Climate change vulnerability and resilience of Pacific island water services

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Climate change impacts

- Water insecurity
- Infectious diseases
- Rising inequality
- Undermine human rights
- Undermine SDGs
- Reverse coverage of improved infrastructure







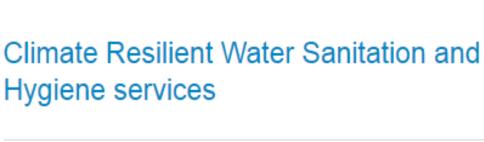




What is WASH resilience?















Research in Vanuatu

- Two case study sites
- Interviews with community members
- Infrastructure risk assessments
- Water catchment assessment
- Participant observations

















RISK/HAZARD

- Exposed source
- Deteriorating infrastructure

Different framings of the problem

CONTEXTUAL VULNERABILITY

- Unequal levels of service
- Women are underrepresented in decision-making

SOCIAL-ECOLOGICAL RESILIENCE

- Single water resource & system
- Management not adaptive











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- Respond to climate change is also about flexibility, not just resistance
- Climate risk management and general development must be integrated and harmonised
- Capacity to adapt to climate change is differentially held within communities





- A single catch-all approach to PICs is inappropriate. Not all PICs...
 - Are small (PNG is 460,840 km², many PIC islands are mountainous)
 - Remote (Remote in relation to what?)
 - Have poor access to water infrastructure (Most PICs have >90% improved water access)
 - Have civil instability (Many PICs have enjoyed decades of peace)
- PICs further differ substantially in terms of...
 - Geography
 - Water availability
 - Government capacity
 - GDP per capita
 - Culture











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- Low-lying atoll islands face severe consequences from sea-level rise













Summary of key points

- WASH resilience includes a wide range of ideas and perspectives
 - Biophysical, Social, and Social-ecological
- WASH resilience is not just about resistance
 - Need to balance flexibility and resistance
- WASH resilience integrates climate risk management with traditional development objectives
- WASH resilience is not equally spread across and within communities
 - Need to identify whom is most affected by climate change
- Climate change should be a part of SDG6 discussions in the PIC region
- Addressing climate change in PICs is island-specific











Thank you

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Collaboration for Universal WASH



