

# Engaging with urban planning for climate resilient WASH – Melanesian informal settlements

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# Informal settlements in Melanesia



Progress is being made:

- **Fiji** upgrading 46 settlements
- **Solomon Water** connected >2,800 hh
- **Moresby** has ongoing settlement upgrade process
- **Port Vila** urban wastewater taskforce

WASH is often forgotten in urban planning

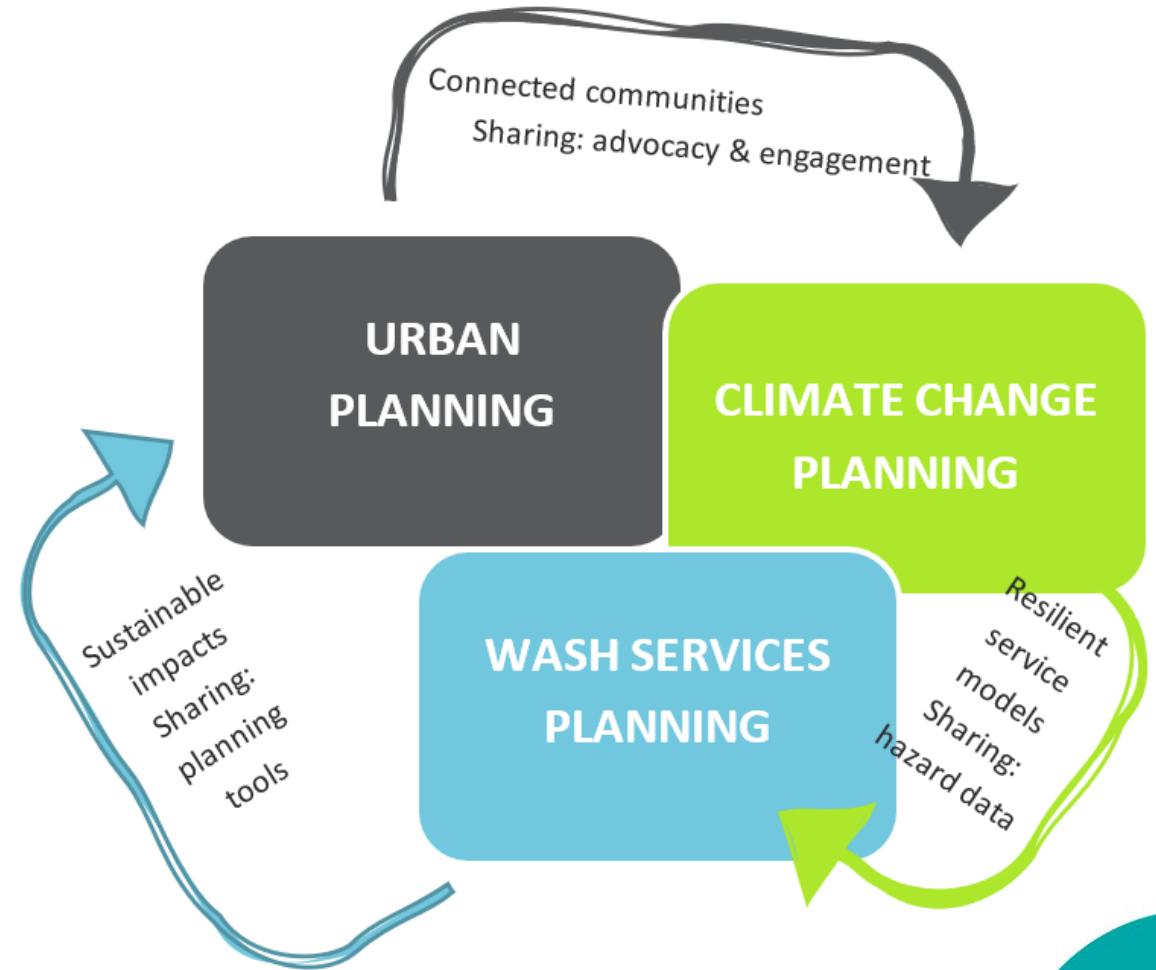
Informal settlements, by nature, are excluded from formal urban planning (but not informal planning)

# How does it all intersect?

Urban land use and infrastructure is essential to implementing effective WASH, and is also important for responding to climate change.

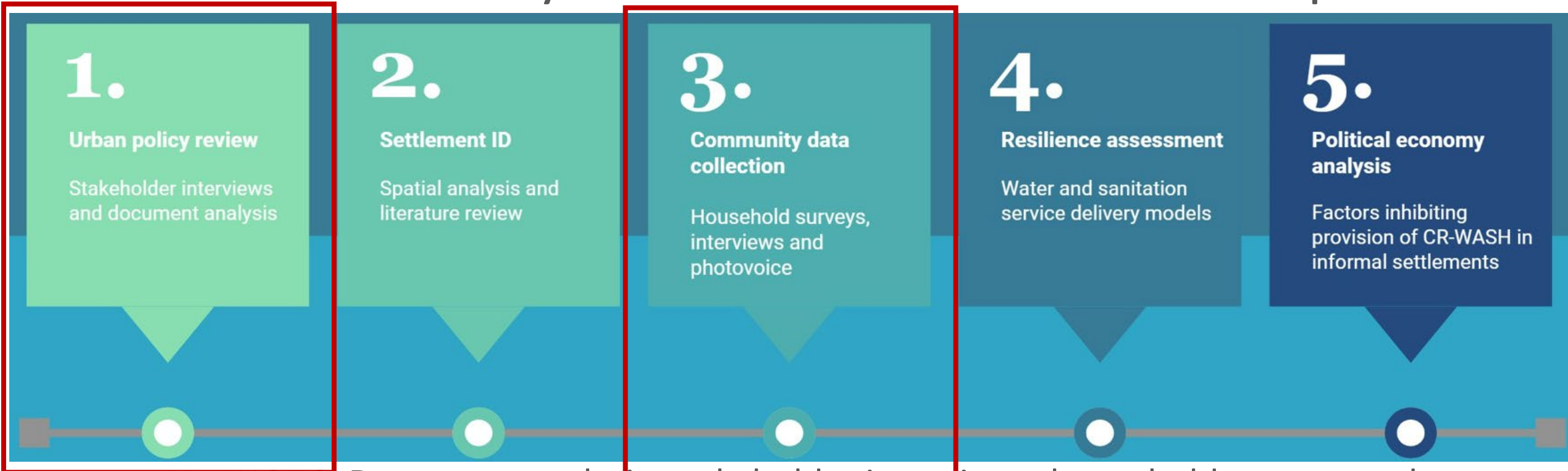
**Planning can provide a way to choose and improve land uses by bringing together knowledge and values.**

Hence, planning provides one useful means of integrating WASH and climate change resilience.



# Research overview, objectives and approach

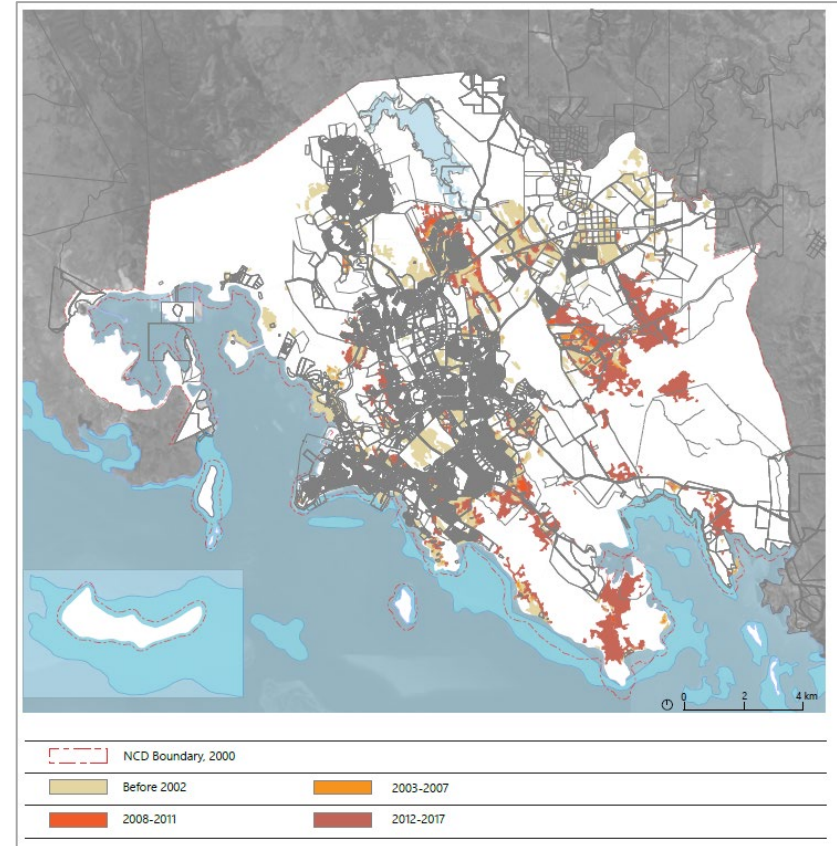
**RESEARCH QUESTION:** How could urban planning processes in Melanesia be strengthened through participation and integration to improve the resilience of WASH service delivery in informal settlements within the urban footprint



**METHODS:** Document analysis, stakeholder interviews, household surveys and interviews, photovoice techniques, GIS analysis, PEA

# Urban planning, climate change & WASH in Melanesian IS

- Urban planning processes are not keeping up with the **pace of change**
- Ownership, integration and **responsibility for urban WASH**, especially in informal settlements, is often unclear
- Hazard data – transitioning from a general lack of data (through hard work of gov'ts and regional bodies like SPC to provide data), to a **paucity of location-specific data and translation of data to decision-making**



# Engaging with decision-makers and leaders

We conducted 39 conversations with diverse decision-makers and stakeholders (Port Vila and Suva)

- Government (national & local)
- NGOs, CSOs, FBOs
- Private sector
- Residents and community leaders

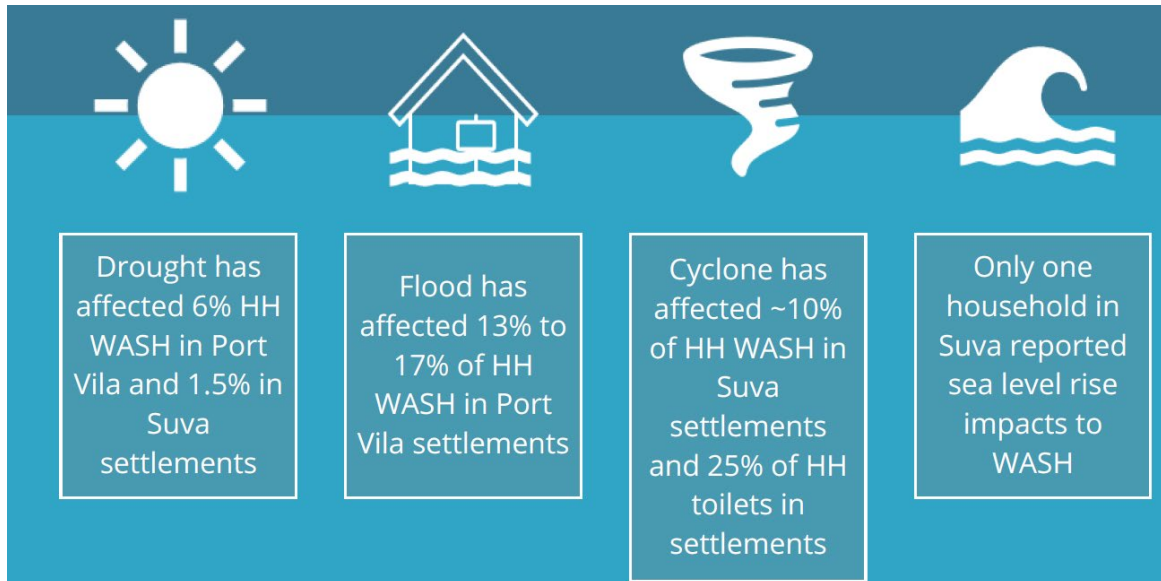


Stakeholders say:

1. Tenure insecurity can be a barrier for upgrading services in urban informal settlements
2. Responsibility for improving services between departments & providers can be unclear
3. More information and data sharing is needed
4. Proactive and up-to-date urban planning and instruments (town plans, by-laws, policies) are required to address WASH issues

# Research component – engaging with residents

- Traditional household surveys
- Photographic observations
- Qualitative interviews (semi-structured)
- Photovoice



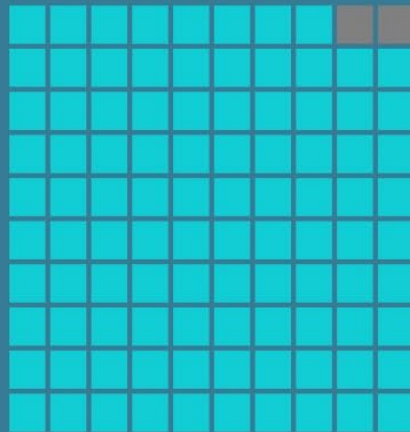
Worried about future climate events impacting WASH?  
*16% in Suva*  
*68% in Port Vila*

Based on our HH survey responses (n= 161)

# Research components – place-based analysis

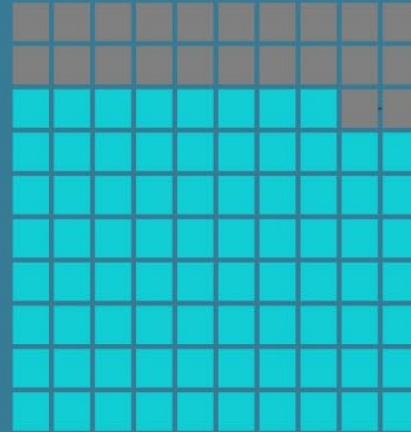


Rates of water piped into homes by the utility are high in settlements in Suva



**98%**

Utility piped water  
in HHs surveyed in  
Suva settlements



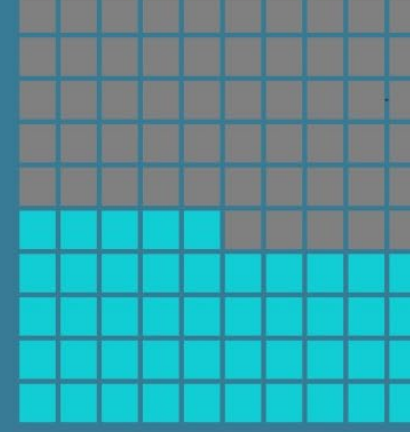
**78%**

Utility piped water  
in HHs surveyed in  
Vila settlements



**51%**

Utility piped water  
in HHs surveyed in  
Honiara settlements



**45%**

Utility piped water  
in HHs surveyed in  
POM settlements

Data sources: household surveys and interviews (Port Vila and Suva; UNICEF household survey 2018, WSP)



# Photovoice activities with Nanuku community



# Photovoice examples



*Water pipes were once buried beneath by the ground but due to water currents and climate change, the pipes have surfaced back up. - Merelita, Nanuku Community*



*Pictured is the toilet at my home. The only problem faced is when the backup water (seen in the back) runs out, then it is difficult to use the toilet. - Save, Nanuku Community (2022)*

# Photovoice examples



*This household's toilet and bathroom is closely located to a community footpath. With only an iron sheet as a door and purple cloth as a curtain, there is a concern about safety for women and children especially with a rise in drug use within the community. -*

**Marica, Nanuku Community (2022).**

# So what is needed to better support integrated urban planning, WASH & CC for informal settlements?

- Political will
- Integration across key ministries and service providers
- *Localised* data (climate hazard and user preference) to guide ID of CR-WASH options
- Community voice and ownership
- Diversity in solutions



**Advocacy & champions**  
**Local exposure histories**  
**Attention to whole service (residents) delivery chain for water and sanitation**  
**Cross-sector taskforces**

**Open source, spatially-described data layers**  
**Share and support diversity processes between sectors (e.g. spatial analyses)**  
**Create space for co-design**

# Ways forward



## Next steps:

- develop and share tools and activities for settlement residents' climate exposure histories;
- Explore + trial planning support systems;
- Identify champions and plan effective advocacy methods

Thank you for joining us and to the project team:

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