What’s Working, Where, and for How Long: A 2016 Water Point Update

METHODOLOGY: FUNCTIONALITY BY COUNTRY
Countries were included in the benchmark if they had significant data available through the Water Point Data Exchange. This includes countries where:
• More than two sources had contributed more than 100 records each; or
• The number of water point records analysed exceeded 50% of the number of water points expected (based on JMP rural population data divided by 250 people).

Functionality figures are based on the “#status_id” field. Cases where it was not known whether water was flowing at the time of the visit were only added to the denominator of the functionality estimate.

METHODOLOGY: FUNCTIONALITY BY AGE
Data was downloaded from the Water Point Data Exchange. All water points with an installation year (install_year) at least one year greater than the date of the inventory (#report_date) were included. Water points with a functionality of “unknown” were removed from the sample. The percentage of water points of a given age that were functional (“yes” for #status_id) was captured for each age. This information has been plotted below.

Conclusions and Next Steps
• Water point mapping has experienced explosive growth in Africa and Asia and bodes well for an Asset Management approach that is common in urban water supply but is less common in rural.
• An average of 78% of water points are functional across the 11 countries analysed.
• The high failure rates early after installation are troubling: almost 15% after one year and 25% of water points are non-functional by their fourth year after installation. This indicates widespread problems with poor quality water point installation, due to a range of problems that may include professionalism and skills around contracts, construction and supervision; borehole siting; lack of quality control of hardware; or lack of post-construction monitoring and problem resolution.
• Handpumps are often singled out as technology that fails, but analysis of other water point types show similar functionality levels, and that tens of thousands of handpumps are providing a service.
• Additional data will help to provide a more robust analysis, and updated data will allow for analysis of change over time and perhaps on different metrics that are better indicators of service level quality.

Sources
• Briefel, R. (2009). May and May Day: Our handpumps are not working! RWSN Perspective No 1, RWSN, St Gallen, Switzerland. DOI: 10.1021/es402086n.