

PACE-NET Plus Bremen Conference and Think Tanks

September 9-11, 2014 | Bremen (Germany)

**Exploring the convergence of science
and traditional knowledge in aqua- and
agriculture for sustainable, healthy
living in the 21st century**

PACE-NET PLUS



PACIFIC-EUROPE NETWORK FOR SCIENCE, TECHNOLOGY AND INNOVATION

Sebastian Ferse and Judith Francis
ZMT Bremen **CTA Wageningen**



Presentation Plan

Think Tank 2: Exploring the convergence of science and traditional knowledge in aqua- and agriculture for sustainable, healthy living

1. Specific vulnerability of Pacific Islands
2. Sources of strength and resilience
3. Think tank thematic scope
4. Think tank approach

1. Specific vulnerability of Pacific Islands

The Pacific Islands face particular vulnerability of aqua- and agriculture to climate change and variability due to location-specific challenges:

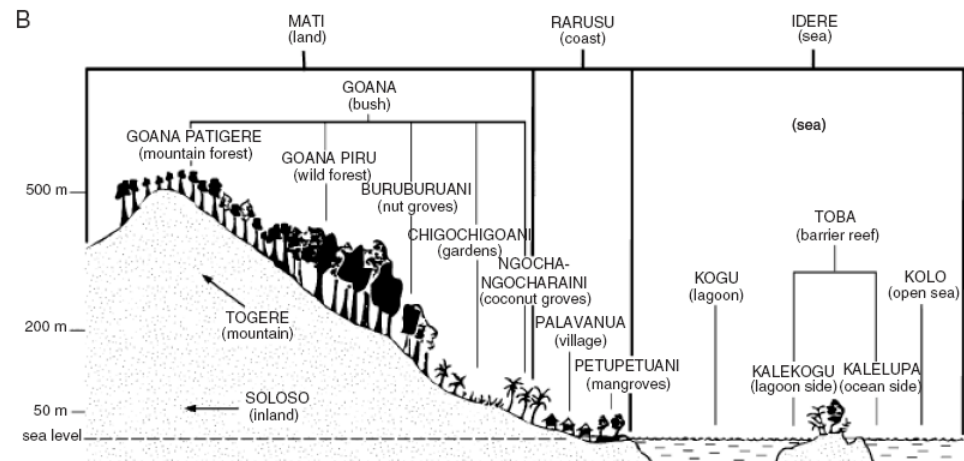
- Small sizes of islands, relatively small human population sizes coupled with limited renewable land-based natural resources: does not favour broad-based and diversified agricultural development
- Highly dispersed (geographical isolation) in the Pacific Ocean: challenges in air and sea transport, and associated economic activity
- Much of land mass is coastal and low-lying, exposed to climate extremes, including tropical cyclones, high sea tides and sea level rise
- Proximity to the Pacific Ring of Fire and associated threats of tsunami

2. Sources of strength and resilience

- Pacific Island communities have over millennia developed a **rich culture and knowledge base** that enabled them to **thrive physically and spiritually** in environments characterized by **finite resources** and environmental uncertainty



<http://blog.bishopmuseum.org>



Hviding and Bayliss-Smith 2000

3. Think tank thematic scope (1)

Thematic areas:

- Climate-resilient agricultural practices to support nutrition and human well-being:
 - **Changing dietary patterns** in the EU and Pacific, their drivers, and influences on nutrition
 - **Trade-offs** between improved production and resilience in terms of **genetic diversity** and **responses to environmental variability**
 - Advances in knowledge on **agroforestry, bioagricultural diversity and pest management** that support traditional agricultural practices in the Pacific

3. Think tank thematic scope (2)

Thematic areas:

- Linking island microclimate, water and soil management to improve agricultural practices and resilience:
 - State-of-the-art in [microclimate assessment](#) and modeling
 - Advances in [integrated soil and water management](#)
 - [Ridge-to-reef governance](#)
- Integrated multi-trophic aquaculture (IMTA):
 - Recent advances in tropical [closed-circuit and IMT aquaculture](#)
 - [Quality-control](#) and infrastructural requirements
 - Potential [target species](#): culture requirements, nutritional value and acceptance



4. Think tank thematic scope (3)

- Cross-cutting issues among the three Think Tanks:
 - Climate-resilient pathways
 - Human wellbeing and nutrition
 - Innovation and innovative technologies

5. Think tank approach and objectives

- **Use your collective knowledge to identify needs and gaps in current research, policy, development, and innovation programs**
 - Build on previous work (e.g. PACE-Net agriculture and aquaculture policy briefs, existing multi-lateral and national projects/programmes)
 - Concentrate on areas where EU-Pacific collaboration would be mutually beneficial

- **Build understanding and potential collaborations in an open, creative, interactive and respectful environment**
 - Try to *identify priority areas and initiatives YOU* would like to work on and could lead with support of others in the group



Thank you from the project team



Tenkyu tru (PNG)
Kiaora Koe (Maori)
Vinaka Vaka Levu (Fiji)
Mauruuru (Tahiti)
Tankyou tu mas (Vanuatu)
Tubwa kor (Nauru)
Fa'afetai télé lave (Samoa)
 ● *Tubwa Kor (Nauru)*
Ko'rabwa (Kiribati)
N'de me braweao (Paici-NC)
Malo 'aupito (Tonga)
Merci Beaucoup, ... ,
Thanks mate