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# OCEAN CITIES OF THE PACIFIC ISLANDS

## POLICY BRIEF #2 BUILDING COMMUNITY RESILIENCE

### INTRODUCTION

Building resilience in Ocean Cities of the Pacific region is key to converting challenges and risks communities face into opportunities for systemic transformation toward sustainable development. Island settlements at the nexus of ocean health, climate change and urban development will need to build anticipatory, adaptive, absorptive and transformative capacity in the face of complex stressors.

#### RESILIENCE CAPACITIES

**Anticipatory capacity:** the ability of human systems to anticipate and reduce the impact of shocks through preparedness and planning.

**Adaptive capacity:** the ability of human systems to change in response to multiple, long-term and future risks, and to learn and adjust after a shock materializes.

**Absorptive capacity:** the ability of human systems to absorb and cope with the impacts of shocks and stresses.

**Transformative capacity:** the ability to take deliberate steps to change systems that create risks, vulnerability and or inequality.

The interlinked challenges and resource constraints in rapidly growing Ocean Cities in the Pacific means that the ability to absorb shocks and bounce back quickly is crucial to limit damages to hard-won development gains. Building community resilience recognizes the importance of effectively engaging with

relevant partners and stakeholders to promote equitable opportunities for all people in urban communities to access resources and use them sustainably, and to apply standardized methods contextualized for the Pacific to assess the relative vulnerability of communities in Ocean Cities. It also recognizes the importance of promoting stronger governance regimes within urban communities, aligning these with the policies of local government, and encouraging partnerships between urban and rural communities. This second policy brief in the Ocean Cities series offers guidance in this direction.

*Resilience is defined as the ability to absorb and recover from shocks, and to adapt and transform people's structures and means of living in the face of long-term stresses, change, and uncertainty. A resilient society is one that incorporates the ability of individuals, communities, and systems to survive, adapt, and grow in the face of stress and shocks; to convert risks into opportunities; and to transform when conditions require it.<sup>1</sup>*

## KEY MESSAGES

### THE COST OF DISASTERS<sup>2</sup>

#### PACIFIC ISLAND COUNTRIES ARE HIGHLY VULNERABLE TO NATURAL DISASTERS



WHICH ARE **DESTRUCTIVE, UNPREDICTABLE** AND OCCUR WITH **INCREASING FREQUENCY**

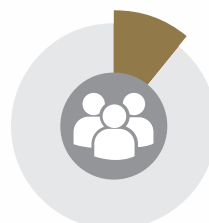
IN **12 COUNTRIES** OF THE PACIFIC ISLAND REGION,  
THERE IS A **46 PER CENT PROBABILITY**



OF BEING **AFFECTED** BY A  
NATURAL DISASTER **EVERY YEAR**



ON AVERAGE, A DISASTER CAUSES  
**14% DAMAGE TO GDP**



ON AVERAGE, A DISASTER AFFECTS  
**11% OF POPULATION**

**MORE SEVERE DISASTERS BRING ECONOMIC DAMAGES  
THAT SIGNIFICANTLY AFFECT COUNTRIES' GDP**

IN **VANUATU** IN 2015, CYCLONE PAM CAUSED DAMAGES  
EQUATING TO **64 PER CENT OF ITS GDP**



**ANNUALLY, NATURAL DISASTERS IN THE  
SOUTH PACIFIC REGION COST AN ESTIMATED**

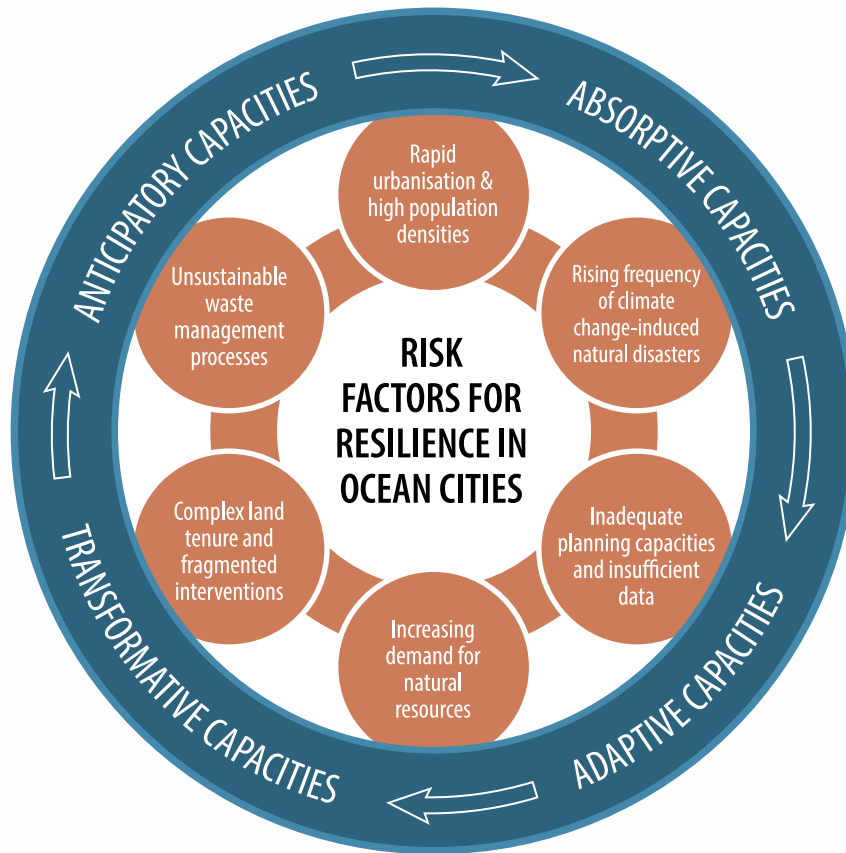
**USD 284 MILLION IN LOSSES**

Through strengthening resilience to natural disasters and economic shocks, Ocean Cities of the Pacific island region can improve the livelihoods of vulnerable populations. Approaches to building resilient communities include:

- ✓ Mapping vulnerabilities to inform the design of social inclusion, health, education, housing, water and sanitation strategies and hygiene programmes.
- ✓ Promoting equal opportunities for urban communities to access and sustainably use resources through developing place-based responses informed by data mapping.
- ✓ Building strong partnerships between communities in and beyond cities (including rural-urban safety nets), engaging both civil society, customary community leaders, local and national governments, and private sector developers.
- ✓ Strengthening urban community governance regimes and processes, and aligning them with urban planning policies and legislations.
- ✓ Integrating a 'Pacific Way' to resilience that builds on shared identities and traditional knowledge.

## KEY ISSUES

### RESILIENCE CAPACITY



Ocean Cities are diverse, and vary in their composition of settlements, which themselves vary in size, socio-economic status, governance arrangements, levels of access to basic services, vulnerability to external shocks and response capacities. Building urban resilience means reducing vulnerability and increasing absorptive and adaptive capacity of the urban system as a whole, while paying special attention to the needs of its most vulnerable or disadvantaged communities and groups. Sectoral efforts to improve well-being and to build capacity, e.g. in education, healthcare, livelihoods, will likely contribute to urban resilience. From a planning/urban system perspective, the overarching challenges that undermine resilience of Ocean Cities in Pacific island countries include: rapid urbanization, complex land tenure, and fragmented interventions, as explored in Policy Brief 1.

Small island developing States of the Pacific have different laws, policies, regulations, and programmes in place that often function to build urban resilience, though they are not often recognized for this purpose. These government interventions take the form of environment acts, building codes, adaptation and mitigation frameworks, gender inclusive strategies, decentralization acts, and provision of social services.<sup>3</sup>

Meanwhile, communities of the Pacific island region have developed informal and traditional patterns of resilience based on kinship networks, patterns of mutual aid and reciprocity, and informal economic relations. These are often underestimated and rarely integrated with more formal legislative and regulatory frameworks. State-generated responses and community-based actions form a network of intertwined efforts to build resilience in Ocean Cities, increase adaptive capacity, and reduce vulnerabilities to environmental, social and economic stresses.

AVERAGE **ANNUAL DIRECT LOSSES** CAUSED BY NATURAL DISASTERS  
IN THE SOUTH PACIFIC REGION ARE ESTIMATED AT **USD 284 MILLION**<sup>4</sup>

SINCE 1950, **NATURAL DISASTERS** HAVE IMPACTED ROUGHLY **9.2 MILLION PEOPLE**  
IN THE PACIFIC REGION, CAUSING **9,811 REPORTED DEATHS**<sup>5</sup>

To function effectively, resilience structures in Ocean Cities of the Pacific islands must be based on sufficient integration of cross-cutting issues; understanding and creating interlinkages between related frameworks, policies and actions; appropriate formal and non-formal capacity building; effective monitoring; and continuous updates to accommodate rapid social and environmental changes. This requires functioning multi-level governance structures that include community representation, not simply as consultees but as a key decision makers and resources allocation managers.

## KEY OPPORTUNITIES FOR ACTION

Community-based resilience building can benefit from embracing the spirit of a 'Pacific Way' of community ownership, communal responsibility, and creating consensus through dialogue. Resilience building that speaks to citizens' priorities and a shared island and ocean identity is an opportunity to permeate customary governance structures and engage citizens across and beyond urban communities within island systems. Understanding urban-rural dynamics in islands and building effective urban-rural relationships for more resilient livelihoods, social safety nets and food security can mitigate rural to urban migration pressures and address resource and infrastructure inequalities.

### BUILDING RESILIENCE IN HUMAN SYSTEMS: AN APPROACH TO SUPPORTING POLICY DEVELOPMENT IN OCEAN CITIES

Local authorities and governments can enable individuals, communities and systems to turn risks into opportunities and minimize negative impacts in partnership with urban communities and relevant stakeholders in a practical three-step approach to resilience thinking:

1. Identifying sources of existing and emerging risks in society
2. Mapping out the critical systems in society that these risks will affect, and establish who will be most vulnerable to the potential impact of these risks.
3. Formulating policy responses that can enhance resilience capacities.

Addressing climate change impacts and natural disasters in Ocean Cities, for instance, could involve:

- Reducing likelihood of natural hazards and disasters occurring through climate change mitigation approaches;
- Opting for policies that reduce people's exposure, particularly the most vulnerable, to natural hazards, by preventing informal settlement in flood-prone areas, for example; and
- Reducing people's vulnerability by developing suitable infrastructure and services to support their ability to cope with hazards.

Making poor policy decisions can result in increased vulnerability and exposure to environmental, social and economic shocks and stresses. Resilience building through a combination of policy and programmatic interventions is advised to ensure sustainable development and intergenerational equity and equality across social groups within Pacific island Ocean Cities. Possible policy responses to challenges faced in Ocean Cities are identified below:

### Map vulnerability and capacity

- Consolidate and generate information on spatial and socio-economic vulnerabilities within urban systems. Mapping climate vulnerability has been undertaken widely across the Pacific through regional and national initiatives<sup>6</sup>, and there is potential to build on these spatial databases and integrate them with socio-economic system indicators (including citizen-generated data) to inform community resilience initiatives. Socio-economic-environmental mapping can inform green infrastructure planning and the development of innovative community-local government collaborations to build more resilient urban communities.<sup>7</sup>
- Standardize methodologies for assessing vulnerability as this will facilitate more targeted allocation of resources to address the specific needs of the most marginalized and vulnerable groups in society.
- Explore opportunities to develop pricing and revenue models to incentivize the provision of services.



#### UN-Habitat's PCCF in Port Vila and Honiara<sup>8</sup>

The UN-Habitat's 'Planning for Climate Change Framework' (PCCF) was implemented in the cities of Port Vila and Honiara between 2014 and 2017. Initially, the intention was to use a variety of participatory frameworks to develop local climate change adaptation plans for both cities based on climate vulnerability assessments that were supported by the Pacific-Australia Climate Change Science Adaptation Planning programme's 'Pacific Climate Futures' scenarios. However, it later became evident that existing exposure to climate variability (cyclones and floods) and natural disasters (earthquakes and tsunamis) meant that disaster risk reduction (DRR) principles also needed to be factored into the development of local action plans and policies. Further discussions with communities highlighted they were being served by inadequate infrastructure, services and housing stock; under considerable population and urbanization pressures; and lacked the institutional capacity at the community and municipal levels to effectively respond to urbanization and global environmental change.

### Invest in innovative research and solutions

- Invest in research to understand the processes of resilience in Ocean Cities of the Pacific islands and pursue innovative ways of combining traditional knowledge, ecosystem services, and modern science to address urban community issues.
- To better inform decision making, information and knowledge should be produced in language that is familiar to communities and policy makers.

## Support localized or 'place-based' responses

- Develop holistic, integrated, localized approaches to resilience building. For example, Fiji, Tonga, Solomon Islands and Vanuatu have resilience structures and frameworks in place that encourage a combination of bottom-up and top-down approaches, including financing and strengthening capacities, structures and legal frameworks and mainstreaming risk into development.<sup>9</sup>
- Embrace multi-level and multi-sector governance in building resilience, by focusing multiple-agencies on specific local issues to develop place-defined partnerships. A 'place' focus can assist in developing common objectives, agreed priorities, collective programmes and shared budgets to maximise impact.
- Community engagement in partnerships can assist in developing local ownership of solutions and improve community capacity in engaging with and influencing formal agencies.



### Youth as Agents of Change in Tuvalu

Under the Tuvalu Coastal Adaptation Project the Government of Tuvalu is implementing measures to reduce the impacts of climate-induced sea-level rise and intensifying storm events on key infrastructure such as homes, schools and hospitals. Funded by the Green Climate Fund and implemented in cooperation with the United Nations Development Programme, one of the project components involves funding up to six students to study a discipline relevant for coastal resilience at a specialized university, with the prospect of working on the project upon completion of their studies. By engaging youth and building their skills in this field, the initiative supports Tuvalu's efforts to address the impacts of climate change in coastal settlements and improves the livelihoods and resilience of young generations of Pacific islanders.

## Enhance policy integration and coordination

Align urban governance regimes with urban planning, policies, and legislations under an oceans-climate-urban development lens - viewed as a package and aligned with appropriate legislations.

Adapt urban policy formulation processes and consultation mechanisms to ensure participation of different communities and that the voices of the marginalized communities are heard. Entry points could include formal or informal arrangements through government development processes; public consultations; traditional governance systems; faith-based organizations; groups for women, youth or men; or other interest groups. This will ensure all actions are well coordinated, resources are shared, and partnerships are fostered between communities, government, the private sector, town councils, faith-based organizations, and others.





### Managing Risk to Increase Resilience in Tonga

The Ministry of Internal Affairs of the Government of Tonga, with Mainstreaming of Rural Development Innovation Tonga Trust (MORDI-TT) and the International Fund for Agricultural Development (IFAD), are implementing a bottom-up approach to development planning in Tonga. Climate and disaster risks have been integrated into development planning and implementation processes from the community level up. Risk-informed community priorities, identified in Community Development Plans, are now being brought to the national level and being used as a basis for allocating funding to communities. This approach to development portrays a shift from an administrative to a more 'community-driven' approach to dealing with disasters and climate change impacts, and is supported by relevant human resource capacity at the island and national level.

### Leverage a 'Pacific Way' to building urban resilience

- Build critical partnerships with communities and local stakeholders, such as customary land owners, to address Pacific island Ocean City-specific structural issues such as land tenure and to facilitate community-led action. This can include opening up participation and consultation processes to local chiefs and community leaders when designing responses to challenges in informal settlements in Ocean Cities, and building awareness in women's and youth groups through popular sports and gender-responsive initiatives.
- Create awareness of the importance of relationships between rural and urban communities to strengthen rural-urban safety nets that are vital during and after natural disasters.
- Adopt policies that foster strong rural-urban connections to enable a two-way flow of resilience-building.

## ACKNOWLEDGEMENTS

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## ENDNOTES

<sup>1</sup> ESCAP, ADB, UNDP (2018), see endnote 1.

<sup>2</sup> Lee, Dongyeol and others (2018). The Economic Impact of Natural Disasters in Pacific Island Countries: Adaptation and Preparedness. IMF Working Paper, No. 18/108. Asia and Pacific Department, International Monetary Fund.; International Labour Organization (2015). "Cyclone PAM causes devastating impact on employment and livelihoods." ILO Disaster Preparedness and Response. News 23 April 2015. [https://www.ilo.org/suva/public-information/WCMS\\_368560/lang--en/index.htm](https://www.ilo.org/suva/public-information/WCMS_368560/lang--en/index.htm) (last accessed 05.10.2018).

<sup>3</sup> See Ocean Cities of the Pacific Islands - Policy Brief 1.

<sup>4</sup> World Bank (2012). "Pacific Islands: Disaster Risk Reduction and Financing in the Pacific." <http://www.worldbank.org/en/results/2012/04/01/pacific-islands-disaster-risk-reduction-and-financing-in-the-pacific> (last accessed 14.09.2018).

<sup>5</sup> World Bank (2012), see endnote 5.

<sup>6</sup> For a list of past initiatives see Pacific Climate Change Portal (n.d). <https://www.pacificclimatechange.net/topics/vulnerability-0> (last accessed 14.09.2018).

<sup>7</sup> Collier, Marcus J., and others (2013). "Transitioning to resilience and sustainability in urban communities." Cities. doi:<https://doi.org/10.1016/j.cities.2013.03.010>.

<sup>8</sup> Kiddle, Gabriel L., and others (2017). "Unpacking the Pacific Urban Agenda: Resilience Challenges and Opportunities." Accessed September 2018. doi:<https://doi.org/10.3390/su9101878>.

<sup>9</sup> Winterford, K., Chong, J., Gero, A. (2016). Pacific Risk Resilience Program Mid-Term Evaluation Report, prepared for UNDP by the Institute for Sustainable Futures, University of Technology Sydney.