





**TC PAM: VANUATU**  
The Challenge of using disparate datasets

Mereoni Ketewa

## Post Disaster Assessment Survey

- Rapid Damage Assessment
  - Assess damage to buildings
  - Capture high resolution photographs of affected buildings using standard camera and UAV data
- Baseline: Pacific Risk Information System (PacRIS) - buildings, Census
- Inundation assessment
  - Generate high resolution topography of coastal areas to investigate wave and storm surge impact.

2

## The Survey

The image is a composite. On the left, a computer screen displays a survey form with various tables and input fields. On the right, a person's hand holds a yellow handheld GPS device, which shows a map on its screen. The background of the right side is a photograph of a debris field, likely the result of a disaster.

## THE CHALLENGE

- Post disaster assessment methodology – differs per country and by agency
- Dependent on whatever baseline datasets are available. Can be outdated and therefore difficult to gauge extent of impact eg. Population data is only as current as the last census, PCRAFI datasets were collected in 2010, in 5 years significant changes have taken place in affected areas, for instance Lenakel is now an urban area.
- Damage assessment:
  - Social impact assessment [people, livelihoods and community infrastructure affected]. What is a household?
  - Assess standing/remaining building stock (if it doesn't exist). Dwelling vs Kitchen
- Datasets used for response should be updated both vectors and rasters
- Coordination of assessments between agencies.

## Possible solutions

- Data preparedness – ensuring baseline datasets to support response are collated
- Understanding damage assessment methodologies
- Knowing the information flows – how will the data collected be used? Response, recovery, documenting disaster impacts
- Recognising and using the external support available: regional/ international organisations; Esri Disaster Response Program; crowdsource mapping – Tomnod (DG), Copernicus, OSM; Imagery: International Charter on Space and Disasters, Sentinel Asia

**Vinaka Vakalevu**  
**Questions ?**

[liteab@spc.int](mailto:liteab@spc.int)  
[mereonik@spc.int](mailto:mereonik@spc.int)