# PACE-NET Plus Bremen Conference and Think Tanks

September 9-11, 2014 | Bremen (Germany)

TT2: Exploring the convergence of science and traditional knowledge in aqua- and agriculture for sustainable, healthy living in the 21<sup>st</sup> century



### **Priority Groupings**

- 1. Aquaculture
- 2. Climatic resilient agricultural practices & Linking island microclimate (water and soil management)

### Cross-cutting:

- 3. Tenure, Intellectual Property Rights, Convergence of traditional knowledge and western science
- 4. Context-responsive policies







### **Cluster 1: Aquaculture**

**Activity:** Research Centre for Pacific Aquaculture (USP)

### **Important Elements:**

- R&D, Community & Industrial Partnerships and Capacity building to effectively drive aquaculture development in the Pacific
- Focus on EU and Pacific post-graduate and post-doctoral positions to drive innovative research
- Work on aquaculture species for food security & cash crops to provide socio-economic outcomes





### Rationale

- Innovation via:
  - Aquaculture Planning
  - Key species development: sea cucumber (beche-de-mer), tuna, integrated multi-trophic aquaculture, tilapia, algae and others
  - Value chain analysis
  - Examination of genetic resources available
  - Holistic approach policy, planning, socio-economics, postharvest and processing, aquatic health and biosecurity
  - Effects of climate change on future aquaculture development



### Cluster 2: Climate resilient technologies/practices

#### **Activities:**

- Decision support tool for crop management
- Cloud-based information system
- Impact of climate change on agricultural practices (e.g. crop underutilized for climate change adaptation)
- Use of waste for adaptive, productive agrosystems

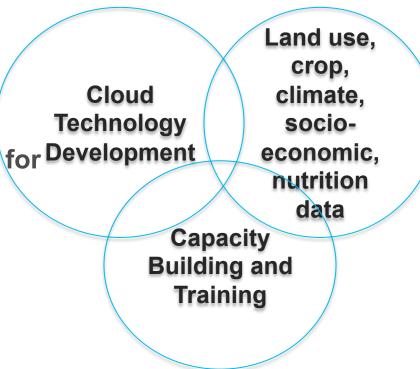






### PACE eLINK – Pacific Europe eLink Innovative **Network Knowledge**

- What, when, where, why, how - cropping systems in changing climate
- Timely availability and accessibility of adaptive cropping systems information for stakeholders
- Crop suitability and decision support tool
- **Existing USP Cloud System and Pacific initiatives**









### **Benefits**

- Europe
  - Knowledge creation and dissemination
  - Markets
  - Employment
  - Sustainable Technologies
  - Environment friendliness
  - One Server could be hosted in Europe
  - Technology transfer

- Pacific
  - Agriculture Sector
  - Researchers
  - Health Sector
  - Policy development and auditing
  - Stable agriculture productivity for livelihood







# Cluster 3: Convergence of traditional knowledge and western science, Tenure, Intellectual Property Rights

#### **Activities:**

- Collection and use of plant genetic resources (traditional vegetables)
- Ethno-botanical knowledge database
- Native organic food security

### **Cluster 4: Context-responsive policies**

### **Activity:**

 Indicators for measurement of success (context-specific, sensitive to traditional knowledge and western science)









# Converging Traditional Knowledge and Science to develop terrestrial and marine organic foodstuff pathways for economic and social wellbeing

- Learning from EU organic experience (farmers, policy, markets)
- Build sustainable organic markets between EU and Pacific
- Support Pacific capacity building through PhD's and Post-doc
- Reinvigorate traditional trade routes through waka/vaka voyaging
- Identify crops and species for organic production
- Methodologically innovative through indigenous methodologies and diverse communities driven approaches eg: Maori organics group
- Aligns to think tank priorities of: convergence of traditional knowledge & science (indigenous methodologies), resource tenure for Pacific peoples, dev't of frameworks to support Pacific cultural & intellectual property rights & context responsive policies

Consortium approach with EU and Pacific and Aotearoa/NZ partners
Seed funding to support development of full proposal 5yr project
Benefit: contribute to EU and Pacific organic food and nutrition security







### High level messages from TT2

Converging traditional knowledge and science: – defaulted back to the dominance of science – on going challenge to hold holistic knowledge at the forefront – need innovative methodological approaches to drive this convergence





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### 5. Key messages

Food security is critical

Prioritization constantly needed

Challenge of using meaning and interpretation of 'value' – challenge of transcultural language

Policy focus needs to be explicit in outcomes generated from TT2: Science to policy and science to people Genuine commitment to EU-Pacific cooperation

Converging traditional knowledge and science: ongoing challenge to hold holistic knowledge at the forefront – need innovative methodological approaches







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### **Project partners**





