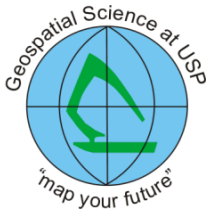
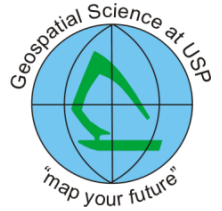


Tradition & Technology Projects using GNSS

a powerful partnership for empowering youth
and community awareness of longer term
environmental change



HELLO!



Semisi Ketenilagi



**Waisale
Rakusanavanua**



Amrita Lal



Dr. Nick Rollings



Aleen Prasad

PTC and USP Geospatial Science

- The pathway to preserve traditional methods of environmental management is to complement them with the latest scientific knowledge and technology.
- GNSS can be a core tool in this area
- PTC provided funding for the new USP Tradition and Technology Project.
- This project sought to investigate how cutting edge geospatial technology could work alongside traditional environmental management practices.
- This project has changed the way we use and disseminate technology and in particular geospatial technology for the mapping and analysis of the environment in traditional Fijian settings.
- USP Geospatial Science has been operating parallel field operations and research in Fijian Village settings with focus on mangrove ecosystems, Mountain Rainforest and reef and lagoon

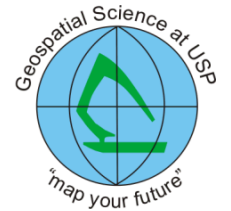


BIG CONCEPT



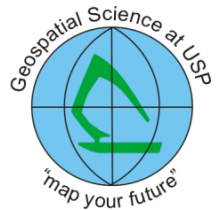
Capacity Building

**Giving Technology into the hands of the local
landowners**





Instead of engaging overseas consultants, generate the capacity of the locals through giving them the technology to find solutions to their needs





Lutumailagi Loki – USP Master’s Candidate

- ❖ Title: Spatial and morphological characteristics of informal settlements in Fiji and Vanuatu.
- ❖ 2 Sites – Tauvegavega, Ba
Valenicina – Lami



Results





Naviyago – Kolora Qativi

Final year undergraduate Student

Research Project





Toga - Flood Simulation Model

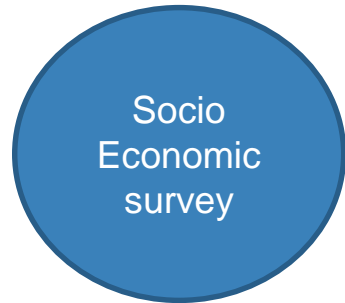


https://www.youtube.com/watch?v=Cqa8g_S68Qo&feature=youtu.be



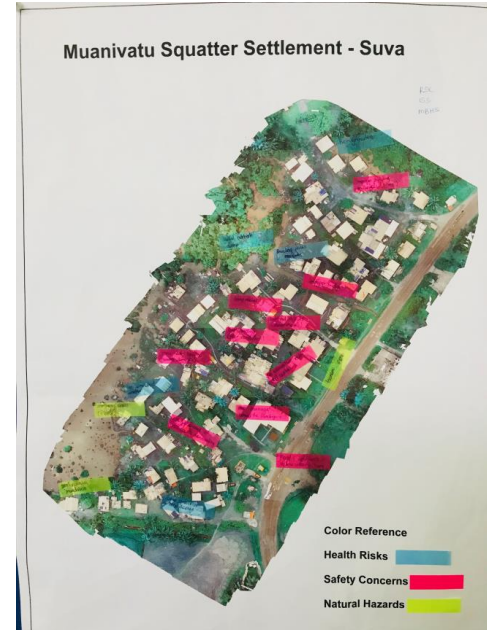
Village Profiling with UAV & Field Survey

- Traditional Village profiling focuses on demographic and geography overview of fijian villages.



Demographic Survey
Development Survey
Natural Resource use &
Management Trends
Food Security

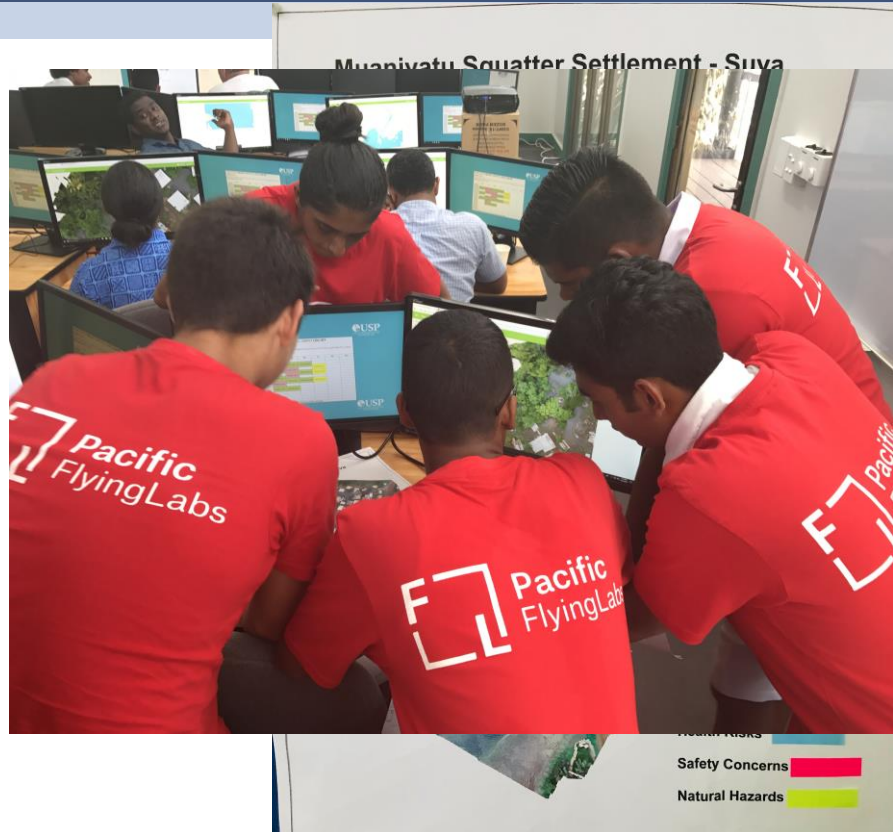
Orthomosaic
Digital Terrain Model
Digital Surface Model
3D Point Cloud
Flood simulation Model





Muanivatu Community Engagement

Muanivatu Squatter Settlement - Suva





Muanivatu Flood Simulation Model

PFL training -> hazard map ->
community engagement ->
students taking on projects







Naboutini Village



0.5 m



1 m



2m



3m

Future Projects

- National Disaster Management Office, Fiji
- UN Habitat in collaboration with The Ministry of Local Government.

DRAUBUTA LANDSLIP

Draubuta Village: 13 Families Evicted After Landslide

The landslide site which forced 13 families to be evicted to the village hall.

By Department Of Information, Navosa

18 Feb 2019 19:57



A police officer looks at the damage caused by the landslide. Photo: Department of information



Draubuta

DRAUBUTA LANDSLIP ORTHOMOSAIC



Acquisition of High resolution imagery over the affected landslip areas will directly AID the DRR officers in visually conveying potential hazard risks areas and potential mitigating factors for the relocation of the proposed 6 village household to the relevant authorities

Draubuta



CREDITS

Special thanks to
all the people who
made these
projects
successful
especially
students who
volunteered their
holidays for field
work !!!





Vinaka!!!

