

Understanding and Measuring Climate and Ocean Risk in Suva, Fiji

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The Pacific Islands Climate Collaborative - 2022 Forum Miko Maekawa, Senior Research Fellow, OPRI-SPF

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Climate change widespread, rapid, and intensifying

- ✓ Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years.
- ✓ Unless there are immediate, rapid, and large-scale reductions in greenhouse gas emissions, limiting warming to 1.5°C will be beyond reach.
- ✓ Coastal areas will see continued sea level rise throughout the 21st century, contributing to more frequent and severe coastal flooding in low-lying areas and coastal erosion.
- ✓ For cities, some aspects of climate change may be amplified, including heat (since urban areas are usually warmer than their surroundings), flooding from heavy precipitation events and sea level rise in coastal cities.
- Cities are also a crucial part of the solution, through building green buildings, reliable supplies of clean water and renewable energy, and sustainable transport systems.

Coastal Cities Exposed to the Climate Crisis

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Introducing CORVI

CORVI integrates economic, social, and environmental data to produce a holistic assessment to determine how resilient a coastal city is to climate and ocean risks.

► CORVI:

- Three types of risk
- ✓ 10 risk categories
- ✓ 100 indicators



Bloomberg Philanthropies Vibrant Oceans Initiative





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CORVI: A Decision Tool for the Future



- Framework for cities to assess vulnerability to climate change
- Enables clients to identify opportunities to build resilience where it matters most
- Builds resilience into future decision making



Coastal City Assessments



STIMSN



CORVI Data Portal



Developed with the data analytics firm, Qlik

Improves CORVI accessibility and allows users to visualize results

Open Data Portal 🔶

Increases efficiency of CORVI assessment

https://www.stimson.org/project/corvi/coastal-cities-index/data-portal/

The CORVI Data Portal

Data from completed CORVI assessments are added to this open Data Portal, a tool for researchers and decision makers to interact with the data, compare risk, and assess regional trends.

Developed in collaboration with Qlik Q







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CORVI Pacific Project in Suva, Fiji

Fiji's national profile

Population: 889,953 (2019) Land areas: 18,270 (sq. km) GDP: 5.536 billion USD (2019) GDP per capita: 6,220 USD Annual GDP growth: 1.06%

Suva City

Population: 94,000 Land areas: 790.5 (sq. km) Population Density: 98/sq. km



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Pacific Regional Map

selected cities in the pacific





DC SASAKAWA PEACE FOUNDATION **Suva Climate and Ocean Risk Profile**

SUVA RISK PROFILE						
Ecological Risk		Economic Risk		Political Risk		
Geography/Water	5.88 🛑	Economics	5.61 🔴	Social/Demographics	4.80	•
Climate Change	7.23 🛑	Major Industries	6.63	Governance	5.19	
Ecosystem	5.67 🔴	Infrastructure	5.07 🔴	Stability	6.01	
Fisheries	4.29 🔴					



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Recommended Action Areas

CORVI assessment shows that risks are concentrated under climate, ecosystem, and industries in Suva City. The following action areas are suggested as priorities for Suva's climate change adaptation strategies.

Develop climate-risk-informed urban planning
Harmonized urban development and natural restoration
Enhancing the climate resilience of the tourism sector

Thank you for your attention!



Contact Us

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