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Design and implementation of *rahui* network in Tahiti Peninsula

Tahiti, France

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1. Context- what?



INTEGRE FOR TAIARAPU



Methodological assistance to implement locally managed area for natural resource in Tahiti peninsula

• Our **approach** is:

- **With** and **for** communities across Taiarapu
- **Collaborative** action with local and regional institutions
- Associate **local** and **scientific** knowledge

1. Context- who?



The stakeholders:

- Administratives authorities, gouvernemental directions (environment, culture, fisheries)
- Lagoon fishermen, farmers, aquaculture activities, tourism activities, local experts (*tahu'a*)
- Local associations, organizations, traditional activities

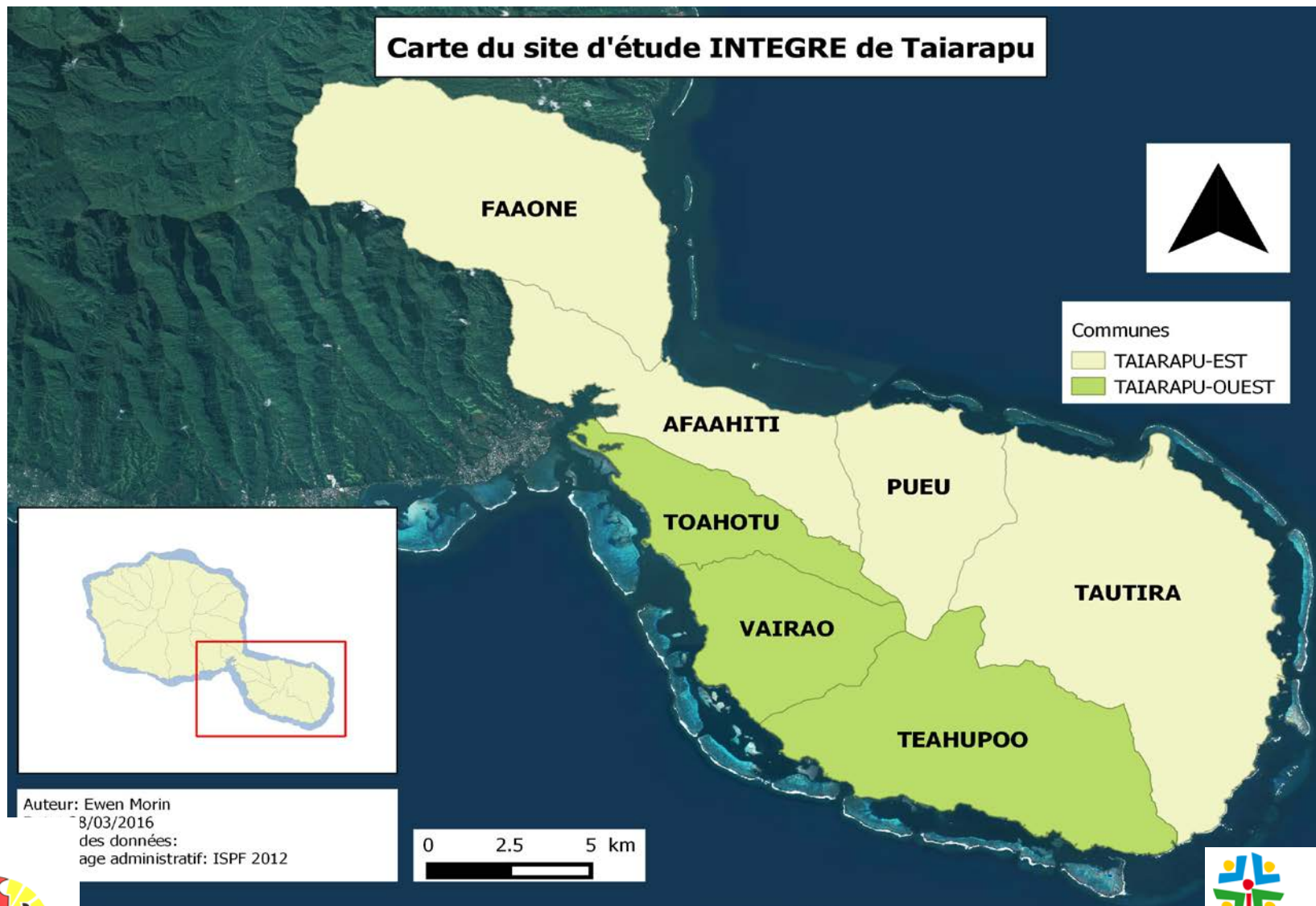


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1. Context – where?



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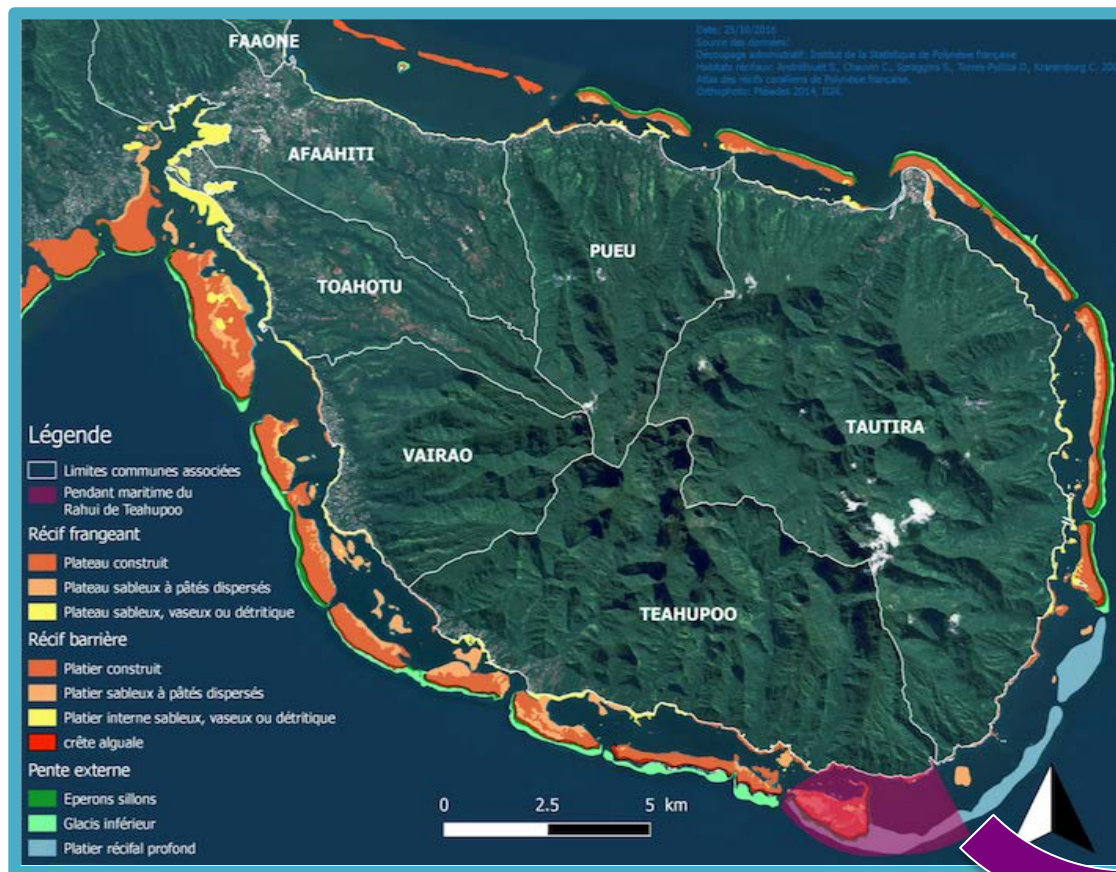
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1. Context – where?



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One *rahui* implemented today

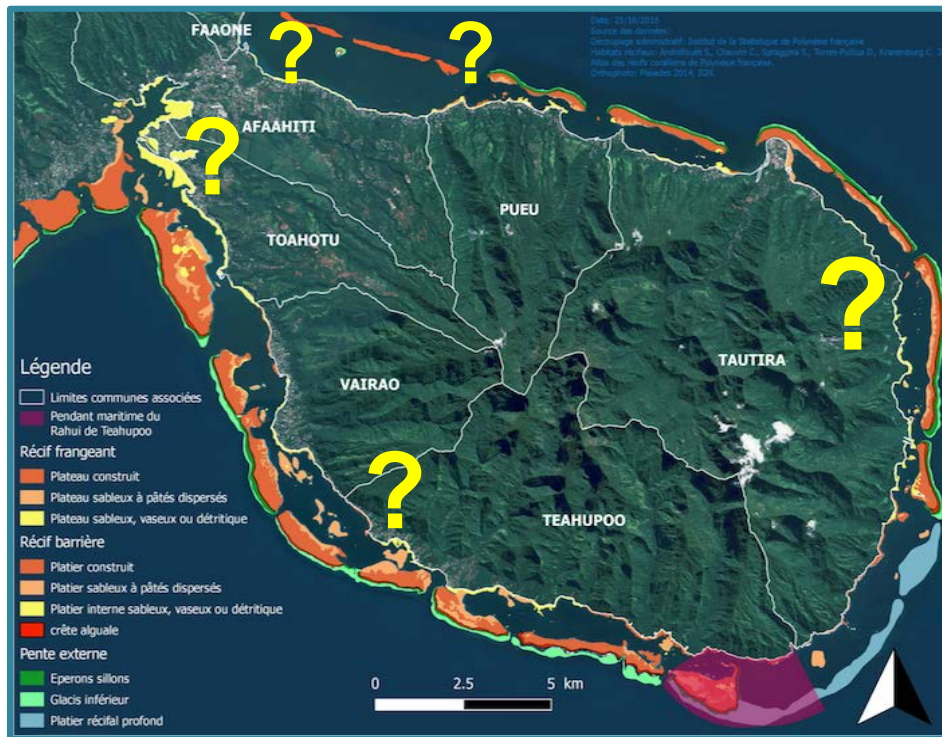


Teahupo'o



1. Context – where?

> Several *rahui* project across Tahiti peninsula



Anticipated outcomes:

- Ecological connectivity
- Local issues
- Cultural identity and social equity in resource management

>> Opportunities of local communities to decide of management **committee**, **rules** and **boundaries**

2. Methods

- **Organizing** work with local communities
- **Interviews**: *place's name, history, local knowledge, economic activities, management attempts, priorities...*



Interview with fishing
expert at Tautira
2010



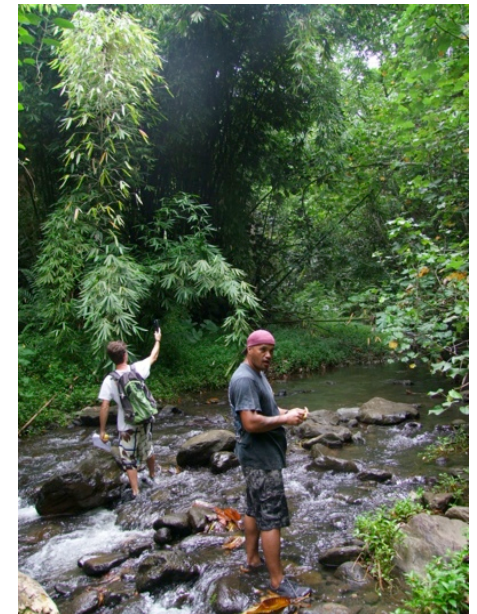
Interview name of lagoon places
- April 2015

2. Methods

- Fieldwork observations



Visit of possible *rahui*
by an experimented
fisherman in Faaone -
April 2017



Aoma Valley observations
- January 2015

2. Methods

- Concertation meetings with local communities



Meeting at Toahotu - January 2015



Meeting with fishermen of Fenua
Aihere - March 2017



3. Work and Results

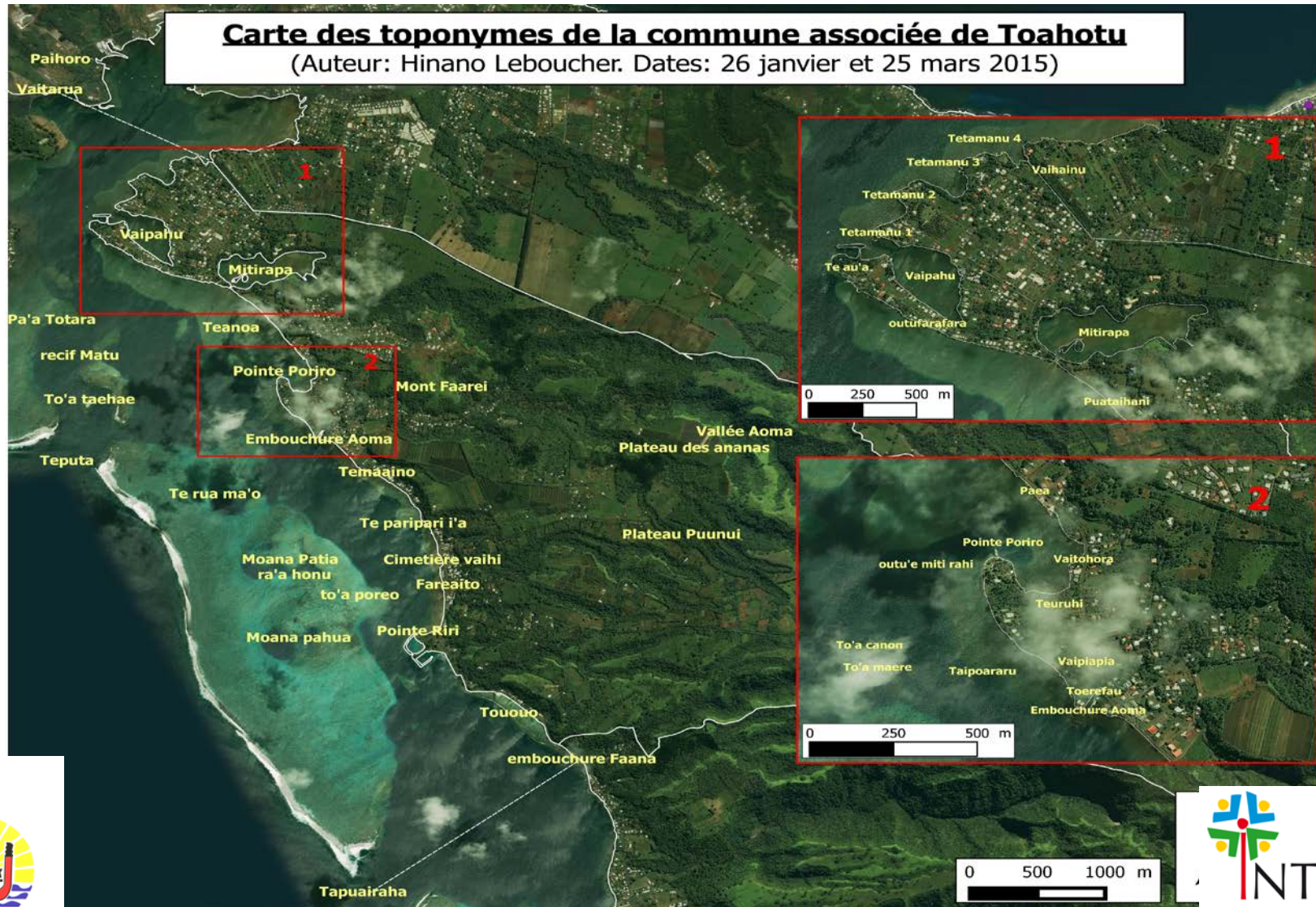


~ Some of our work ~

- **Local name of places** in valleys and lagoon of Tahiti peninsula
- **Ecological monitoring of lagoon and identification of juveniles nursery** (July, August 2016, January 2017)
- **Fishing Surveys across Taïarapu** (from July to November 2016)

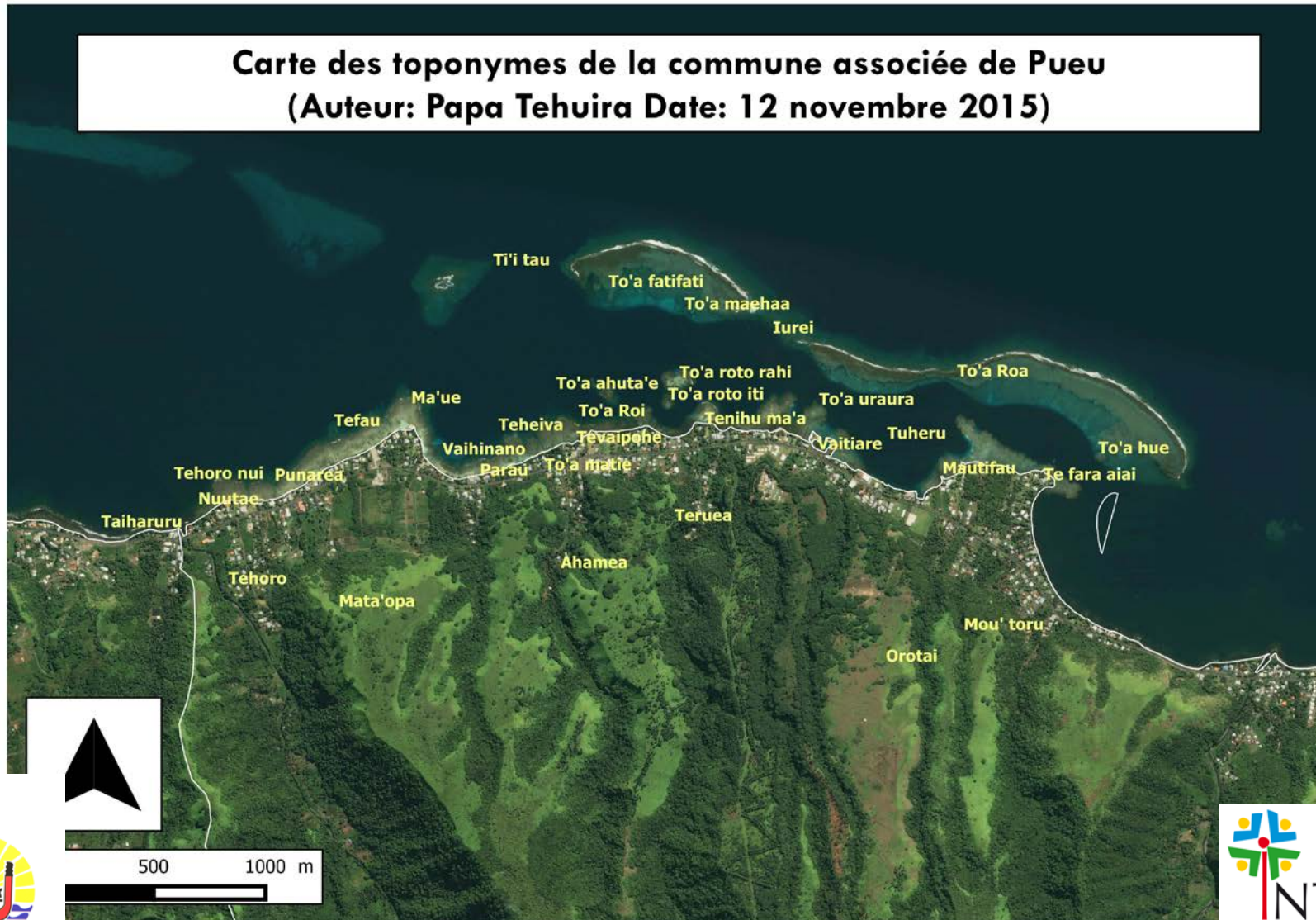
3. Work and Results

Local names and values of places (land/seascape)



3. Work and Results

Local names and values of places (land/seascape)





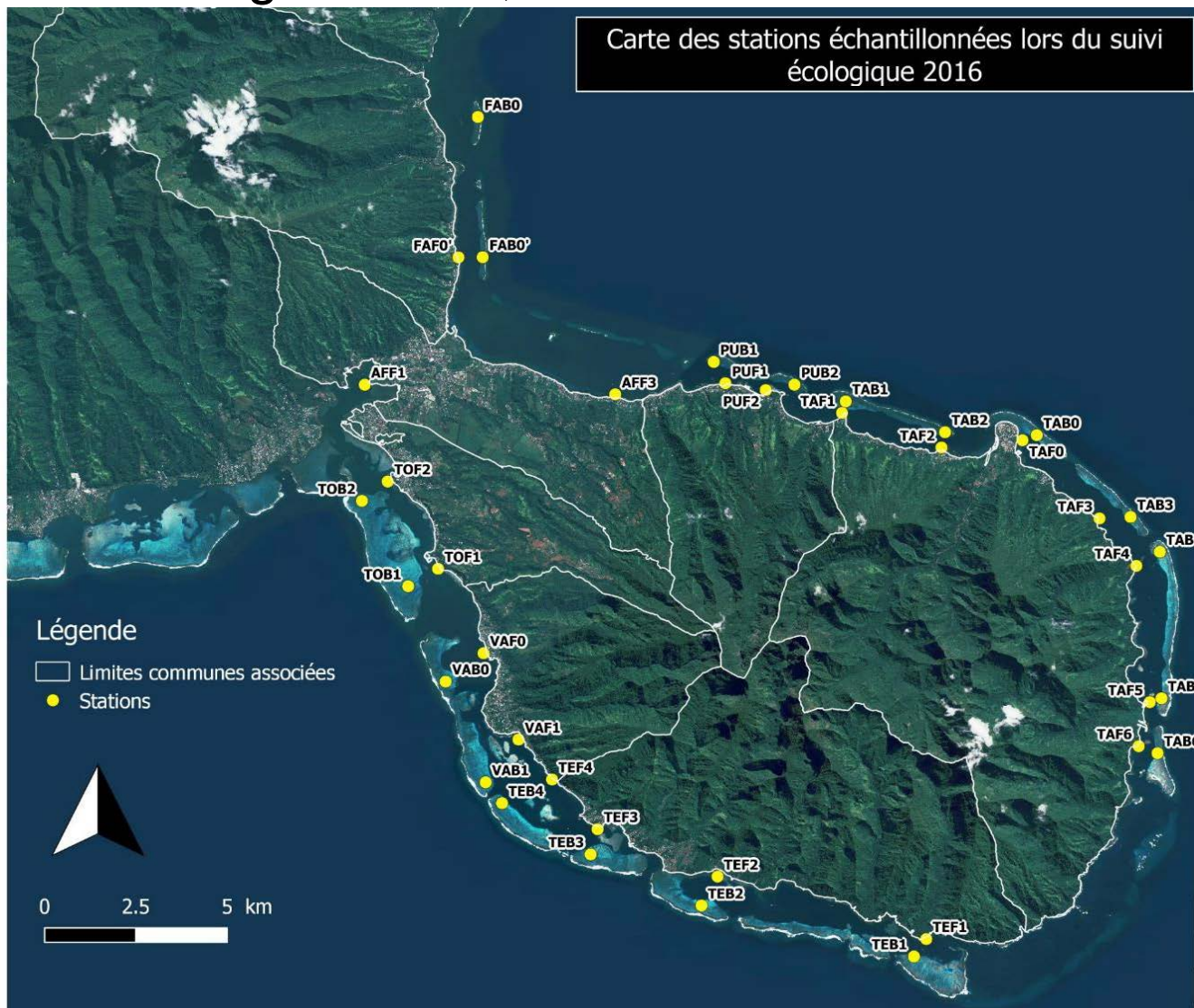
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3. Work and Results



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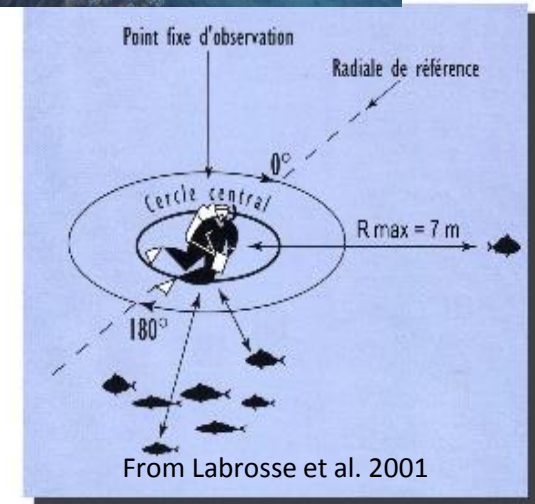
Monitoring of fishes, benthos and substrat



3. Work and Results

How?

- Substrate: 25m Point-intercept-transects
- Invertebrates: 25 X 2m Belt-transects
- Commercial fishes: Stationary-point-count technique
- 3 replicates for each technique



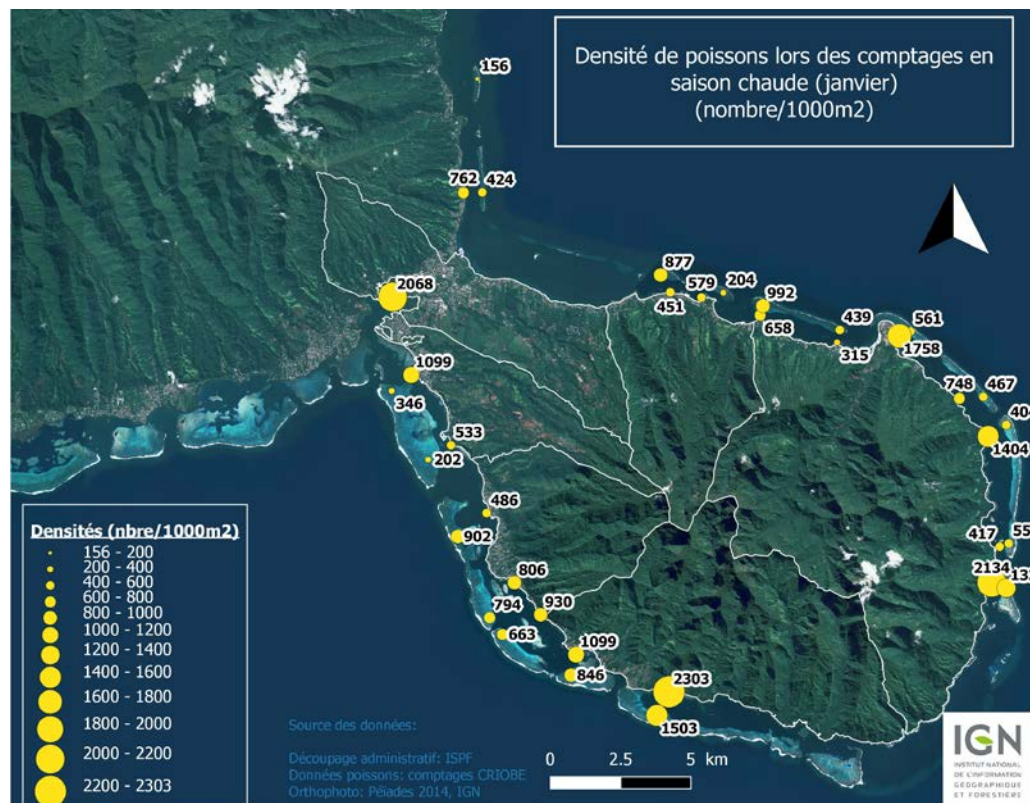


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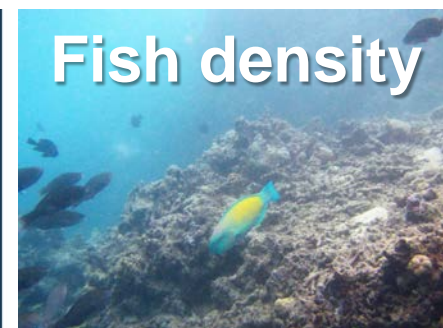
3. Work and Results



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▲ Wet season



Fish density



Dry season ►



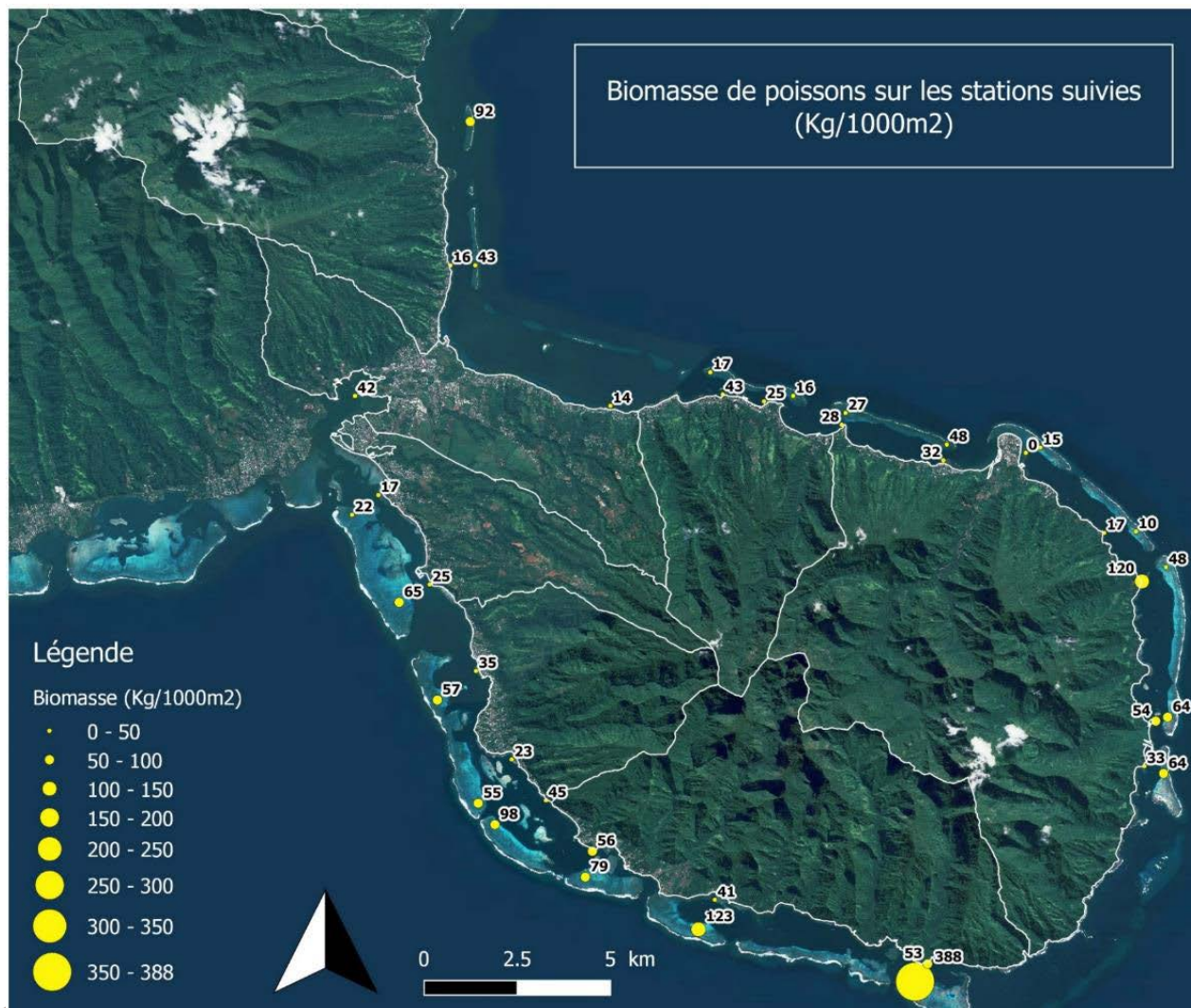


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3. Work and Results



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▲ Dry season



Fish biomass



3. Work and Results



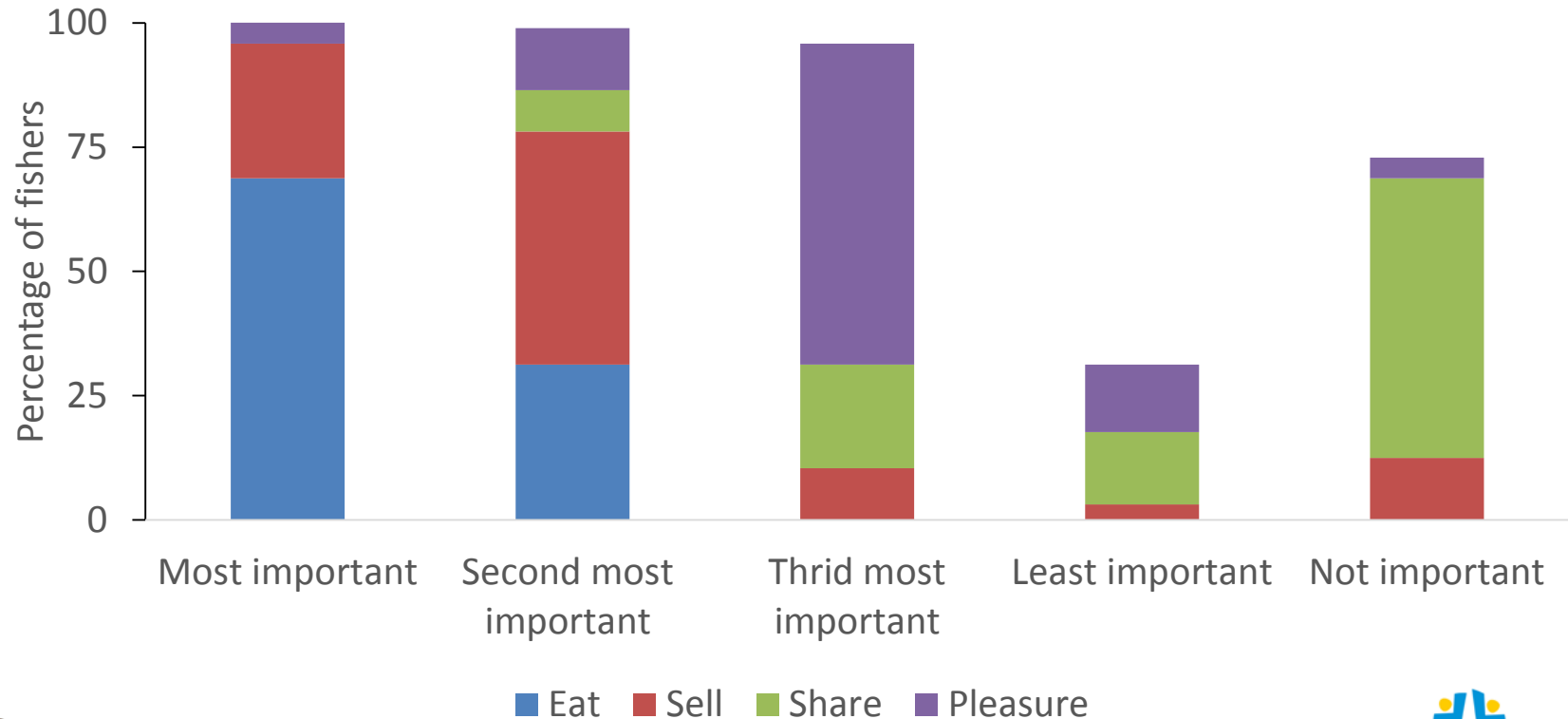
~ Fishing surveys ~

- Quota sampling using the latest population & housing census (ISPF, 2012)
- Semi-structured questionnaire
 - Part 1 – Socio-economic information
 - Part 2 – Fishing activity
 - Part 3 – Management measures
 - Total of 30 questions
- 96 local fishers interviewed in July-October 2016
 - 9 women and 87 men
 - Age range: 19 – 83

3. Work and Results

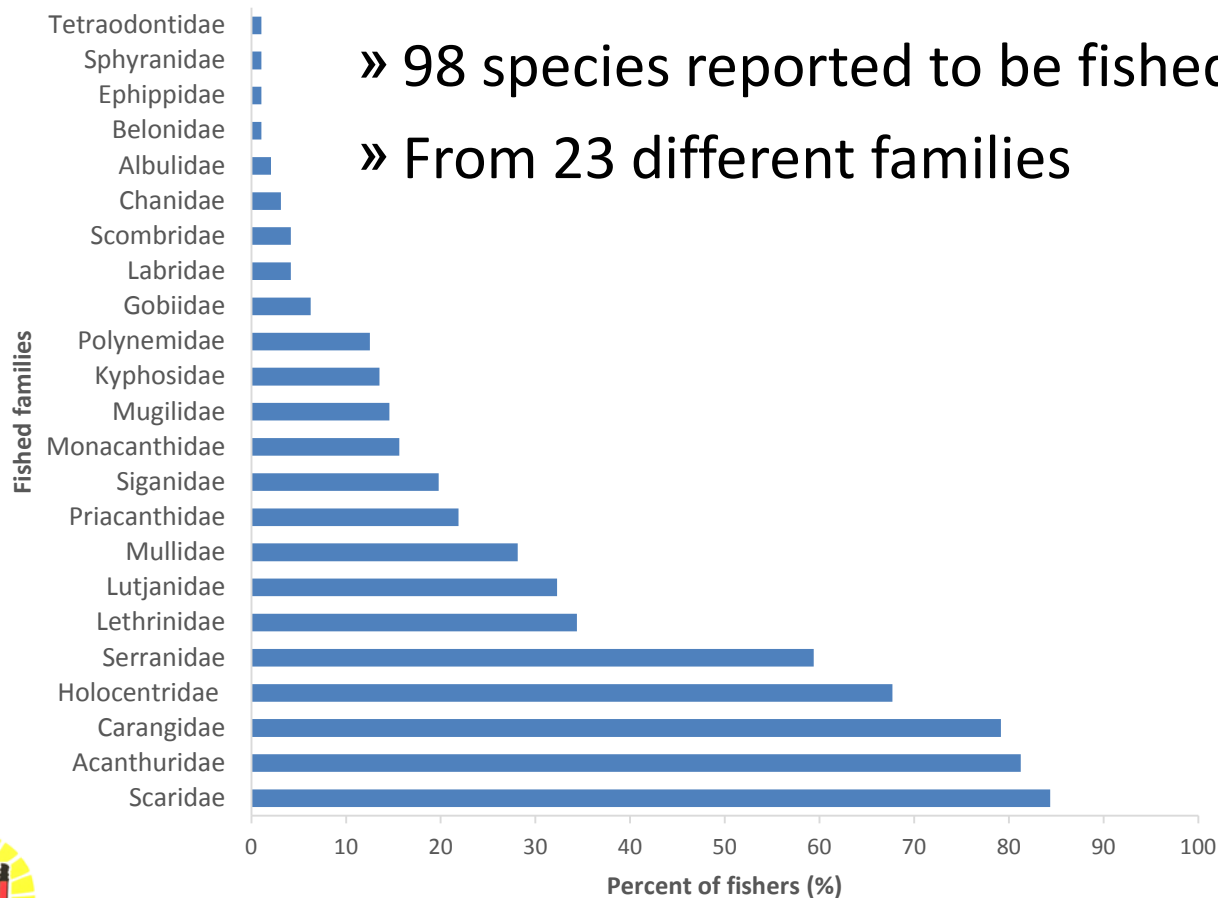


- Fishing = highly important in fishers' livelihood



3. Work and Results

- Coastal fishery = very diverse



3. Work and Results

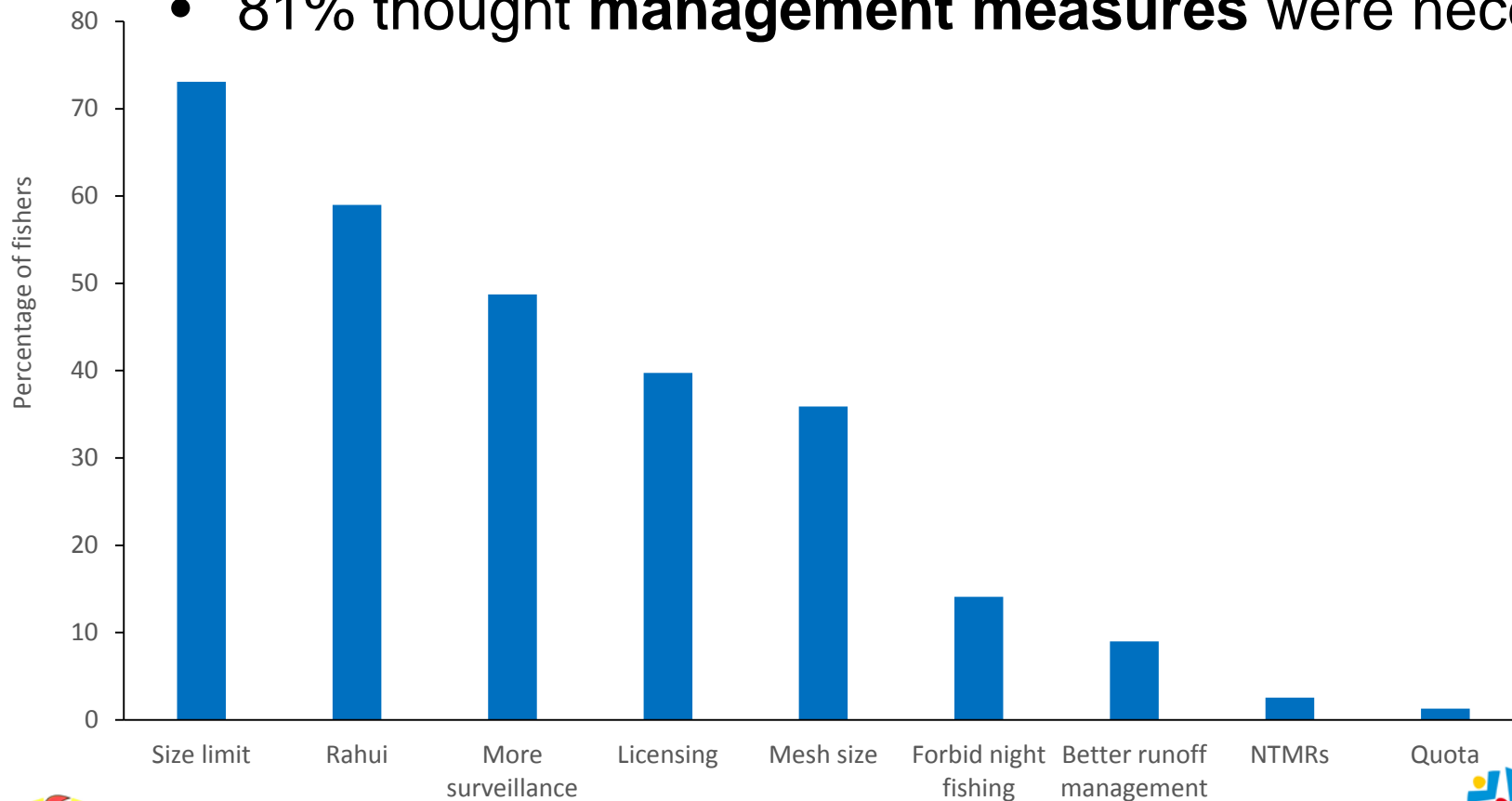


- 85% had seen a change in the fishery such as:
 - 1) Less fish
 - 2) Fish go deeper and further away
 - 3) Species composition changed
- Attributed these changes to:
 - 1) Overfishing
 - 2) Fishing small individuals
 - 3) Pollution
 - 4) Cyclone
 - 5) Climate change
 - 6) Low recruitment

3. Work and Results



- 81% thought **management measures** were necessary



3. Work and Results



~ Further work ~

- Raise awareness (e.g. explain why size limits are important)
- Conduct a catch-per-unit-effort survey over at least one full-year
 - Quantify the coastal fishery production and local fishers' dependency
 - Investigate the seasonality of the fishery

4. Assessment



- **First time** of such a work at Tahiti peninsula scale.
- **Ongoing studies** and support on local socio-economic profiles, *rahui* rights, hybrid governance to help the design and implementation.
- To **bring meaningful** information **with** and **for** local communities.
- Decision of *rahui* belongs to **local stakeholders**.