

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”

Sunil Thawani
Author, Speaker, Board Member
CEO, Quality Indeed Consulting
Ltd., U.A.E.



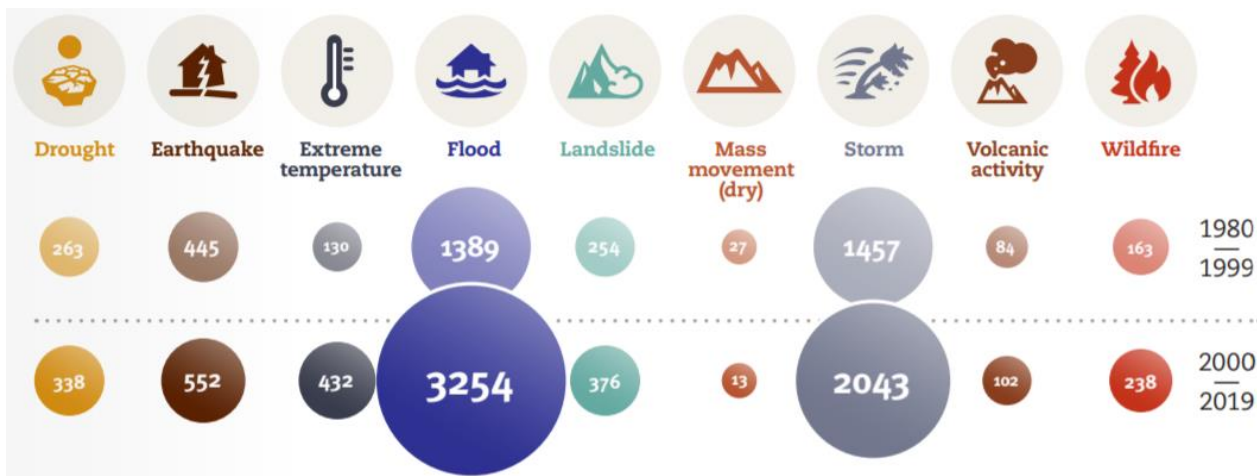


Contents

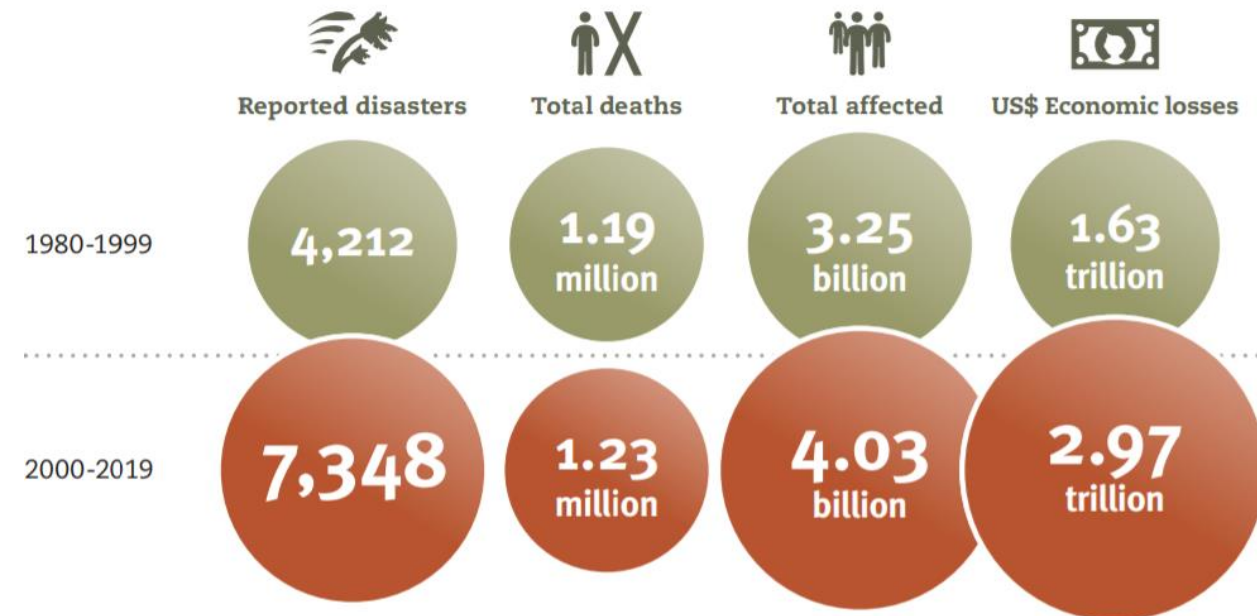
1. Global trends in disaster risks and impact
2. Importance of effective & innovative governance to address the impact of the climate change
3. Key building blocks of risk-informed governance
4. Innovative Cases on Digital Government for DRR and Resilience
5. Conclusion and Policy Recommendations

Global Trends in Disaster Risk & Impact

Disaster Impacts: 1980-1999 vs. 2000-2019



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



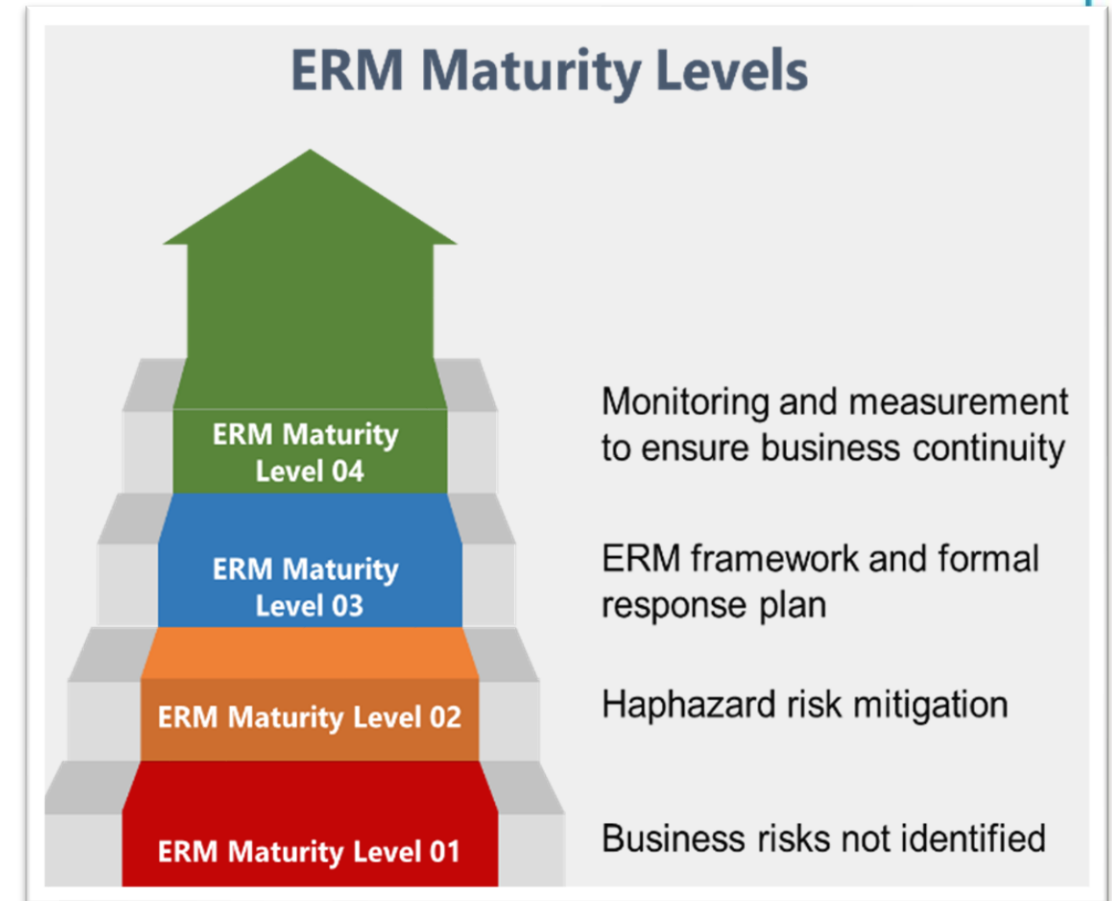
Effective and Innovative Governance

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



The Sendai Framework for DRR

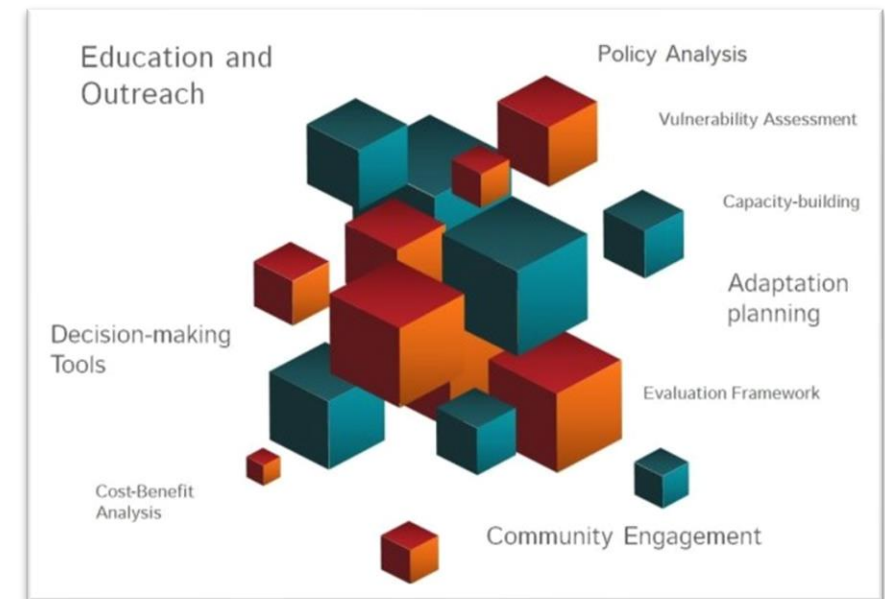
Call on governments to move towards risk-informed governance arrangements that include a broader hazard and risk scope and incorporate the concept of systemic risk. This requires integration across different sectors and levels of government, working with scientists, civil society and the private sector to address current and emerging risks.





Building Blocks of Risk Informed Governance

- 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>.

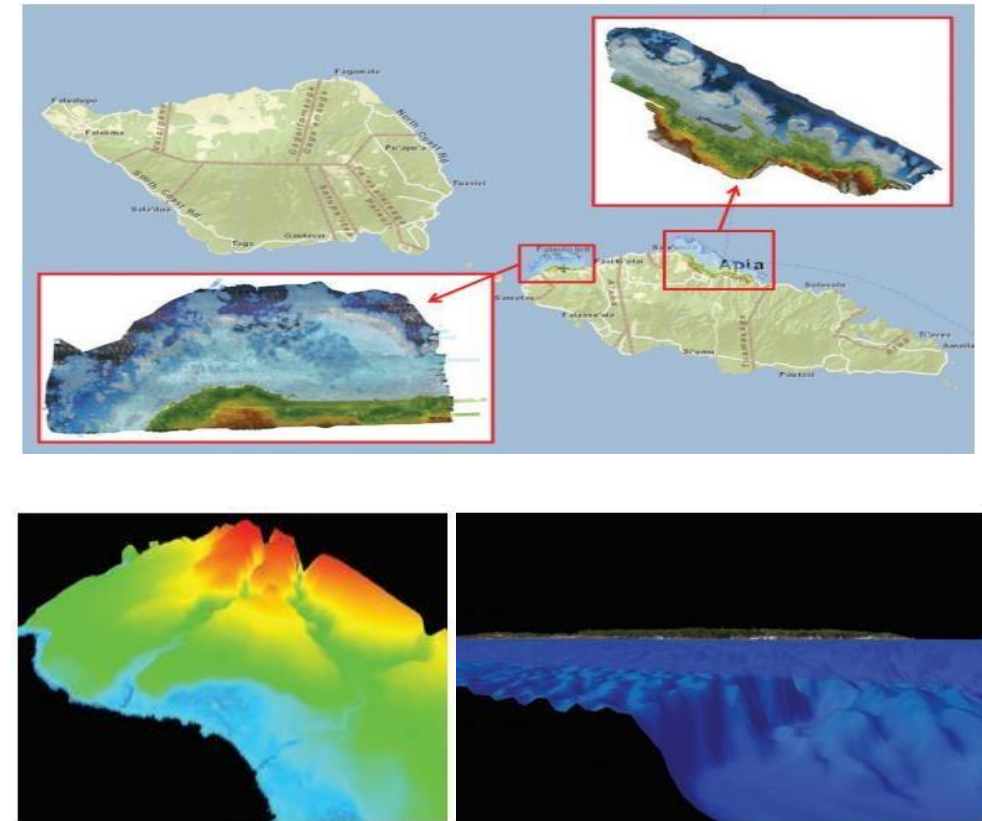
Case Study 2: Samoa LiDAR Mapping

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 Upolu. Images Source: Australian AID, 2013.

Conclusion and Policy Recommendations

- 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



Sunil Thawani
Author, Speaker,
Board Member
CEO, Quality Indeed Consulting Ltd., U.A.E.