CIVA FRAMEWORK
&
QGIS MAPPING TOOLKIT

A case study in Fasi moe ‘Afi, Nuku’alofa, Tonga 2017.

How it all started?

The Anglican Diocese of Polynesia in collaboration with the University of the South Pacific, conducted a workshop on Community Integrated Vulnerability Assessment (CIVA) and Geographical Information System (GIS) mapping toolkit. The framework was to identify the areas in the community that were at risk or vulnerable in case of a natural disaster or crisis. The framework encompasses two main factors that determine how vulnerable a particular area of study is.

These are:
- Human Security Objectives (HSO's)
- Livelihood Assets (LA's)

The datas collected from the framework were then mapped using the QGIS software. Once completed, an action plan is then prepared to address the issues gathered from the community.

Acknowledgements

- Siu Jione – PaCe-SD, USP, Fiji
- Lopeti Fakaosi – CIVA Framework , USP Tonga
- Anglican Diocese of Polynesia & Aotearoa, New Zealand
- Community of Fasi moe ‘Afi

Outcome

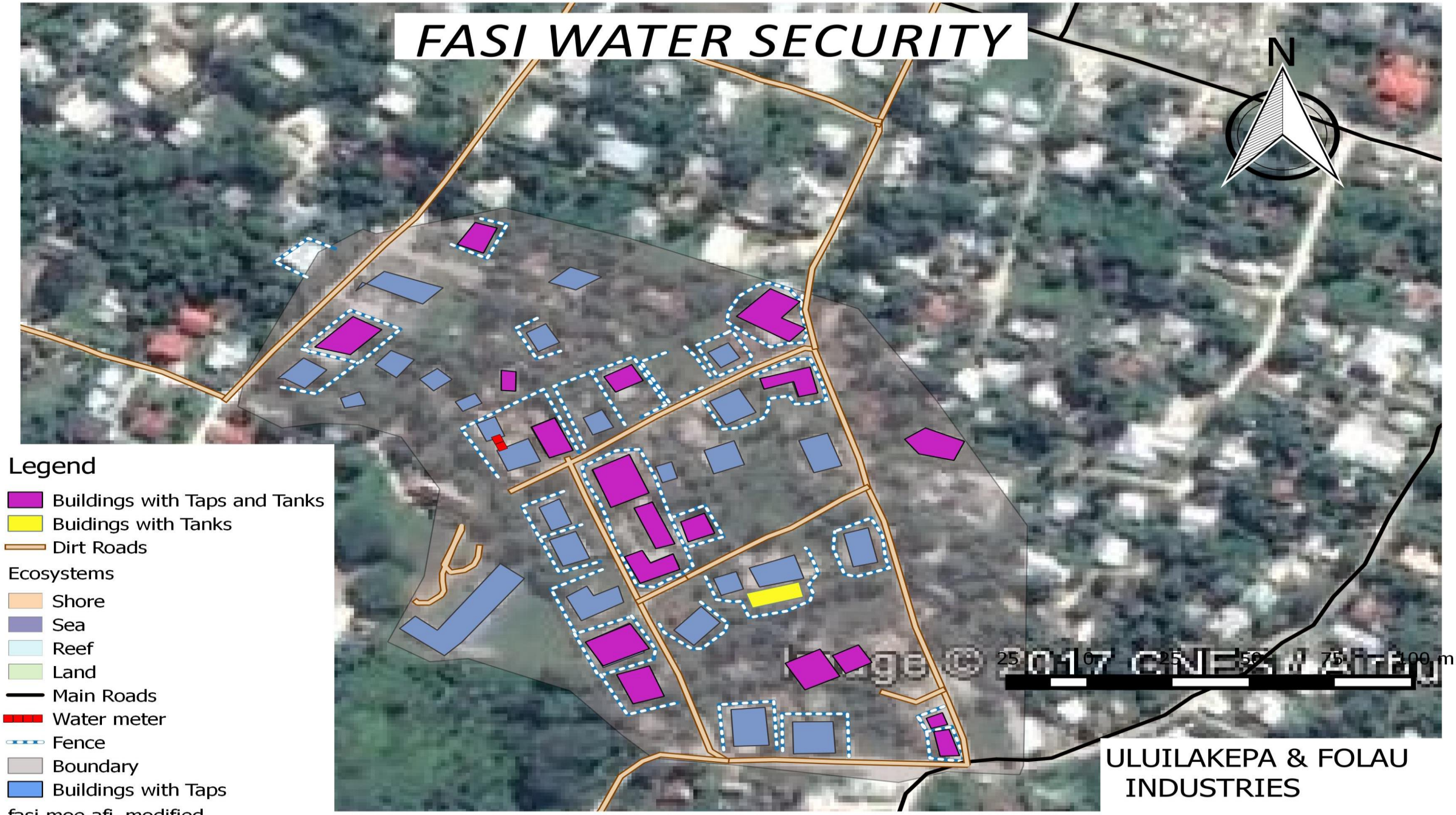
- The purpose of the training is to build the capacity of the youth leaders of the Anglican Diocese of Polynesia and the wider youth representations of the church of Aotearoa, New Zealand and Polynesia using the Community Integrated Vulnerability Assessment (CIVA) framework and Community Mapping & QGIS – A climate and disaster risk mapping toolkit, with a view to reducing risk and increasing the climate resilience in the community

An extract from the case study

Human Security Objectives

- Ecosystem Health
- Community Health
- Security of Place
- Water Security
- Food Security
- Energy Security
- Income Security


Map of Fasi moe Afi, Nuku'alofa, Tonga
Study Area
Image © 2017 CNES / Airbus
Google earth
Imagery Date: 6/2/2016 1 K 687990.32 m E 7661482.04 m S elev 4 m eye alt 1.69 km


FASI WATER SECURITY
N
Legend
Buildings with Taps and Tanks
Buidings with Tanks
Dirt Roads
Ecosystems
Shore
Sea
Reef
Land
Main Roads
Water meter
Fence
Boundary
Buildings with Taps
fasi moe afi_modified
25 0 25 50 75 100 m
ULUILAKEPA & FOLAU
INDUSTRIES

Issues the community identified:

- Not all houses have alternative water sources
- Some have tap water only
- Some have rain water tank only
- Multiple houses using one water meter
- In the study it shows that some houses do not have closed fences resulting in livestock destroying Pipelines.
- Weak Water Pressure

Follow up!!

- All these datas were compiled and a report was made and presented to the Anglican mission board.
- The Anglican mission board has approved and set aside funds to aid 2 water tanks for the community which will be presented in the coming year
- A similar training has been made to one of our local church community here in Fiji

Remarks!

- The QGIS and Community Mapping Toolkit is first of all, FREE! A free software than can be used by anyone in the community. An easy to learn and fun toolkit that can generate maps with very important messages.
- The QGIS and Community Mapping Toolkit displayed the data received from the CIVA Framework onto images or maps, thus providing more depth and knowledge about our study area. Participants were able to pinpoint exact locations of vulnerable areas within the community and more importantly, pinpointing areas on maps created by the participants themselves

Vinaka!