Pacific WASH
WEBINARS

ADB

EVENT SNAPSHOT

Image 1: Ebeye shift operators troubleshoot via remote support with Osmoflo control center in Adelaide (Source: Osmoflo)
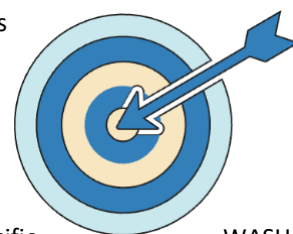
Digital technology is revolutionizing the way we manage water, offering opportunities to improve water security and resilience for water utilities around the world. This webinar explored the pivotal role digital technologies are playing for water utilities from planning and disaster recovery, through to real-time remote monitoring.

Webinar Overview

Utilities across the Asia-Pacific are searching for solutions to the water crisis. Digital tools and platforms provide excellent opportunities to improve water security, build resilience and enhance the management of water.

The ADB Pacific WASH Technical Assistance (REG TA-6551), in association with the Pacific Water and Wastewater Association (PWWA), hosted the final Pacific WASH Webinar for 2023 in November to explore how digital technologies can improve water utility planning and management of water. The webinar focused on real-world digitization success stories – Osmoflo shared how they are providing real-time remote monitoring of a desalination plant on the island of Ebeye, Marshall Islands. While ADB presented on the digitalization strategy being adopted by Indonesia to support disaster recovery planning and help water utilities to build back better. The event was attended by 28 participants, including 11 from 4 Pacific countries.

The webinar explored several key topics:

- Emerging examples of innovation and digitalization in the region
- The need for agility within the water and wastewater sector to adapt and transform in the digital space
- The human side of digitization and the need for local expertise and collaboration to enhance digital solutions and outcomes.

Digitization in the Pacific

Harnessing digital innovations and solutions has the potential to improve the quality of planning processes, reduce operational costs and enhance system efficiencies to ensure the sustainable management of water for all. It is recognized that there is a need to come up with innovative solutions to ensure Pacific utilities and communities are not left behind. While there are challenges in terms of affordability, accessibility and sustainability, there are opportunities to adopt agile digital approaches that will support the extension, and improve the quality, of services. To increase the adoption of technology, water utilities must be able to assess the most appropriate tools and strategies that suit the size of their operations and staff capacities. A phased and well planned approach to adopting digital solutions is needed to ensure success.

Case Study: Indonesia

Following a tsunami and earthquake in Palu in 2018, Indonesia is focused on 'building back better' and using digital technology to ensure planning and development reflect actual conditions. Indonesia is facing an urbanization challenge common to many cities and regions across the world. Growing populations are creating higher demand on water and sanitation systems. In Palu, the Asian Development Bank is financing the Emergency Assistance for Rehabilitation and Reconstruction project aimed at supporting the post-construction phase of Palu following the 2018 tsunami and earthquake.

The core concept of the project is to 'build back better' and develop a source-to-tap system for the 1.4 million people affected by the disaster. Using digital technologies for planning and development, the project has made use of digital tools to collect satellite data for critical infrastructure reconstruction, ground movements, and to develop a geospatial monitoring and evaluation platform (GeoPortal). Using various data and methodologies the team is able to monitor and capture the actual conditions for planning and development.

Case Study: Republic of Marshall Islands

Situated in the Marshall Islands, Ebeye Island stands as one of the most isolated locations on Earth. Digitization of the Island's water treatment facilities is supporting water security and ensuring a stable and reliable water supply for the community. Given the remote nature of Ebeye, achieving operational reliability demanded a unique approach by Osmoflo. The company crafted a sustainable model that leveraged its 24/7 manned control center in Adelaide. The model enables real-time, remote-controlled monitoring of the water treatment facility. The supply of 24/7 support has emerged as a key tool for the Ebeye operations, with the Ebeye team leading operations and Osmoflo assisting and troubleshooting where needed. While a digitized plant can efficiently signal the need for management and maintenance issues like a cartridge filter change, the human touch remains invaluable. Nothing can replace a local night shift operator in Ebeye expressing uncertainty or the Control Centre guiding a team member through a live-stream filter change. The human side of digitization adds a layer of expertise and collaboration.

Digitalizing for water security and resilience

Accelerating the adoption of appropriate digital technologies and innovations will aid water utilities in mainstreaming water security and resilience. Digital technologies are an important component to promote and achieve safe and affordable drinking water for all by 2030.

ADB recognizes the need to use technology to spur change in Asia and the Pacific, particularly to support the priority of addressing water and sanitation issues.
Strategy 2030 commits to proactively seek ways to promote the use of advanced technologies across its operations and provide capacity building support to Developing Member Countries (DMCs).

Read more here.

Learning Snapshots

- *Digital tools can support the planning and monitoring of water and wastewater projects, providing data and information critical to ensure actual conditions of land and resources is captured for planning.*
- *The human side of digital technology adoption remains invaluable – building capacity of utilities and team members to enhance their processes and management of water and wastewater through the use of technology will support the extension and improvement of services to communities.*
- *The digital reform is having a major impact on the water and wastewater sector. While there are challenges to adoption, there is recognition that digital technologies are an important component to promote and achieve safe and affordable drinking water for all by 2030.*
- *The ADB is committed to not only helping utilities identify and adopt digital technologies that suit their needs, but to also build the capacities and know-how of utility staff to use these technologies, ensuring data is analyzed and used to support management decision-making.*

Upcoming Events

Thank you for joining us, this was our last webinar for 2023.
To register your interest for future 2024 Webinars, please contact: llfernando@adb.org.
Past ADB Pacific WASH webinars can be accessed here: Pacific WASH Webinars

ADB continues to support government and water service providers in the region to build resilience, capacity and knowledge to manage threats in our changing world.