USING DATA TO ACHIEVE SDG 6

CHALLENGE

According to the **United Nations**, at the current pace the world will not meet the Sustainable Development Goal (SDG) on water. This means that in the year 2030, hundreds of millions of people will still be spending hours to collect unsafe drinking water, especially in rural areas where most of the unserved population currently lives. Achieving the SDGs and making sure that nobody is left behind will require dramatic acceleration of water access.

One of the biggest challenges limiting progress to date is the lack of information about rural water services and infrastructure. Historically, detailed global data about rural water points has not been available. Global actors looking to develop evidence-based strategies have had to either rely on national summary estimates, reference small-scale studies, or spend massive amounts of resources to bring together disparate data sets. At a local level, the barriers to using evidence are even greater. Many developing countries have no national inventory of rural water services, and many others have no way to regularly update the data that has been collected. Further, critical data that has been collected is often difficult to access, even by government officials. In cases where data is available, the capacity needed to turn raw data into insights and improved decisions is often limited.

Critical decisions about water services at all levels, from global to local, are being made without enough information. Ultimately, barriers to accessing and using evidence are holding back the achievement of the SDGs.

SOLUTION

The data needed to accelerate progress on the SDGs already exists. In fact, data about rural water services is being collected more rapidly than ever before. Smartphones, tablets, and

sensors are generating the data needed to increase the impact of scarce resources, target marginalized communities, and help to accelerate the achievement of SDG 6.

However, these disparate data sources are fragmented and difficult to harmonize. To address this, Global Water Challenge launched the Water Point Data Exchange (WPdx) in 2015 to bring together diverse rural water data. Governed by an expert working group and built upon data types that most stakeholders are already collecting, the Water Point Data Exchange is the global framework for sharing, accessing, and using water point data.

DATA EXCHANGE STANDARD

WPdx provides a simple format for sharing data that allows all actors to share information about rural water services. This format is flexible, allowing users to develop their own contextually relevant monitoring framework while still contributing standardized data to the global community. The WPdx data standard allows people to easily share information about location, type, management structure, cost recovery model, water quality, and more for rural water services.

GLOBAL DATA REPOSITORY

In addition to a simple standard, WPdx provides an accessible online global repository for rural water point data. This repository is easy to access, requires no login, and presents all the data in a simple table. Users can share new data by uploading their data file in a variety of formats or download relevant data in just a few clicks. WPdx automatically joins different updates on the same water point. This allows for a dynamic reflection of the reality on the ground, even if different sources provide the information.

By enabling all stakeholders that are collecting water point data to contribute information, WPdx stitches together a more complete and timely understanding of rural water services than any one entity could do alone. In cases where robust national information systems already exist and bring together different data sources, WPdx can simply connect to the national data inventory.

In just over 5 years, WPdx has provided global access to information on almost 600,000 water points across 50 countries. This data has been contributed by dozens of stakeholders and continues to grow.

DECISION SUPPORT TOOLS

The WPdx Global Repository provides the information needed to accelerate access to water and ensure that nobody is left behind. However, low levels of data literacy can limit the potential impact of this data. To increase the use of the data, WPdx brings together governments and data scientists to develop tools that help with routine decisions that are being made all over the world.

From identifying high impact locations for investment to predicting water point failure before it happens, decision-support tools developed by WPdx are changing the way that water services are delivered. WPdx is putting advanced analytics, including machine learning and geographic information systems (GIS), directly into the hands of those who are working to accelerate water access.

SCALING THE USE OF EVIDENCE

WPdx has worked with national governments in Ethiopia, Liberia, Sierra Leone, Uganda and Eswatini to support the use of evidence in improving services at national and local levels. This includes supporting a national framework for data sharing, identifying specific use cases for data, and providing the support needed to turn data into insights. Early achievements include a policy from the Ministry of Finance in Sierra Leone requiring the use of WPdx decision support tools in annual planning processes and the development of the first national data sharing standard in Liberia. In the coming years, WPdx aims to continue to provide tailored support to increase the use of evidence and accelerate the progress towards the SDGs in additional countries around the world.

Recognizing the large role international NGOs play in collaborating with governments to deliver water services and shape strategies, WPdx is collaborating with the world's largest water NGOs to help provide access to the data they have collected and integrate evidence-

based decision making into their own programs. WPdx is committed to building a community of water sector leaders that advance the use of data in order to achieve SDG 6.
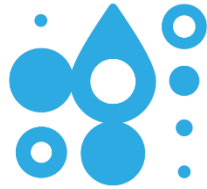
"Before WPdx, the selection of the location of water points was done by assumption and political decisions. Today, our district planning officers and national budget officers are using WPdx tools to reduce duplication and improve resource allocation in the country."

Mohamed Bah

Ministry of Water Resources of Sierra Leone