

#OGS 2022

TERRITORY KNOWLEDGE

Predicting trajectories for the evolution of coastal environments using datasets

(2) Predicting trajectories for the evolution of coastal environments using datasets



WHY

- 1. To reorient public policies (of costal development natural threats
- 2. Know to Plan & Adapt
- 3. Build solutions: Anticipation Prevention- Adaptation to costal hasards

WHAT

- 1. Making maps : risk, Impacts Financial Cost, Land use...
- 2. Collect historic Data & LIDAR Data (DEM – Digital Elevation Model)
- 3. Create Policy framework and build infrastructures for coastal Management

HOW

- 1. International Collaboration + sharing
- 2. Funding Money (Banks, subv., partners...)
- 3. Datasets

1. To see the transformation of recommendations IN action Plan implemented by decision makers.

SUCESS INDICATORS

2. Change detection for statical evolution

(2) Predicting trajectories for the evolution of coastal environments using datasets



WHO

- 1. Regional Organization : PGSC, SPC (DEP), IUCN
- 2. Research organism : Ifremer, IRD, OFB
- 3. Government agencies : DIMENC geospatial service (Possible Animator Facilitator), OBLIC, CSIRO,
- 4. Politics : Ministry of land and natural resources, Environment department
- 5. Regional communities of interest
- 6. Countries with institutions in charge of the coastal management
- 7. Local Landholders of marine areas / syndicate of sector involved in this problems : Fishing and aquaculture or Tourism
- 8. Different level of seas administration : eq SG Mer, Premar, Etc.
- 9. Donor : Fundings
- 10. Highly specialized GIS expert and data analyst
- 11. Data Terra : Precise satellite picture producer

WHERE

- 1. ATOLL
 - Kiribati
 - Tuvalu
 - French Polynesia
 - Wallis et Futuna
- 2. Territories with geospatial strategy and existing action plan (Tonga / Fiji)
- 3. New Caledonia
- Vulnerable coastlines country facing changes
- 5. All countries involved in coastal studies and management with coastal planning tool
- 6. Displaced population and emergency country first

WHEN	Personal Next Step
1. <u>+3 month</u>	•Lika : make this project successful and the vision is
• Identification of : Champions, Teams, Available datasets,	achieved
data gaps, existing methods	•Eric : for each 3 French territories, engage this project
Define dedicated sites to survey	first in New-Caledonia with atoll and mountains
 Inception surveys (feasibility study) 	 Marine AUBERT : helps with funding applications
 Create a common framework to make sure every 	process (writing)
stakeholder approve it	•JF Faure : contribute to formalization of project /
Identify pilot territories	dataset identification
 Apply for funding (Life, PEBACC ++) 	 Tony : include an aircraft (UAV, drone technology)
	seek support for global mangrove watch
2. <u>+6 months</u>	 Nicholas : collect list of existing methods
 Share objectives between countries 	 Jerome : report to decision maker and active
 Make projection for pilot territories 	participation to work sessions
 Make an inventory of the situation 	 Vani : communication (with current groups /
 map historic and actual coastline in territories 	stakeholders)
 Data workshops (countries / stakeholder) 	 Alexandre (PF) : write a public minister
 Lead first in situ mission and modeling (IT) 	communication
 Working plan validated 	•Jean M. : share digital coastline mapping method +
 Engage a call for action 	facilitate links
	 Pearl : help to get all the existing projects and work to
3. <u>+12 months</u>	converge
 Co-planification of operations 	•SCP : project design / technical support and capacity
Engage the project	building
Collect Data : Bathymetries, Shoreline Change, Marine	 Marc Despinoy : training, acquisition data, trustment,
Spatial / Habitat Planning, Digital Elevation Model	observatory mangrove

- 4. +18 months
- Validation of the process
- Setup implementation plan (timeframe)
- First results

- observatory mangrove •Adam Steer : facilitation, airborne data collection,
- project development, training