on the first few years of PIMS we have honed our approach to maximise the value of the PIMS process, by standardising the indicators used, and introducing technologies to support the collection and analysis of information.

### Indicator Review

The aim of the review was to ensure PIMS indicators are fit-for-purpose and streamlined enabling cross-comparison between country programmes, and aligning, where possible, with wider sector monitoring indicators.

First steps were to define categories, then indicators and finally relevant questions. An example of the categories identified as necessary for PIMS in relation to water services can be seen in the diagram to the right. These include functionality, access to external support, local management, financing and service level (which amalgamates water access, quality, quantity and reliability). We aim to present top-line results of future PIMS in this way.

Furthermore, reflecting our latest global strategy, increased emphasis has been placed on monitoring the sustainability of our hygiene interventions. The hygiene indicators take a multi-criteria based framework for sustainability analysis and decision-making. Included are: i) hygiene behaviours/practices, ii) presence of institutional mechanisms, iii) environmental determinants, iv) technical sustainability, v) hygiene policy environment, and vi) financing.



Water: Service level categories, indicators and questions		
Category	Indicator	Survey questions
Service Level	Quality	<ul style="list-style-type: none"> <li>Is the water source improved or unimproved according to JMP definitions?</li> <li>How would you rate the quality of water from the source you use for drinking?</li> <li>How many faecal-coliforms were detected in a 100ml sample taken from the water point?</li> </ul>
	Quantity	<ul style="list-style-type: none"> <li>How many containers of water does the household use each day?</li> <li>Enumerator to assess the volume of the container</li> <li>Calculate litres per person per day</li> <li>What is collected water used for?</li> </ul>
	Access	<ul style="list-style-type: none"> <li>How long does it take to collect water?</li> <li>Is the water point accessible to people with disabilities?</li> </ul>
	Reliability	<ul style="list-style-type: none"> <li>Does the water point function as designed? <b>Functionality</b></li> <li>If non-functional, will the water point be repaired or has it been abandoned?</li> <li>In the past year, how long has the water point been out of action due to technical failure?</li> <li>Does the water point provide a continuous supply of water?</li> </ul>
Financing	Finance	<ul style="list-style-type: none"> <li>Are user fees/tariffs being paid?</li> <li>Are user fees/tariffs being collected and managed as agreed?</li> <li>Over the last year, what was the total amount of money raised from users in US dollars for upkeep of the water point?</li> <li>Are subsidies available from outside the community to cover the cost of major maintenance?</li> </ul>
Local management	Local management	<ul style="list-style-type: none"> <li>Who manages the water point?</li> <li>Is the water point being cleaned and maintained by those responsible?</li> <li>Is the water point clean and well maintained?</li> </ul>
Access to External Support	Post Implementation Support	<ul style="list-style-type: none"> <li>Is technical support available to help repair the water point in event of breakdown?</li> <li>Is managerial support available to help reform the management body or resolve disputes?</li> </ul>

Functionality is part of the Reliability Indicator, but is also elevated to its own Category to give an immediate view

### Streamlining the indicators

Examples of previous PIMS questions	New PIMS Indicators	New PIMS Questions
<ul style="list-style-type: none"> <li>Financial support- Does the community receive /have access to financial support if needed?</li> <li>Describe the level of financial support for water in the community</li> <li>Access to external support</li> <li>Does the community have the capacity to mobilise financial and technical resources to carry out repairs</li> <li>Does the community receive /have access to financial support for the water point if needed?</li> </ul>	<p><b>FINANCIAL SUPPORT FOR WPs</b></p> <p><b>% water points where external funds are available to cover the cost of major maintenance</b></p>	<ul style="list-style-type: none"> <li>Are external funds available (from outside the community) to cover the cost of major maintenance?</li> <li>Who provides these funds?</li> </ul>
<ul style="list-style-type: none"> <li>After WaterAid left the area, has there been any support from outside for sanitation?</li> <li>Do you have access to Advisory support (technical)?</li> <li>Does there exist a community support to improve access?</li> <li>Does the community have access to get support on technical aspects of sanitation?</li> </ul>	<p><b>SUPPORT FOR SANITATION</b></p> <p><b>% communities with effective external support for sanitation</b></p>	<ul style="list-style-type: none"> <li>Do you receive support for sanitation from the local government?</li> <li>Do local government staff work with the local/community support groups for sanitation?</li> <li>How does the local government work with the local support group for sanitation?</li> <li>Is there another organisation working on sanitation in your community?</li> </ul>

The table above illustrates the process of harmonising indicators structure and questions across different countries and PIMS applications, to ensure data can be directly compared across countries, and to define an overall indicator set with standardised questions for future surveys

### Informed by sector best practice: people and groups consulted

In refining our indicators we drew upon workings from WASHMEL, Rapid WASH, UPGRO Hidden Crisis, Carter & Ross (2016), WPDx, the workings of the SWA Functionality Working Group, the JMP indicators whilst also conducting extensive internal consultations with thematic experts.

### Using ICT: mWater

mWater is a technology solution that can be used for collecting, analysing and sharing data. It was selected after an assessment of different available tools, to perform PIMS data collection and analysis.

WaterAid has been using mWater across its programmes since 2014. WaterAid, together with other WASH sector actors, is also actively supporting further developments of mWater, to ensure the capacities needed are available and subsequently free to use by other WASH actors.

"The use of the mobile phones for the data collection saves a lot of time in the data analysis process. There was no need to key-in data" WA Ghana, 2015.



### WaterAid's experience using and working with mWater

Before our partnership with mWater, the data collection and analysis processes for PIMS were often paper-based, requiring staff to spend a long time on data entry, and increasing the risk of transfer errors. Data analysis was then carried out manually and the data remained fragmented, stored inconsistently in different formats and systems.

We have now used mWater in over 20 countries to support our PIMS and other data collection activities.

- This has allowed teams to have real time data consolidation and analysis, which is accessible immediately by relevant colleagues globally.
- Using mWater has also improved the quality of the data collected, reducing data entry errors and not least the ability to collect reliable, geo-located information, and provides a consistent database for better comparative analysis.
- The automated visualisations and straightforward map and chart builders have simplified data analysis – leading to increased learning from our work, and in the long term will allow for further longitudinal comparisons and analysis.
- A particular advantage of using mWater is its capacity to create 'sites': specific locations with GPS coordinates. These locations are saved on the platform and surveys can be attached to them over time, thereby enabling longitudinal monitoring of a water point, community or institution.

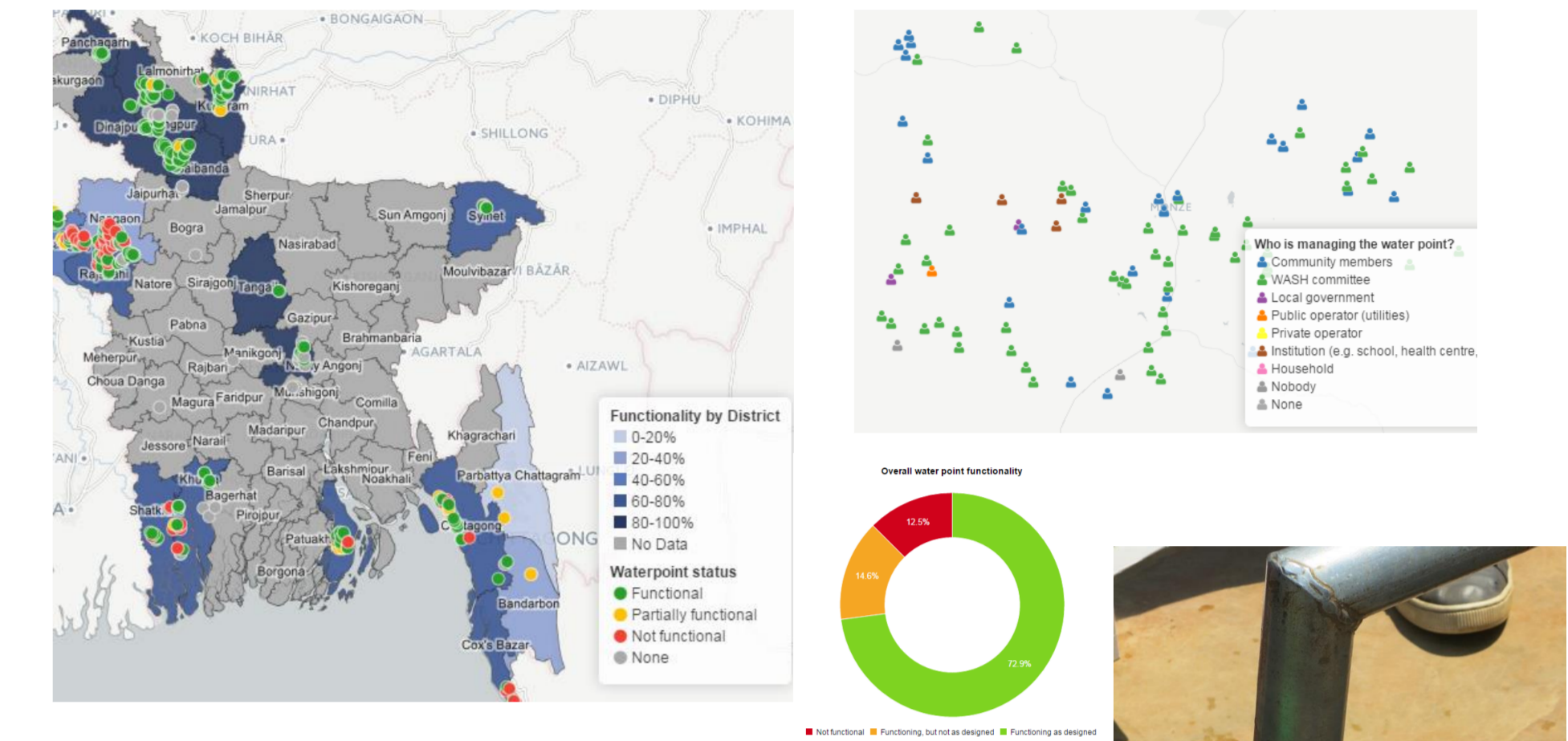


"The use of smartphones for the data collection on the ground allowed the team to be more efficient and more effective. Indeed, the transfer of data onto mWater permitted to follow at a distance the work of the enumerators, quality control of the data collected and to make any corrections from the desktop – all of which greatly reduced the cost of monitoring the implementation of surveys on the ground. The use of mWater helped save time, avoid input errors and has facilitated the processing of data" Burkina Faso, 2015.

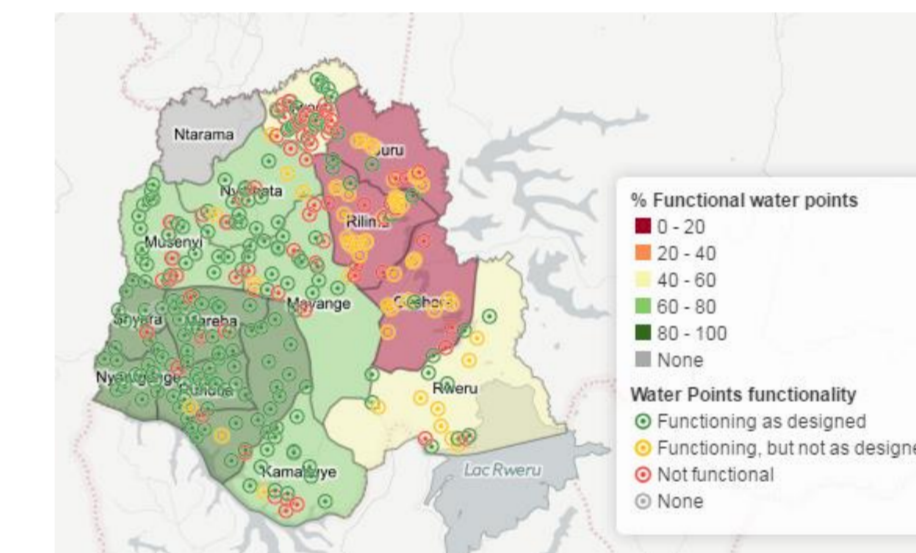
### Recent mWater developments for all: Mapping and Indicator library

Recent mWater platform developments that WaterAid has supported but will be available for all users to use include:

- Integration of WaterAid's Water Point Mapper tool functionality into the platform. This greatly enhances the data mapping capabilities and allows for administrative boundary data analysis (particularly useful when doing national or sub-national wide water point mapping).
- Indicator library on mWater of all the new PIMS indicators. This will enable any user of the free platform to select a predefined indicator and insert the relevant questions for that indicator into a survey they are building. We hope this will become a valuable tool for others, and a way to enhance standardisation of data collection.



Above: Examples of mWater generated data visualisation and analysis of PIMS survey data.



Left: example of mWater generated visualisation with sub-district administrative area data analysis



Above and below: the recent PIMS in Zambia was a pilot for the integration of water quality testing into the PIMS data collection process. The learning from this will inform the integration of water quality testing into future PIMS exercises.

### Next steps for PIMS at WaterAid

- Summarise and share PIMS findings and follow-up from different countries
- Where possible share PIMS data with the Water Point Data Exchange (WPDx) to contribute to sector data sharing processes
- Integrate PIMS sustainability indicators in regular WaterAid planning, monitoring, evaluation and reporting (PMER) processes, particularly within the project cycle, so that our ability for longitudinal monitoring is enhanced
- As part of recent developments of WaterAid's monitoring and evaluation strategy, we will standardise inventory data collection, using mWater where appropriate
- Further develop the public-facing indicator library on mWater and explore how it could be used by the sector more widely
- Explore how best to integrate water quality testing into PIMS – reviewing the learning from a recent pilot in Zambia



### Further reflections

As the need for further comparison and data standardisation across the WASH sector is recognised:

- How are other organisations doing their programmes and project sustainability monitoring?
- How can WASH sector actors work more collaboratively with each other and governments to harmonise indicators?
- To be useful, the learning gained through PIMS data collection should be shared, so:
  - How can we share sustainability learning across the sector?
  - How can we balance the need for greater transparency about sustainability without jeopardizing public morale/support and financial donor flows to the sector?