

Pacific WASH Webinars



Citywide Inclusive Sanitation: Pacific Applications

23 February 2022

Speakers:

- Penny Dutton
International Sanitation Specialist, Australia
- Mark Ellery
International Sanitation and Governance Specialist, Australia
- Hilson Toaliu
WASH Consultant, Vanuatu
- Bronwyn Powell (Facilitator)
WASH and Water Specialist, Australia

Participants:

- Arup (Australia)
- Department of Foreign Affairs and Trade
- Department of National Planning (WASH), PNG
- Government of Niue
- Institute for Sustainable Future UTS, Australia
- Pacific Water and Wastewater Association
- Plan International
- PRIF
- Solomon Water
- SREP
- Tonkin and Taylor, New Zealand
- US Embassy, Fiji
- Ministry of Environment, Solomon Islands
- International Water Centre
- Water Authority of Fiji
- Water PNG

Event recording and resources available [here](#).

[CWIS Guidance notes](#) in the ADB website.

Urban populations in the Pacific are estimated to double between 2015-2040 with a significant proportion of new city residents likely to settle in crowded informal settlements. Access to services, including adequate sanitation is particularly limited in informal settlements due to poor access to centralized sewerage services, high tariffs and barriers to land ownership. As a result, the high costs to access sanitation services is borne disproportionately by the urban poor and vulnerable who typically dwell in informal settlements. Citywide Inclusive Sanitation (CWIS) takes a holistic approach to the entire service chain to integrate sanitation planning into urban development strategies in Pacific urban centers.

Webinar Overview

The Asian Development Bank (ADB) is actively supporting inclusive and sustainable sanitation service provision across the Pacific. In February 2022, ADB in association with the Pacific Water and Wastewater Association (PWWA) hosted this virtual webinar. The webinar was attended by 68 participants from 12 countries across the Pacific region. International and Pacific sanitation experts presented an overview of the principles of CWIS and introduced tools, such as Fecal Flow Diagrams, to gather baseline sanitation data on the proportion of safely- and unsafely managed fecal waste. Drawing on examples from Papua New Guinea, Kiribati, Vanuatu and globally (Bhutan and Bangladesh), the webinar identified human and environmental risks from sanitation system failures and entry points to improve services. For instance, the Fecal Flow Diagram for Port Vila, Vanuatu (developed with UNICEF support) identified high risks to human health via effluent discharge to the surface from failure of sewerage treatment plans or overloaded soakaways. CWIS presents a range of offsite and onsite sanitation options that should be considered to meet the needs of all city dwellers - rich and poor, all genders and abilities, formal and informal settlements.

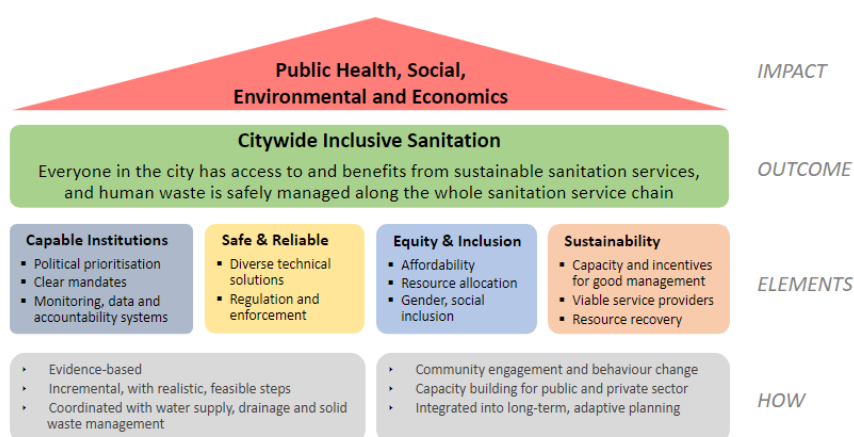
The webinar responded to these key questions:

- ❖ How will CWIS assist in creating livable cities in the Pacific?
- ❖ What tools are available to assess current sanitation risks and potential offsite and onsite containment and treatment systems?
- ❖ Why are urban poor and disadvantaged most likely to suffer poor sanitation services?
- ❖ How can onsite sanitation and service management be improved to make it more acceptable and scalable option in Pacific cities?
- ❖ What sanitation systems are suited to fragile environmental conditions in some Pacific contexts?

Workshop Outputs

Citywide Inclusive Sanitation

CWIS is an evolving concept to meet the sanitation challenges in growing urban areas more effectively. It builds on current sanitation technologies and practices to achieve more comprehensive, effective, and sustainable sanitation services. The outcome of a CWIS approach is that everyone in an urban area has access to and benefits from adequate and sustainable sanitation services, safely managing all human waste along the sanitation service chain. CWIS comprises four elements—capable institutions, safety and reliability, equity and inclusion, and sustainability—with associated actions to achieve the desired outcome (Figure 1 shows conceptual framework, ADB, 2021).



Case Studies

The case studies included in the webinar presentations highlighted key topics relevant to CWIS in the Pacific. In South Tarawa, Kiribati, CWIS included **institutional capacity building** for the utility and government, **sanitation solutions** include a mix of onsite and sewer connections and **inclusive and accessible** communal facilities focusing on the poor. In Port Moresby, Papua New Guinea, almost half of the population relies on an **old sewage system which is poorly maintained** allowing contaminated stormwater to flow into the wastewater treatment plants. In Port Vila, Vanuatu **poor maintenance and operation of 15 sewerage treatment plants** have resulted to inadequate treatment of effluent prior to **discharging directly into receiving waters** (Port Vila Bay and Erakor Lagoon) **or into overloaded soak aways, which overflow to the surface**. Meanwhile, in informal settlements overloaded **soakaways** in silty soils can lead to ineffective treatment and **surface contamination**.

Learning Snapshots

- **There is no ‘one size fits all’ solution to urban sanitation.** CWIS is an iterative process which requires adaptation to specific environments to achieve an optimal mix of sanitation technology and service delivery mechanism across the sanitation service chain.
- **Gathering evidence on existing sanitation systems and practices is a critical first step in proposing solutions.** The fecal flow diagram gathers quantitative data in a visual snapshot of existing sanitation practices and models key risks and management options.
- **On-site sanitation must be on the ‘menu’ of options that ensure everyone can access sanitation.** Well managed dry pit latrines, improved pit latrines and septic tanks with soakaways and/or regular emptying and treatment can be suitable, affordable and considered safe options in certain contexts.
- **Centralized sewerage infrastructure solutions are often poorly managed and maintained.** Examples across the Pacific show that centralized sanitation systems often fail, leading to direct discharge of fecal waste and effluent into receiving waters and the environment. The relative risk of failure, likelihood of system neglect and potential human and environmental health impacts should be considered before favoring centralized services over alternative decentralized systems.
- **Ensuring accountability and political support is critical to providing sustainable sanitation services.** CWIS works to build institutional capacity, accountability and financing mechanisms to sustain services.

Upcoming Events

To register for the upcoming 2022 webinar topics, please contact: llfernando@adb.org.

Topic	Date
Water Safety Plans in action – case studies from the TA work in the Pacific	23 March 2022
Climate Resilient Utilities	20 April 2022

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.

TA 6551 Strengthening WASH Practices and Hygiene Behavioral Change in the Pacific