**CHALLENGE**

According to the World Health Organization, 50 million Latin Americans do not have access to potable water and 125 million lack sanitation. Communities depend on more than 80,000 water and sanitation providers, locally known as Organizaciones Comunitarias del Agua y Saneamiento (OCSAS), to deliver clean, safe drinking water. Some of these community-based organizations operate smoothly, but many others are plagued by inefficiency and corruption. Fundación Avina, a Latin American foundation that works with civil society organizations, entrepreneurs, researchers, and governmental institutions to improve sustainable development, asked Benetech to investigate how software and data analysis could be leveraged to help OCSAS in Paraguay provide clean water and sanitation to their communities more efficiently.

**SOLUTION**

In 2013, Benetech launched a project to create a mobile diagnostic tool for the collection, analysis, and mapping of data regarding the capacity of OCSAS. The app, called DOCSAS (after the Spanish acronym for Diagnosing Community Water and Sanitation Services), surveys each OCSAS’s capacity to provide water and sanitation services to its community. The survey results are uploaded to a web application that generates a scorecard for each organization and recommends ways to improve its management and operations. DOCSAS is built on Open Data Kit, an open-source toolset for building and managing mobile data collection solutions. The app is free and works on Android devices without the need for an internet connection.

**IMPACT**

The government of Paraguay was the first to implement the tool to 1,500 OCSAS in a nationwide project to increase access to clean water for 100,000 people. With funding from USAID and support from Avina, Fundación Moisés Bertoni trained more than one hundred water and sanitation community managers in the use of the app. The data they collected has enabled local organizations to improve water resource management, identify infrastructure needs, and share technical knowledge. The tool also allowed institutional funders and government agencies to evaluate investments in the water and sanitation sector and influence public policies. As a result of this success, DOCSAS is now deployed in fifteen countries across Latin America, including Paraguay, Panama, and Bolivia, and has positively transformed the quality of life of millions of people.

*Benetech is a nonprofit that empowers communities through software for social good. Our work transforms how people with disabilities read and learn, makes it safer for human rights defenders to pursue truth and justice, and connects people to the services they need to live and prosper. We’re constantly pursuing the next big social impact.*