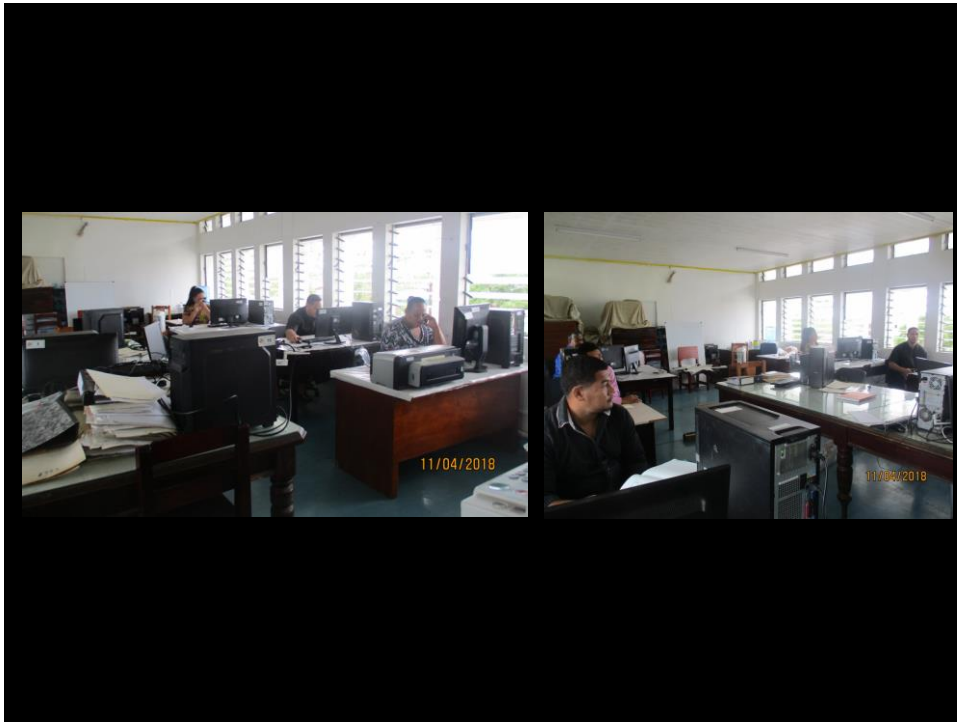


Land Information





Geographical Information Services



Cadastral Survey

The image is a collage of four photographs documenting cadastral survey work. The top-left photo shows a group of surveyors in high-visibility vests and hard hats standing in a field with trees in the background. The top-right photo shows a surveyor in a yellow shirt operating a surveying instrument mounted on a yellow tripod. The bottom-left photo shows a surveyor in a yellow shirt adjusting a tripod in a field. The bottom-right photo shows three people sitting on a white bench; one is wearing a white hard hat and a blue shirt, and another is wearing a dark blue shirt and holding a clipboard.

GNSS for Cadastral Survey

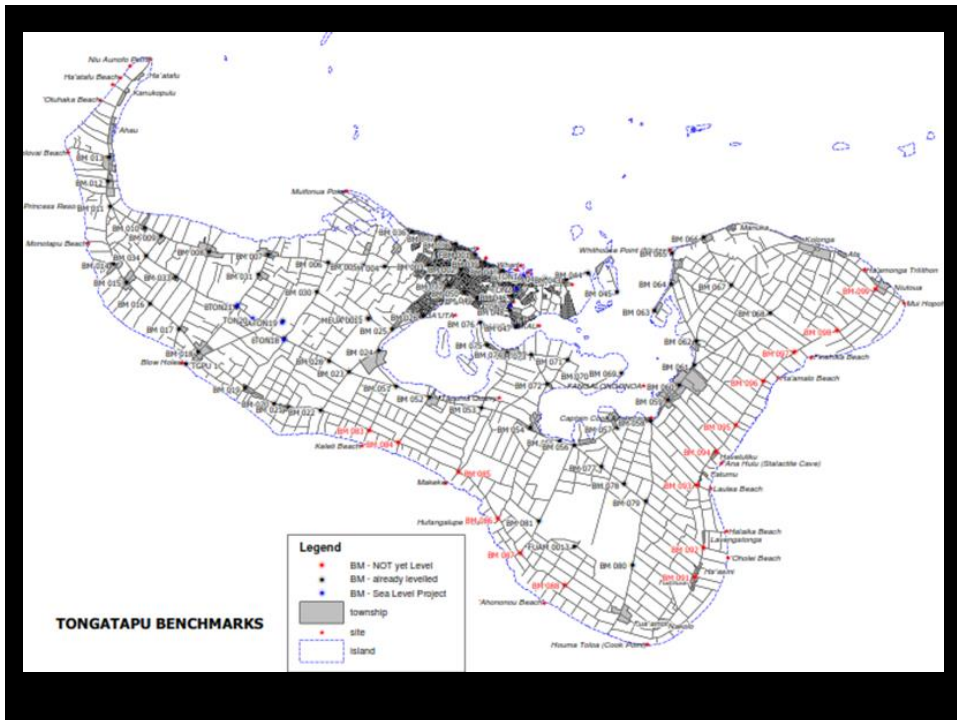




Geodetic Infrastructure

- Tonga Geodetic Datum (TGD2005),
 - Geocentric origin
 - GRS80 ellipsoid (= WGS84)
 - Static datum based on ITRF2000 as at 1 Jan 2005
- Tonga Map Grid (TMG).
 - Transverse Mercator
 - Reference spheroid = GRS80
 - Meridian of origin = 177W
 - Latitude of origin = The Equator
 - Central meridian scale factor = 0.9996
 - False origin = 1,500,000E 5,000,000N

7



Legal & Policy Framework

- Tonga's Land Act
- Draft Survey Act nearly complete
- No survey Standards
- Legal and policy for surveying and mapping not yet there

Capacity Development

- Three scholarship this year to the University of Otago
- Procured 4 sets of Trimble M3 Total Stations for Cadastral Survey
- In-house workshop for surveyors on shifting from manual to digital
- Funding from government of India for fund new sets GNSS and a digital level
- Attending FIG Reference Frame in Practice Seminar Kobe and UN GGIM AP in Kumamoto
- Next budget reflects the importance of a modern land information systems





Impact of Cyclone GITA



Way Forward

- Survey Act
- Standards and specification
- Data sharing policy
- Modern and complete Land Information System for the whole kingdom
- Professional development for graduates and mid-senior staff
- Build capacity on UAV technologies
- Geodetic survey equipment



Malo 'Aupito