

UNICEF Office for Pacific Island Countries WASH & Resilience

Introduction

Water security is central to sustainable development in Pacific Island Countries. Water security will contribute to health, livelihood, economic growth, environment, and human rights, but freshwater resources are under pressure from population growth, urbanisation, and changing land-use patterns. At the same time, Pacific Island Countries must manage the impacts of multiple natural hazards and a changing climate.

The Pacific as a whole has made little progress towards achieving the Millennium Development Goals target for water and sanitation. While all Pacific Island Countries are making efforts to provide their citizens with access to safe water and adequate sanitation, these efforts in many countries are not enough to keep pace with population growth. The proportion of people using improved water supplies rose from 46% to 52% from 1990 to 2012, while the proportion of people served with some type of improved sanitation in the Pacific Region was virtually stagnant, rising from 29% to 30%. Coverage of piped water supply decreased over the same period. No other region in the world has registered slower progress¹.

As a result of their small size and unique geography, Pacific Island Countries face special challenges in water and sanitation service provision. Many countries have limited and fragile water resources and inadequate capacity for resource management. Throughout the region, the pressures of economic development and urbanization coupled with climate variability and change result in water shortages, flooding, soil erosion, and deterioration of water quality².

For many Pacific Island communities, the availability of freshwater resources is confined to small and fragile groundwater lenses, small streams, and rainwater. These scarce resources are vulnerable to overexploitation and contamination, particularly in atoll environments, where limited potable groundwater sources can be threatened by over-exploitation, land use activities, and inappropriate sanitation facilities.

Pacific Island Countries face complex challenges of providing services to both isolated rural communities and growing urban and peri-urban centres. For rural communities scattered among remote islands, drinking water, sanitation and hygiene are primarily managed at the household or village level as there is frequently minimal access to public services, calling for strengthened local community management of water supply and sanitation services.

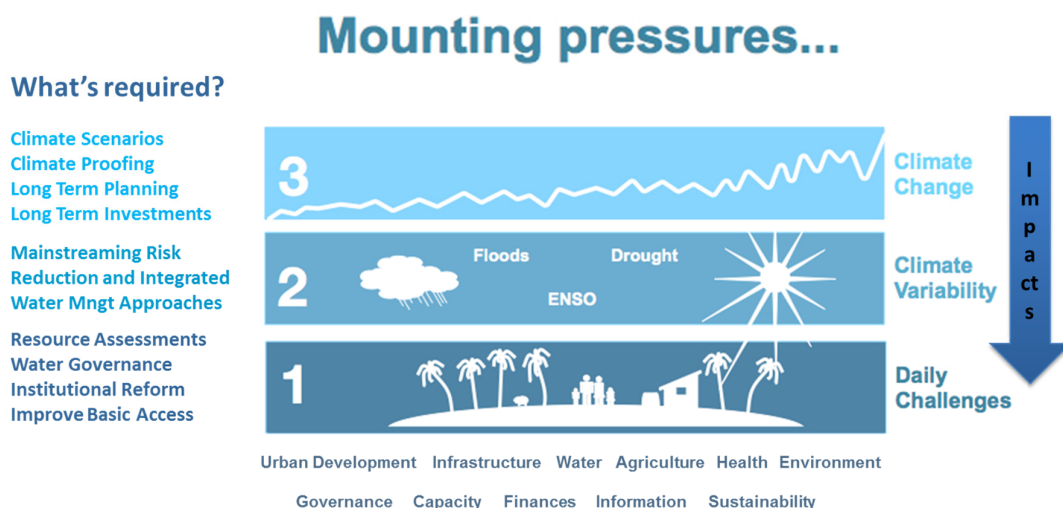
Pacific Islands are generally constrained by small economies, high costs of materials and services, and challenges in building and retaining human capacity. The high costs of doing business in the region further constrain national capacity for service delivery³. These factors are critical, and will be instrumental in the approach, technologies, and costs associated with securing safe and sustainable water and sanitation services.

¹ JMP, 2013

² SOPAC, GWP, 2007

³ Winters and Martin, 2004

Figure 1 Mounting pressures



On top of these daily challenges, climate variability and change increase pressure on island communities and governments. PICs are subject to a relatively high frequency of hazards such as cyclones, earthquakes, floods, and drought. PICs have high risk levels because the majority of the population and assets are exposed to natural hazards while the economy is concentrated in a few climate vulnerable sectors. The Fourth Assessment Report of the United Nations Intergovernmental Panel on Climate Change⁴ identified Small Island States as being the most vulnerable in the world to the risk of disaster such as drought due to climate change. Achieving water security, sustainability, and resilience in the face of these potential shocks requires use of all available water sources, including rainwater, groundwater, surface water, and in some cases desalinated supply. In all countries, coastal cities and communities are directly exposed to storm activity, sea-level rise, and changes in marine ecosystems.

Building resilient communities through WASH

Traditional disaster management is no longer adequate in view of the projected increase in the frequency, intensity and unpredictability of weather-related hazards. Merely managing the symptoms of recurring disasters and climate change, as PICs commonly do, is inefficient, expensive and unsustainable (WB GFDRR, 2012). Proactive risk management is required to address underlying vulnerabilities through risk-informed and climate-sensitive interventions. Increasing national and local capacity for risk reduction is therefore a fundamental development and humanitarian concern that needs to be addressed to ensure resilience and sustainability.

Climate variability and change will always affect community and household access to safe drinking water and sanitation, making WASH is a priority sector for resilience building. Sustainable water and sanitation solutions are vital to strengthening and maintaining the resilience of Pacific communities to the increasing threats of climate variability, climate change, and natural hazards. Water and sanitation solutions must consider the water cycle as a whole by using IWRM approaches from “ridge to reef” in order to protect the long-term sustainability of freshwater resources. Approaches such as water demand management, watershed management, and drinking water safety planning should be integrated into sector investment programmes where not already existing.

⁴ IPCC, 2007

Building resilience to multiple shocks requires that small, isolated and informal communities are empowered to safely and sustainably manage their own drinking water, sanitation and hygiene. To meet post-2015 goals, significant support will be required to better equip small communities and households to establish, operate and maintain appropriate water and sanitation facilities, while also maintaining safe drinking water and hygiene practices in homes, schools, and health facilities.

At the community level, WASH can provide an entry point for wider community-based disaster risk reduction and resilience programmes. Community engagement through drinking water safety planning or sanitation promotion programmes can provide a first step towards mobilizing households in support of safe water, sanitation, and hygiene. Once village structures are in place and households have made incremental improvements, additional programmes and topics can be introduced.

UNICEF Pacific WASH Programme

The UNICEF Pacific WASH Programme supports Governments, NGOs, and communities to build resilience to hazards and climate variability and change through better information, improved planning, and smarter investments. UNICEF supports data analysis to inform planning and decision making, such as through spatial child-centered risk assessments⁵, and community-level planning such as drinking water safety and security plans.

Risk-informed planning

In order to consider hazard and climate risks in decision making, government and sector planners need better national assessments of the type, severity, and location of potential impacts. UNICEF Pacific promotes child-centered disaster and climate risk assessments to identify areas in each country where the impact of natural hazards and climate change on children is highest. Based on the analysis, the geographic focus, programme strategy, and prioritization of investments can be reviewed for greatest impact and to promote equity. A child-centered risk assessment has been carried out in the Solomon Islands, and is planned for Vanuatu and Fiji.

Better risk assessments also inform more effective emergency preparedness. At the regional level, UNICEF can assist all agencies involved in the Pacific Humanitarian Team to systematically address risk to children from natural hazards, and increase capacity for emergency preparedness and response in those regions. At the national level, better risk assessment provides scenarios for multi-hazard contingency planning.

During emergencies, UNICEF Pacific supports Governments, NGOs, and communities to ensure children and women have protected and reliable access to sufficient, safe water and sanitation and hygiene facilities in any Pacific island country. UNICEF Pacific, as Cluster Lead Agency for the Pacific WASH Cluster, facilitates exchange of lessons learned on preparedness and response. The Pacific WASH Cluster will seek to support and enhance partner programmes and activities in order to increase country resilience and improve the effectiveness of specific humanitarian responses.

Better information

To inform planning processes, UNICEF supports collection and use of better information on hazards, vulnerabilities, and potential impacts. Given the high exposure of PICs to multiple hazards and climate change, many regional analyses have provided a rich information base, but national capacities to link hazard data to existing vulnerabilities is low.

In Pacific Island Countries, WASH information is generally unreliable and outdated. Without WASH coverage data that can be linked to social indicators analysed spatially, there is a limited evidence base

⁵ UNICEF EAPRO (2013) Child-centered risk assessment. Regional Synthesis of UNICEF Assessments in Asia.

10 October 2014 draft

for equity-based or risk-informed programme planning and resource allocation. UNICEF is supporting governments in Vanuatu, Fiji, and Solomon Islands to improve capacity for sector monitoring and reporting through the use of real-time monitoring tools developed by partner NGO Akvo. In Vanuatu, this work has already resulted in a rich information base of access, quantity, quality, and sustainability of water supply that can be used to analyse vulnerabilities and prioritize areas for resilience building.

Looking ahead to the Sustainable Development Goals, UNICEF will support countries to improve national equity-focused monitoring systems so that WASH data is disaggregated by income, gender, age, and disability.

Community mobilization

Community water supplies are most secure and resilient when there is a group of people responsible for safeguarding them. Small, isolated, and informal communities without access to government services must be empowered to safely and sustainably manage their own drinking water, sanitation and hygiene.

In Vanuatu and Fiji, drinking water safety and security planning is being used as an approach to strengthen community management of water supply and sanitation, reduce disaster risk, and increase resilience to climate variability. This approach has yielded results on the ground and can be up-scaled in Solomon Islands.

In Kiribati, the unique atoll environment calls for a risk-management approach to WASH service provision and promotion. Throughout the country, the shallow freshwater lenses that people rely on for household water are highly vulnerable to contamination from human activity and increasing salinity. Currently, half of the rural population in Kiribati defecates in the open, and as the campaign to end open defecation accelerates it is essential that the drive to install toilets does not risk a negative impact on water lens quality. In response, UNICEF is preparing a WASH Technical Toolkit for communities and schools to identify WASH risks and needs and a tool for selecting appropriate and affordable options of accessing safe drinking water and sanitation.

Smart investments

UNICEF supports governments of Fiji, Kiribati, Solomon Islands and Vanuatu to decrease vulnerability through investments in robust and sustainable WASH infrastructure at communities, schools and health centres.

In Kiribati, UNICEF is providing technical guidance to a network of rainwater harvesting practitioners to increase the effectiveness of a collective effort by the sector to increase household and community water storage capacity.

In the Solomon Islands, UNICEF is supporting the WASH stakeholders group to develop guidelines on resilient WASH infrastructure with particular attention to schools.

In Fiji, UNICEF is supporting the WASH and Education Clusters and the Ministries of Health and Education to establish a programmatic approach on WASH in Schools focusing on incremental steps to achieve minimum standards on WASH infrastructure, curriculum development and hygiene behavior change.

In Vanuatu, the Department of Geology Mines and Water Resources is being supported with real time monitoring of community water and sanitation access in close collaboration with NGO partners within the Vanuatu WASH Cluster. In addition, the Ministry of Education is being supported in the asset surveys of all primary schools using mobile phone technology.