

5th Regional Symposium
on
“Effective Governance and Digital Transformation for Building Back Better and Accelerating the Implementation of the 2030 Agenda for Sustainable Development”
16th to 18th November, 2021

“Risk-Informed Governance to Address the Climate Change”
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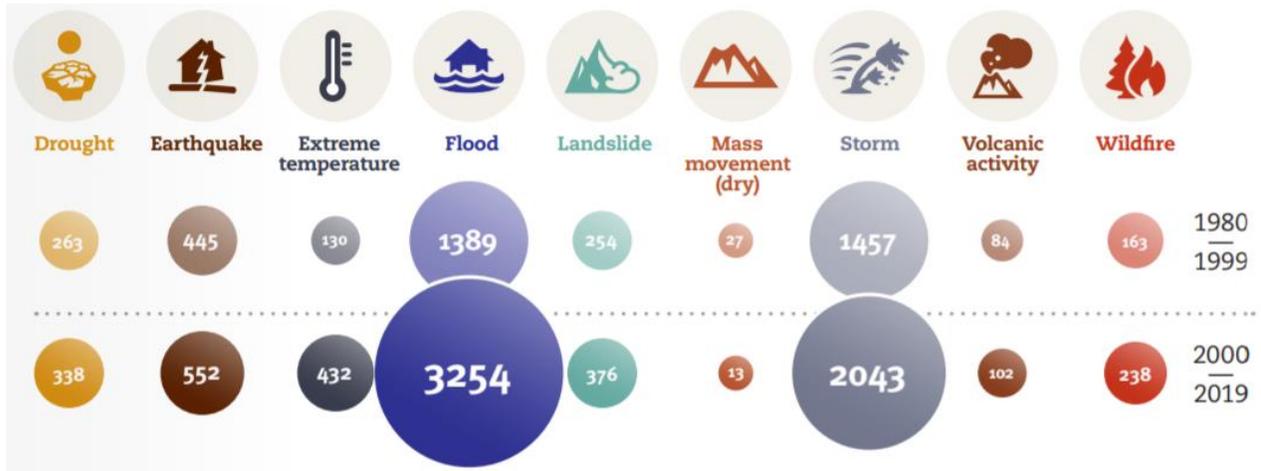


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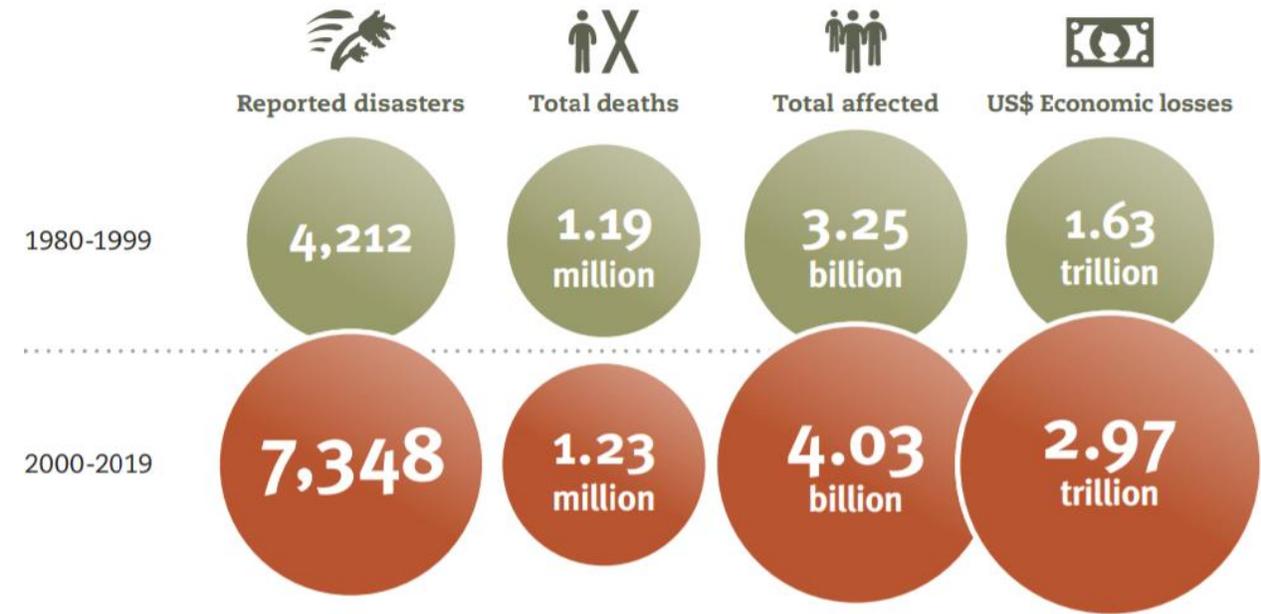
1. Global trends in disaster risks and impact
2. Importance of effective & innovative governance to address the impact of the climate change
3. Key building blocks of risk-informed governance
4. Innovative Cases on Digital Government for DRR and Resilience
5. Conclusion and Policy Recommendations

Global Trends in Disaster Risk & Impact

Disaster Impacts: 1980-1999 vs. 2000-2019



Total disaster events by type: 1980-1999 vs. 2000-2019



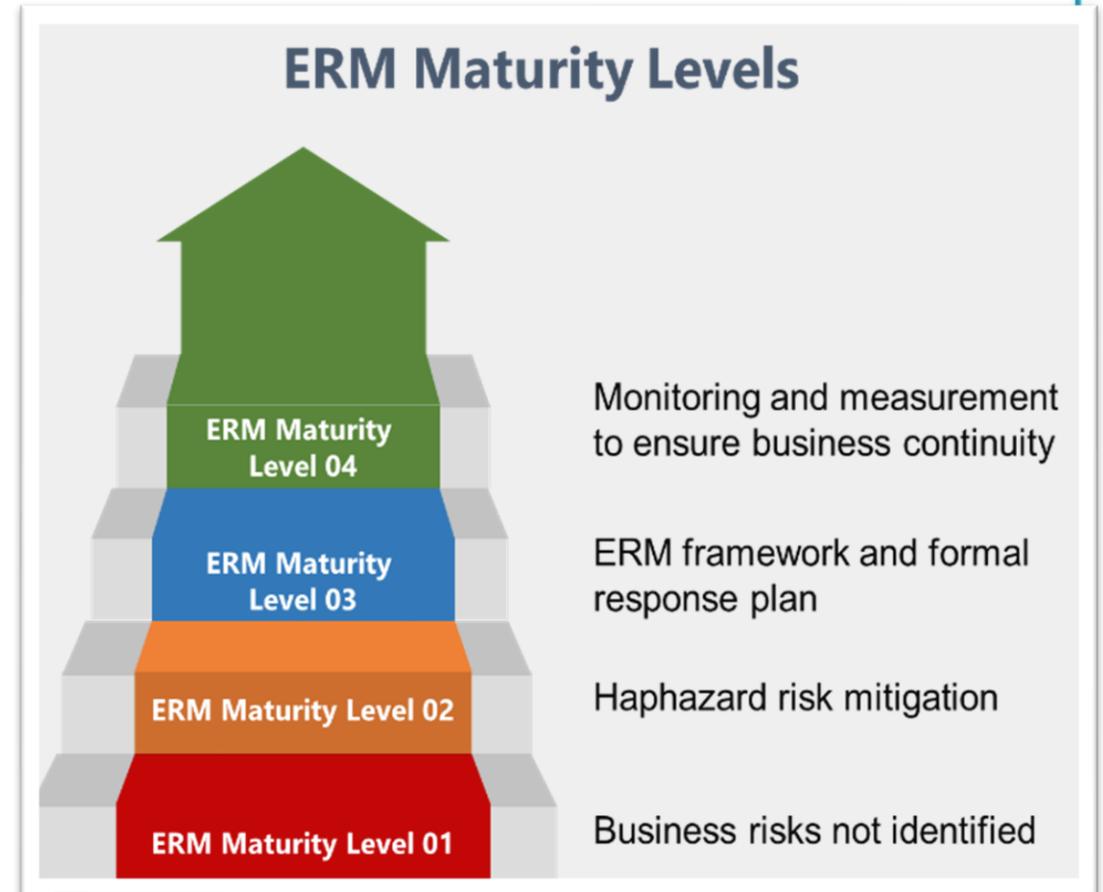
Effective and Innovative Governance

11 Principles of Effective Governance for Sustainable Development by Economic and Social Council

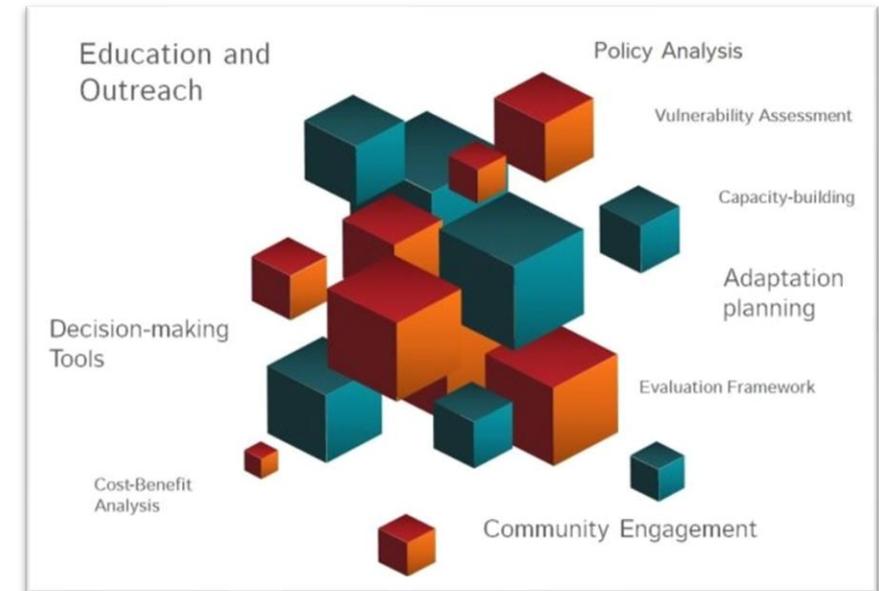


Risk Informed Governance ??

- Risk-based decision-making process
- Understanding of current and emerging risks
- Development & implementation of mitigation plans
- Continued monitoring
- Building resilient communities esp. in times of public health emergencies
- Investments in data, tools, and methods that support risk identification, assessment and management



- Effective Leadership
- Effective coordination among local, federal government, PPP agencies etc.
- Stakeholder Engagement for the Whole-of-Society Response
- Crisis Preparedness and Response Arrangements - Early warning systems
- Effective Communication Strategy
- Leveraging Science, Technology and Innovation - leading edge technologies – Drones, AI, IoT, Big Data Analytics
- Policy analysis
- Fact based decision making
- Adopt international standards/ frameworks





Case Study1 : Drones Fly Disaster Relief in Puerto Rico

- **Problem:** Communities in remote locations have ongoing public health requirements requiring outside delivery of supplies and equipment
- **Need:** Reliable delivery mechanisms
- **Obstacle:** Distance and vulnerable infrastructure
- **Solution:** Alternative delivery mechanisms using long-distance UAV flights



Image: Medical package loaded onto UAV in Puerto Rico during pilot testing program. Image Source: Butschli, Jim, 2018. <http://bit.ly/2BLvOIL>.

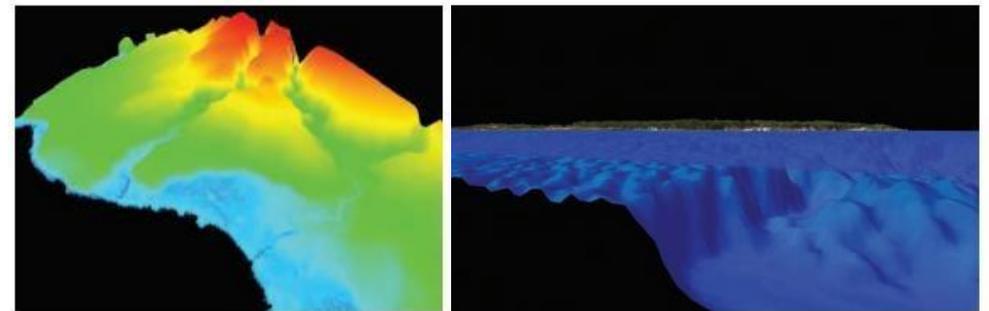
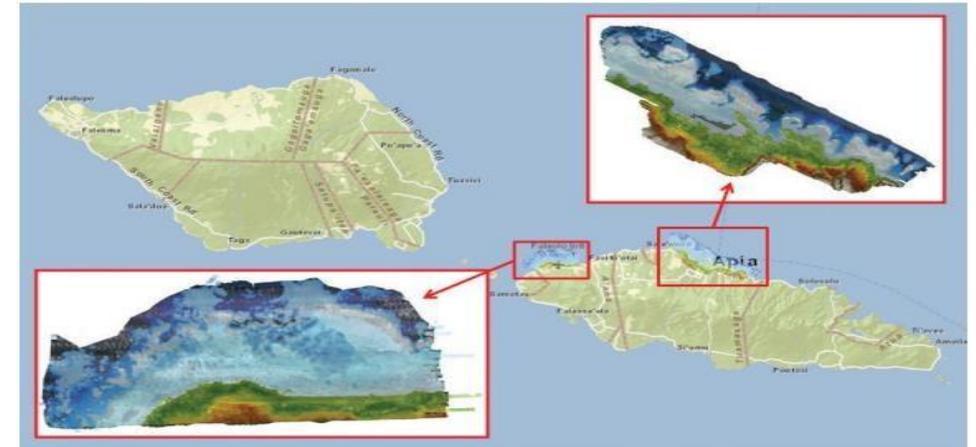
Case Study 2: Samoa LiDAR Mapping

Problem: Low lying coastal communities are at high risk from storm surge and tsunami, exacerbated by sea-level rise

Need: Accurate elevation data to guide planning efforts

Obstacle: Ground-based surveys have moderate accuracy and do not provide complete coverage; also may be outdated

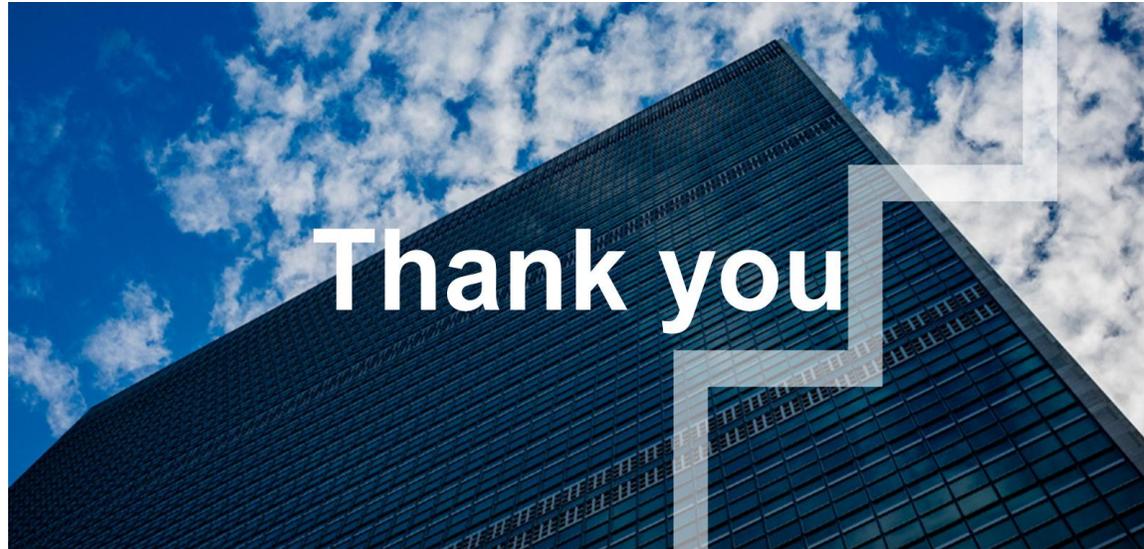
Solution: Aircraft-produced LiDAR scans of topography and bathymetry around populated low-lying areas.



Top: Map showing extent of LiDAR capture in Samoa and digital elevation models (DEM) of the two areas captured; Bottom Left: A 3D digital elevation model of the area surrounding Apia, with red indicating highest elevation; Bottom Right: A 3D perspective of the seafloor off the coast of Upola. Images Source: Australian AID, 2013.

- Adopt 11 principles of effective governance
- Adopt international standards frameworks for Risk Mgt. & Business Continuity
- Integrating risk-informed governance into national development plans and local level programmes/activities
- Ensure all building blocks are in place
- Adopt frontier technologies to protect the environment and ensure DRR.
- Bridge the digital divide by addressing inequalities
- Review government policies and processes to adapt to new innovative technologies
- Enact and enforce policies, laws and regulations to mitigate adverse impact of technologies including through data security, governance, individual protection.
- *Leave no one behind*

Congratulation UNPOG on Successful Completion of 15 years



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