

**European Research Area for Climate Services ERA4CS** - **Transnational Collaborative Research Projects 2016** Topic A - Researching and Advancing Climate Services Development by Advanced co-development with users

## User workshop in French Polynesia

### Main outputs of the two-days workshop with Polynesian stakeholders 22-23 March 2018, Papeete

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# Introductive session and state of knowledge



→ 1<sup>st</sup> session focusing on the state of knowledge on the impacts of sea level rise (research, observation, modeling ...): Which climate services for adaptation to coastal risks in the Pacific?

- General presentation of the INSeaPTION project and its objectives (Goneri)
- State of knowledge on the impacts of sea level rise: Which climate services for coastal risks adaptation in the Pacific Ocean? (Goneri)
- Which future risk of coastal and low-lying islands destabilisation? (Virginie)
- Marine flooding modeling: a potential service for adaptation? (Jehane)
- Assessment of needs for climate services: overview of phase 1 bilateral meetings (Heitea)











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# **Overview of the round table discussion**



→ During this roundtable, stakeholders were invited to share their experiences on climate services, climate change adaptation, participatory climate science, and education.

#### 6 guest speakers:

- Victoire Laurent Head of the Study and Climatology Division of the Interregional Direction of Météo France in French Polynesia
- Emilie Nowak In charge for studies in the Regulation, Strategy and Development Unit, at the Energy Department ; at the helm of the French Polynesia Climate Energy Plan
- Bernard Amigues Head of the Department of Urban Planning, Ministry of Housing, Territorial and Urban Planning
- Bran Quinquis Technical advisor in charge of research and innovation in the Ministry of Labor, Professional Training and Education
- Wikini Sage President of the Economic, Social and Cultural Council (CESC), and President of the Federation of Environmental Protection Associations (FAPE)
- Roland Sanquer Educational consultant in charge of actions on the environment, within the office of educational actions and innovation, in the Directorate General of Education and Teaching



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### What to remember? Some exemples:

*"a significant need for data to allow the existence of climate services (especially observations), allowing at least a climatic assessment at a time t"* 

"There is still an important work to be done on adaptation in Polynesia, both at the local and regional scale, to encourage adaptation measures"

"Not all means of adaptation to climate change are known, but we know that intelligent and thoughtful development will be a "no regrets" measure that will benefit to everyone"

"Collective awareness of the risks linked to climate changes is needed, especially in small islands"

"The strength of research in Polynesia is a chance!"

"promote centralization and dissemination of the data"

"a real difficulty to comfort the decision maker on something restrictive, and a misunderstanding of the constraints from citizens!"

"a real need for information for the population, which must come from the scientific sphere, with more work done jointly in the field"

"the interface between the scientific world and the people will also benefit from ancestral knowledge on the ground and, naturally, from people wishing to change things"

"Intergenerational links are very important and the understanding of the teaching community to ancestral knowledge is essential for children"

"The better we know, the better we protect! "



## Review of the main challenges highlighted by stakeholders



#### What are the barriers but also the tracks for the construction of relevant climate services?

#### Data needs

- $\rightarrow$  at different time scales,
- to identify elements related to CC in the short as well as in the longer term
- climatic, weather (short- and longterm / observations and projections)
- oceanic
- state of marine ecosystems, but also terrestrial,
- quality and availability of the water resource
- satellite imagery
- high resolution data
- key instrumentation (wave and tide gauges...) to ensure the continuity of data assessment (but barriers = acquisition and maintenance costs, extent of polynesian archipelagoes)

#### Needs for further works on:

→ Events of high frequency / low amplitude and their impacts:

potentially more relevant than centennial events to meet the daily needs of inhabitants

## → Analysis of the global strategy with regard to cyclonic risks

(focused on crisis preparation, consistent with the occurrence of cyclones in Tuamotu, but real efficiency?)

#### Finance and costs of sustainable development and adaptation to CC

- → today, climate change is not a financial opportunity in French Polynesia (vs. Maldives, and other territories): could explain the weak mobilization on this subject?
- → Better access (knowledge) to adaptation finance could help to increase interest

Needs in collaborations to ensure the quality of climate services rendered: manage the complementarities of the people/stakeholders involved! Needs in cohesion in the various works carried out in Polynesia Needs for better coordination of research and observations (links with the Climate Energy Plan in particular), scientists and adaptation actors

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#### What are the barriers but also the tracks for the construction of relevant climate services?

Ecosystems → Importance of maintaining or restoring them today, to be able to better adapt later Use nature-based

**solutions**, rather than costly engineering solutions (+ environmental problems), for the coastline, water resources, iconic sandy beaches for tourism

Carry out actions on climate change / sea level rise education and awareness

## Work on general acceptability for adaptation to climate change

## Sea level rise is not "attractive"! $\rightarrow$ A need to interest stakeholders and involve citizens in this phenomenon and its challenges

- Adaptation of messages at a time scale that everyone can see: translate CC and SLR into concrete/tangible impacts in the short term, make visual impacts, hang up on daily activities...
- Communicate scientific data and information to the population on a regular or even continuous basis, relying on local stakeholders...
- → Build a more positive vision and overcome catastrophism on the issue of climate change
- Carry out feedback from adaptation or mis-adaptation practices in French Polynesia or elsewhere (Pacific ...)
- Consider the potential of innovation to engage collectively
- → The general principle: reverse the paradigm and value good practice and successful experiences ("learning by example") as new ideas



## **Coastal climate services co-designed with workshop participants**

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During the workshop, the project proposed to build models of climate services, with the following objectives:

- Take note of successful concrete actions;
- Co-build action proposals;
- Based on case studies, determine the conditions required to guarantee the success of services for coastal adaptation;
- Identify the key partners to mobilize for the implementation of the case studies.



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#### $\rightarrow$ As an outcome of the workshop, 10 coastal climate services were co-designed:

| CCS 1<br>Sustainable<br>development<br>goals:<br>performance<br>indicators   | CCS 2<br>Access to<br>adaptation finance                            | CCS 3<br>Critical<br>infrastructures and<br>sea-level rise<br>(airports and ports) | CCS 4<br>Professional<br>training and new<br>jobs   | CCS 5<br>Erosion of<br>recreational<br>beaches                    |
|--|---|--|---|---|
| CCS 6<br>Habitability of low-<br>lying atoll reef<br>island (water resources<br>and other vital resources,<br>coastal risks, economic<br>activities) | CCS 7<br>Nature-based and<br>Polynesian culture-<br>based solutions | CCS 8<br>Participatory<br>science to support<br>the observation of<br>impacts      | CCS 9<br>Co-construction<br>and sharing of<br>knowledge (schools,<br>associations, inhabitants) | CCS 10<br>Promote<br>sustainable<br>aggregate mining<br>practices |

For each CCS: a leader/facilitator, major proposals, and key partners have been identified



## Mauruuru ! Thank you!

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