Agreeing on a global core set of indicators that can be integrated into existing monitoring efforts or harnessed as a foundation for new monitoring efforts will improve the efficiency of the sector and still enable collection of locally relevant information.

Over the past eight decades, the World Bank has played a critical role in supporting the development of rural water services and institutions, investing over $5.5 billion on projects in the past five years. Despite this massive investment, sustainability of these services has remained a challenge. Globally, approximately 25% of water points fail within the first four years.¹

Worldwide, projects supported by the World Bank and development partners have generated significant amounts of data about rural water services. This information can play a role in understanding and developing solutions to current sustainability challenges. Further, evidence-based analysis can accelerate water access by enabling insights at all levels—from global policy levels down to local operations.
Currently, each World Bank water project and study develops their own unique monitoring frameworks, with only a few simple Core Sector Indicators in common. As a result, rural water data are difficult to harmonize, and it has not been possible to bring together the data collected across the rural water projects by different agencies to learn about sustainability challenges at scale. Fragmented data limits measuring impact by countries, development partners, and other stakeholders, each developing and implementing their own monitoring frameworks. The WASH Poverty Diagnostics implemented in 18 countries also revealed the close correlation between extreme poverty and lack of rural water services. These findings highlighted that reducing extreme poverty will require larger and more sustainable investments in rural areas. SIASAR, the Rural Water Monitoring System in Latin America, has been successful in showing how harmonized data can help improve rural services in middle-income countries.

The need to enhance the Development Agencies’ approach to rural water data is a growing strategic imperative.

The return on this investment will be significant. Research can be accelerated when researchers have easy access to clean data, allowing for unprecedented learning throughout the water sector. Project review can also be accelerated when practitioners are able to access key information on the context of proposed programs using standardized information. Finally, project implementation can be more efficient, as detailed data can be used in planning processes to prioritize investments where they can have the greatest impact.

Although the data required to accelerate rural water access and harness the data revolution are being collected, and increasingly so, it remains too fragmented to use at scale. Slight differences in formats and limited global data sharing architecture mean that data are difficult to share, harmonize, and use. Accelerating progress toward universal water access and achieving the SDGs will require a more sophisticated approach to rural data harmonization.

Challenges

In the urban context, the World Bank has demonstrated clear leadership on improving the global evidence-base through the work of IB-Net. However, as is often the case, the rural sector has been left behind. Investing in data harmonization is particularly urgent as the unique context of rural water services exacerbates data challenges. While urban utilities may serve millions of people under one service provider and one set of data, rural service provision tends to be much more decentralized. Rather than harmonizing data from a limited number of urban service providers in a given country, understanding rural services may require harmonizing data from hundreds or even thousands of rural water services. This fragmentation of data leads to three specific challenges:

Planning, Implementation, and Monitoring: The lack of harmonized data increases the amount of resources required (both time and money) to plan, implement, and monitor projects. Because finding and accessing relevant data is difficult, new data are constantly collected for project design and monitoring, even though data may already exist. In addition to the data collection itself, resources are repeatedly spent developing new monitoring frameworks from scratch.

Research and Innovation: Beyond implementation, the lack of a central repository severely hampers efforts to research, learn, and innovate. The lack of standardized data means that researchers are forced to either use smaller, less representative data sets, or carry out new data collection activities—both of which slow the progress of innovation and research in the sector. Standardized analysis of data is also impossible, requiring instead that analytical tools must be constantly developed to match different monitoring frameworks. This limits the use of data.

Understanding Trends: The fact that rural water data are not currently harmonized across country borders poses a further set of unique challenges. To start with, the lack of detailed global data makes it difficult to understand global trends that transcend specific countries. Related to this challenge, the lack of robust multinational data eliminates the possibility of benchmarking to identify “bright spots” and areas where tailored support is required.

The inefficiencies noted above ultimately increase the costs of reaching universal access. Scarce resources are often spent addressing the inefficiencies of fragmented data, rather than improving water services. In a resource-scarce environment, a lack of global metrics increases costs and reduces the use of costly data that have already been collected. The lack of global metrics is holding back progress on the SDGs.

Opportunity: Global Standard, Local Flexibility

The World Bank is proposing the global water sector implement global metrics that effectively balance national objectives and the global imperative to improve rural water data. This approach recognizes that every country has unique needs and capabilities related to rural water information. Among this diversity of needs, however, some information requirements are common across nearly all countries.
In these cases, where many countries are already collecting similar data, the differences in data collection frameworks are often the result of a lack of coordination rather than a meaningful need for diverse approaches. While every country and stakeholder should collect data, they need to match the local context; there is a clear opportunity to make minor enhancements to monitoring frameworks to ensure that key data can be shared and harmonized globally. Creating a global core set of indicators that can be integrated into existing monitoring efforts or harnessed as a foundation for new monitoring efforts will improve the efficiency of the sector and still enable collection of locally-relevant information. As illustrated below, countries with existing monitoring frameworks can simply integrate the Global Core Metrics for Rural Water Supply. In other cases, where no monitoring framework exists yet, these metrics can serve as a starting point for monitoring.

![Core Metrics Country 1 Country 2 Country 3 Country 4](image)

To make integration of these indicators as easy as possible, the global indicators should be based on existing monitoring frameworks that are already in use. Following a World Bank review of 40 different existing rural water indicator frameworks from national and development partner project systems, a set of 24 existing indicators was identified as a potential set of Global Core Metrics for Rural Water Supply. A subsequent review that piloted the proposed metrics across three countries in Africa with some of the greatest data collection challenges (Burkina Faso, Kenya, and Sierra Leone) evaluated the proposed indicators in terms of feasibility and usefulness and further refined the list to 13 core indicators and 11 reference attributes.

The proposed indicators reflect what is already being collected in many cases—either through common elements of national monitoring frameworks or existing global standards. Where the information is not already being collected, evaluations have shown that these indicators and metadata can easily be integrated to ensure alignment and still enable stakeholders to monitor the information that is locally relevant.

### Implementation Approach

A set of 13 indicators form a core set of metrics across four levels of analysis: water point, household, service provider, and service authority. Additional metadata at each level enable the identification of this data in time and space. Moving forward, any Rural Water project that collects data at any of these four levels will be encouraged to integrate the relevant core indicators using the standardized approach.

Where existing indicators among the proposed core indicators already exist in widely adopted monitoring frameworks, such as the JMP tools, MICS, DHS, GLAAS, SIASAR, or WPDx, the indicators will be used in the same format. This will reduce duplication and enable interoperability. This “collect-as-you-go” approach will ensure that future data collection, regardless of institution or government leading the collection, can be collected in a harmonized format and can contribute to global rural water learning.

### Next Steps

As a first step, the Global Core Metrics for Rural Water Supply will provide a full set of guidelines to enable Rural Water Practitioners and clients to begin collecting data in a standardized way in its projects. Moving forward, the Global Core Metrics for Rural Water Supply could provide a platform for sharing data from different sources across diverse stakeholders. This platform would be a flexible interchange, allowing data to come from different sources and able to provide data directly to other platforms. Information from different sources could be harmonized into a single data repository, using the Global Core Metrics for Rural Water Supply as a framework.

These metrics will first be piloted throughout the World Bank’s own portfolio in partnership with external stakeholders, including governments and development partners. As the global dataset grows, the Global Core Metrics for Rural Water Supply initiative could provide tailored support to enable the use of the harmonized data in planning, implementation, and monitoring efforts.
### Annex A: Summary of All Indicators

**List of All Global Core Metrics for Rural Water Supply, by Survey:**

| Household | HH1. Percent of households using an improved drinking water source |
|-----------|---------------------------------------------------------------|
|           | HH2. Percent of households that have water accessible within 30 minutes (total collection time) |
|           | HH3. Percent of households reporting sufficient water available when needed |
|           | HH4. Percent of household income dedicated towards water |
|           | HH5. Percent of households with reliable water service |
|           | HH6. Percent of households satisfied with overall water service supply |
| Water Point | WP1. Percent of water points at risk of E. Coli infection |
|           | WP2. Percent of functional hand pumps in geographic area |
|           | WP3. Percent of functional taps/points of collection in geographic area |
| Service Provider | SP1. Percent of service providers that have carried out preventive or corrective maintenance in the last 12 months |
|           | SP2. Percent of all households in service areas using water services |
|           | SP3. Percent of service providers reporting availability of funds at the time of monitoring |
| Service Authority | SA1. Percent of service authorities providing support to rural water scheme operations in the last 12 months |

**List of All Reference Attributes, by Survey:**

| Service Provider | RHH1. Presence of a legally established service provider |
| RSP1. Staffing |
| RSP2. Chlorination |
| RSP3. Non-revenue water |
| RSP4. Tariff structure |
| RSP5. Financial management |
| RSP6. Tariff collection efficiency |
| RSP7. Source, catchment and water resource management |
| RSP8. Complaints handling mechanism |
| Service Authority | RSA1. Service authority capacity |
| RSA2. Presence of an information system |

### NOTES

1. [https://www.rural-water-supply.net/en/resources/details/78](https://www.rural-water-supply.net/en/resources/details/787).
2. [http://www.worldbank.org/en/topic/water/publication/wash-poverty-diagnostic](http://www.worldbank.org/en/topic/water/publication/wash-poverty-diagnostic).
3. [https://www.siasar.org/](https://www.siasar.org/)
4. [https://www.ib-net.org/about-us/](https://www.ib-net.org/about-us/)
5. World Bank, 2017. “Toward a Universal Measure of What Works on Rural Water Supply: Rural Water Metrics Global Framework,” World Bank, Washington, DC.
6. In line with the Principles for Digital Development, the Addis Accord, and the World Bank’s work on the Data Revolution, all data collected in compliance with the Global Core Metrics for Rural Water Supply will be shared openly (based on open data best practices and World Bank guidance [https://spappscsec.worldbank.org/sites/ppf3/Pages/previewpage.aspx?DocID=18ec8892-2ed1-458f-8797-50a83313dca3]).

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