

*MULTI-HAZARD RISK ASSESSMENT &
EARLY WARNING SYSTEM WITH
APPLICATION OF SPACE & GIS
The First Pacific Regional Workshop
13th~15th Sept. 2016
Nadi, Fiji*





KIRIBATI GIS DEVELOPMENT IN THE CONTEXT OF MULTI HAZARD RISKS

Kiribati profile

- *Kiribati is an island nation comprised of 33 low lying atolls islands*
- *The capital Tarawa is home to more than half of the total country population*
- *The country is vulnerable to natural hazards including;*
 - *Coastal erosion*
 - *Inundation*
 - *Disease outbreaks*



GIS Applications

- *Government through its relevant agencies utilize GIS for various uses*
 - *Ministry of Health for tracking of disease outbreak*
 - *PUB for public utilities ~ power lines, sewerage pipes*
 - *MPWU for coastal works & engineering*
 - *Minerals Division for coastal monitoring*
 - *Lands Division for land use planning*
 - *Agriculture Division for vegetation cover*
 - *No coordinated effort for multi hazards risks particularly use of GIS*
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Gaps & Challenges

- Absence of server dedicated to GIS users
- Scattered GIS data
- UAV operation
- Bathymetry data (MFMRD)
- Outbreak (MOH)
- Infrastructure address code
- Establishment of Bench Marks



Recommended GIS establishments

- Institutional setup
 - Establishment of GIS portal (server)
 - Integration of readily available data
 - Procurement of state-of-the-art equipment
- Capacity development
 - Topography data collection
 - Establishment of Bench Marks
 - Infrastructure Mapping & coding exercise
 - Ground Control Point Survey
 - Tide Gauge deployment
 - Processing of UAV & RTK GNSS data

*EU-GIZ ACSE Programme ~
Land Use & Coastal Vulnerability
Assessment & Adaptation Project;
2016 ~ 2018*



Introduction

- *To inform interested parties of Project utilizing GIS applications for land use & coastal vulnerability assessment & adaptations*
- *Share on the key elements of ACSE programme on land use/coastal vulnerability assessment*
- *Establish linkage & synergies with similar/parallel interventions implemented regionally and in-country for coordination of efforts and pooling of resources for expanded benefits and effective implementations*

EU-GIZ ACSE Programme

- Adapting to Climate Change & Sustainable Energy (ACSE) Programme*
- Funded by the EU-GIZ (German Cooperation) under the so-called ACSE initiative (€18.64million)*
- A Pacific-regional programme with Kiribati receiving €650,000*
- Sustainable Energy activity allocated €450,000 with Land Use/Coastal Vulnerability Assessment component €200,000*

ACSE Land Use Vulnerability Assessment Component

- *Comprise of 3 key objectives;*
 - *Instituting an appropriate GIS platform supported by tailored training to technical staff*
 - *Conduct GIS based land use & coastal vulnerability assessment producing vulnerability maps & models*
 - *Utilizing a GIS community participation model as an essential learning experience for community members irrespective of their gender*
- *A 2 year-timeframe Project coordinated by The Office of Te Beretitenti (OB) as focal agency for Climate Change & Disaster Risk Management*

ACSE Land Use Vulnerability Assessment Component...cont'd

- Implementing agency is the Land Management Division of MELAD as key agency for land planning & foreshore management*
- Implementing partners include Geo-Science Division of SPC & relevant Government agencies namely Environment Division, Minerals Division, Public Works, Internal Affairs*
- It is anticipated that Project roll out Q4 this year*



KAM RABWA!!

Thank you