



November 2021  
COP26

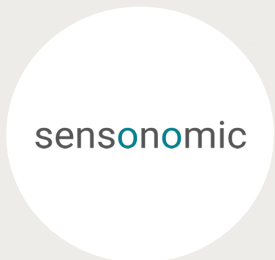
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# CommonSensing Project

Earth Observation and Geospatial Data Solutions to support Climate Finance Proposals and Projects



# Partners



Funded by:



International Partnership Programme (IPP)





Goal: Help build Disaster Resilience, enhance Food Security and Support Climate Finance Applications



Geospatial and climate  
Data and decision-support  
Tools



Capacity building of:

Technical staff  
Specialised analysts  
Decision makers





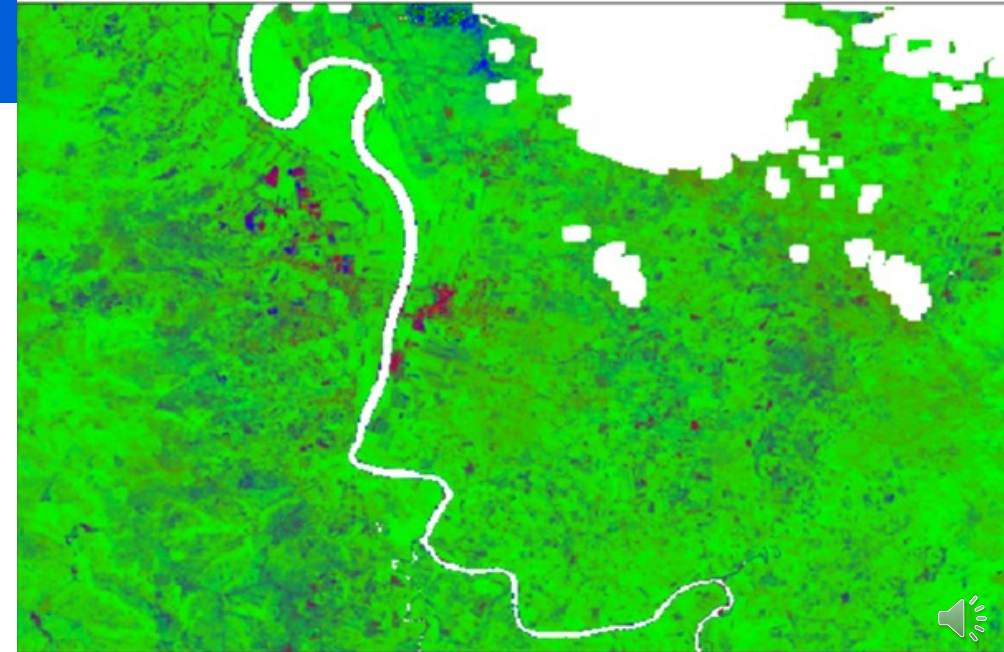
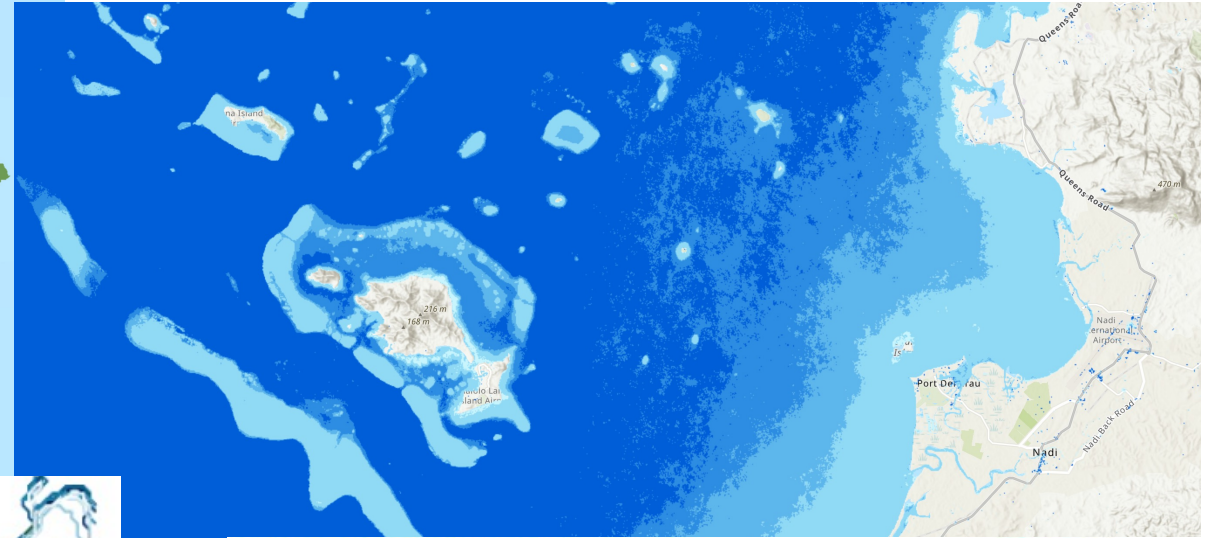
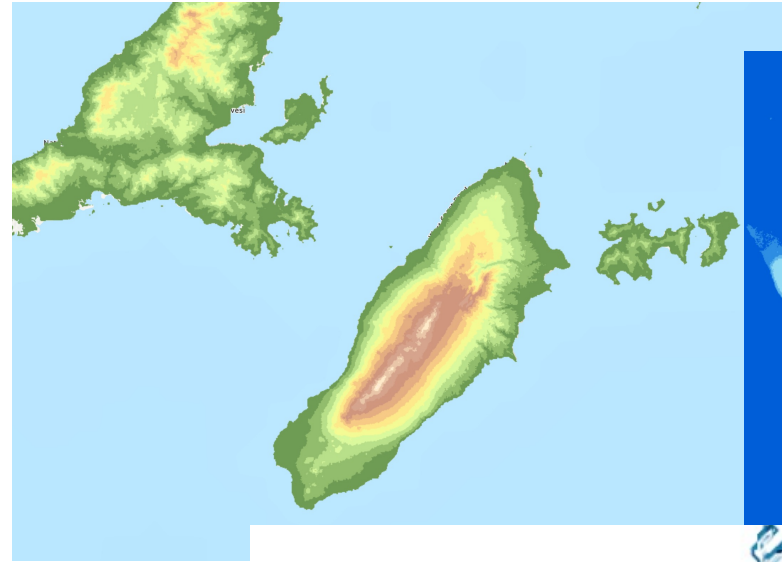
# Data

- **Collated** datasets from various sources (including MLMR, NDMO, FRA, HDX, HOTOSM, PacGeo, UNEP, SPREP, JRC, JAXA, PopGIS, World Bank, Census and Facebook).
- **Created** the following datasets:
  - Climate Models (ERA5, ERA5 Land, CMAP, GPCP, TRMM, CRU, NCEP/NCAR, ENSO + Pacific Climate Finance)
  - Digital Elevation Models (30m and 12.5m resolution)
  - Elevation Zones
  - Slope Classes
  - Relative Bathymetry
  - Mangrove Forests
  - Sugar Plantations
  - Cube ARD Products (Sentinel-1, Sentinel-2, Landsat 4, 5, 7 and 8, SPOT 1 to 5, Water Masks, Geomedian)
  - Cube On-Demand Products (Geomedian, S-1 Median, Fractional Cover, Water Change, Water Permanency, Water Quality, Shoreline Extraction, Mosaic Indices, NDVI Anomaly, Vegetation Change, Land Change).





# Data

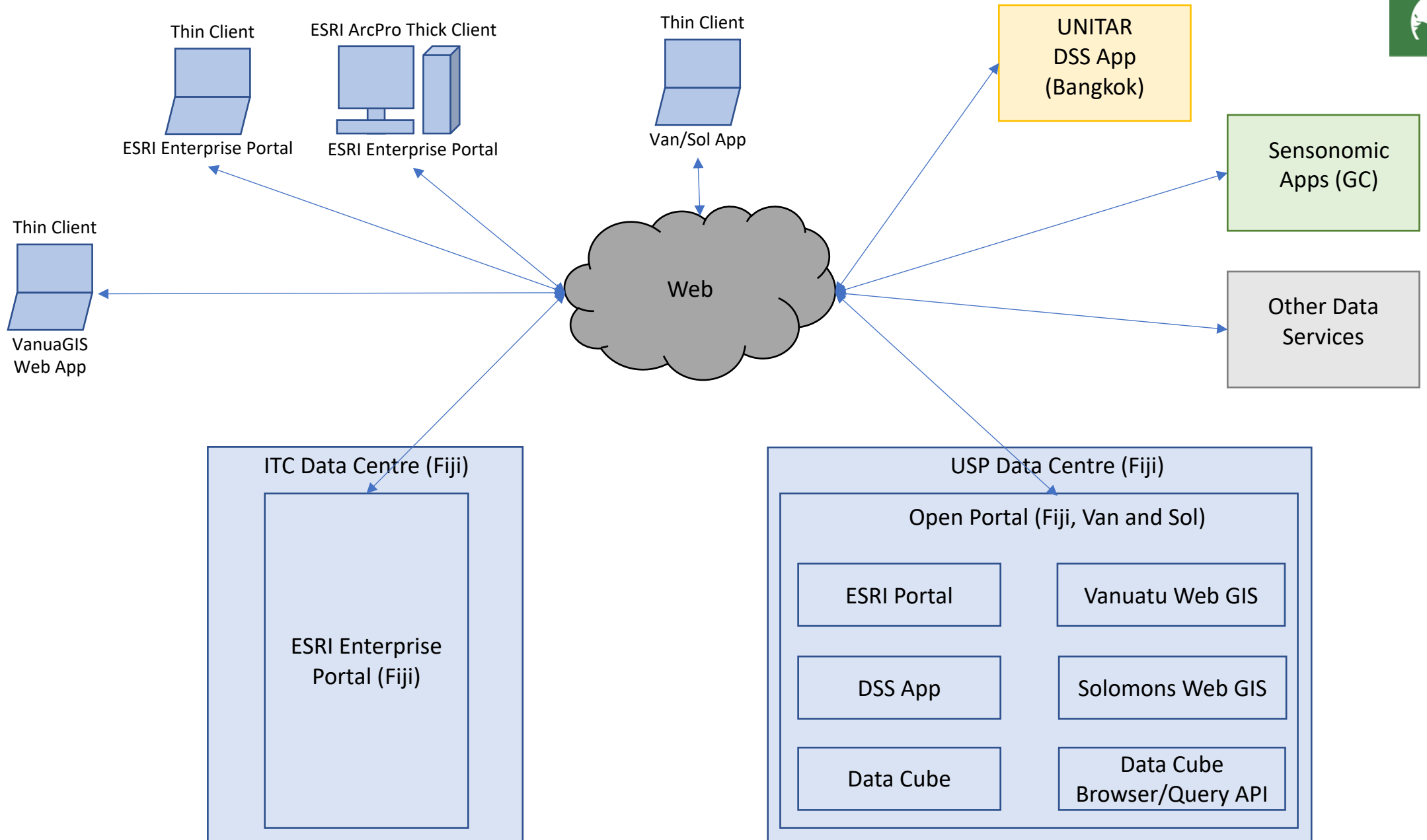




# Tools

- **ESRI Enterprise Portal for Fiji** complete with a Sites homepage, a Data Catalogue and Apps including:
  - Climate Information Application
  - Map Explorer Application
  - Risk Information Application (with 3D Scene Viewer)
- **ESRI ArcOnline Decision Support System (DSS) for Fiji, Vanuatu and Solomon Islands**
- **Open Source Data Cube for Fiji, Vanuatu and Solomon Islands**
- **Bespoke Agriculture Apps for Fiji, Vanuatu and Solomon Islands**
- **Open Portal with Apps for Fiji, Vanuatu and Solomon Islands** including:
  - Open Source Vanuatu Web GIS
  - Open Source Solomon Islands Web GIS
  - Open Source Data Cube Browser
  - Open Source Data Cube Query API

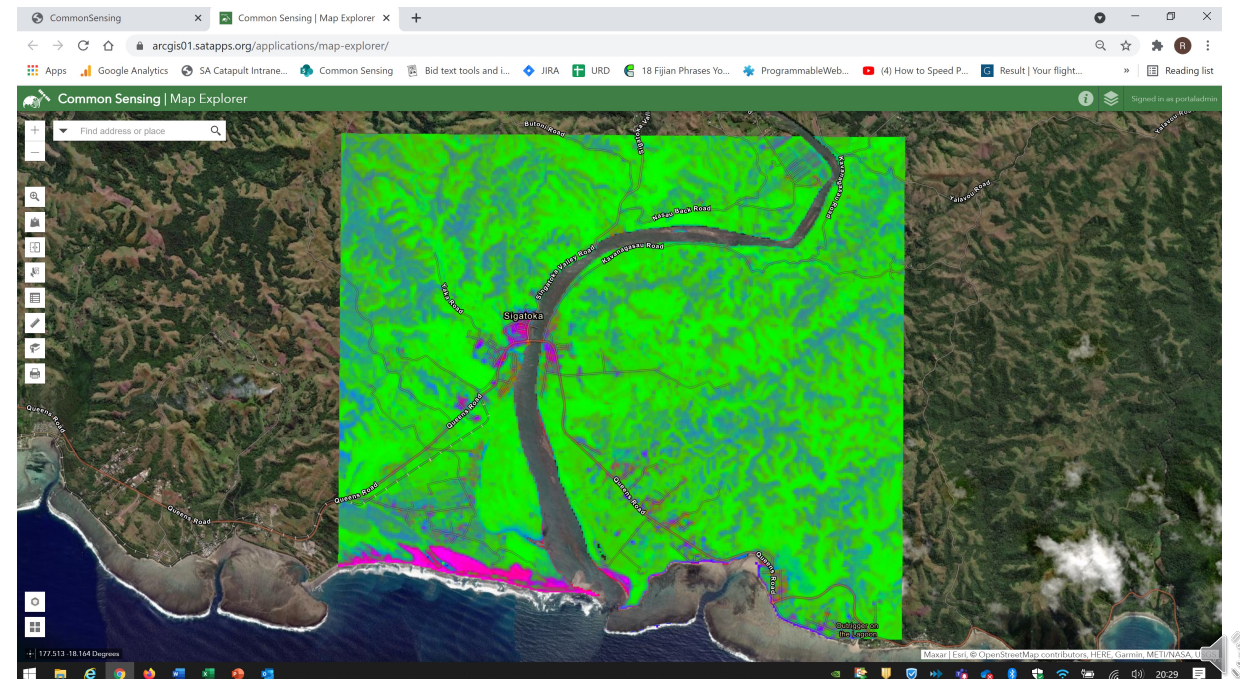






# Capacity Building

- Remote and on-site training of Technical users in the CommonSensing data and tools
- Remote and on-site training of Government decision-makers and Climate Finance Advisors in appropriate use of CommonSensing data and tools
- Ongoing support of Technical users in the CommonSensing data and tools
- User Guides, Operations Manuals, online resources







# Application to Climate Finance

- CS Data and Tools can be used at **all stages** of a Climate Finance Project:
- **Pre-Feasibility Stage:** collation of on-the-shelf GIS datasets to see if data evidences the Project rationale, to inform decisions, to identify data gaps.
- **Proposal Stage:** on-the-shelf GIS datasets and data processing to produce new or improved datasets for context mapping, feature mapping, spatial/temporal planning, multi-criteria analysis, spatial queries, inputs into engineering models, environmental/visual impact assessment etc.
- **Implementation Stage:** baseline establishment, ongoing unbiased monitoring (construction, or environmental impact).
- **Monitoring Stage:** baseline establishment, ongoing unbiased monitoring of improvements/benefits and environmental impact, justification for further work or similar Projects.



Thank you!

