PACE-NET Plus Platform of bi-regional policy dialogue Brussels, 23-24 June 2015

# PAC/EU cooperation status & Agricaquaculture, food security Think Tank



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(WP2)





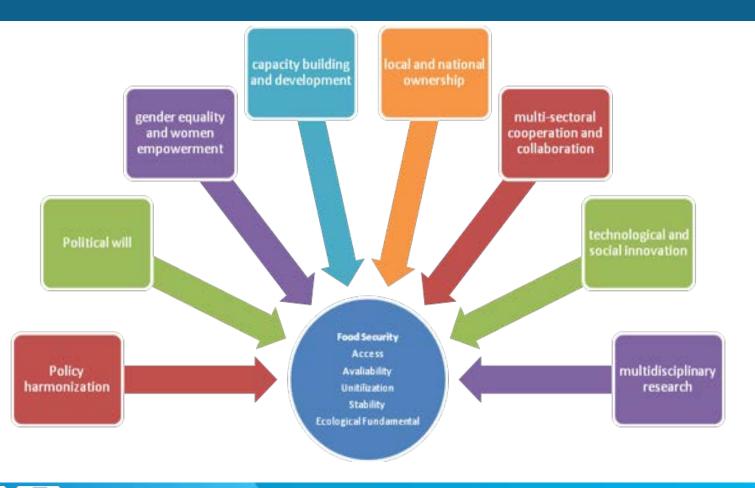
## **Overview**

- Food and Nutrition Security (FNS)
- PAC-EU FNS Research Cooperation
- Think Thank Outcomes
- Innovation Niches





# Food & Nutrition Security (FNS)

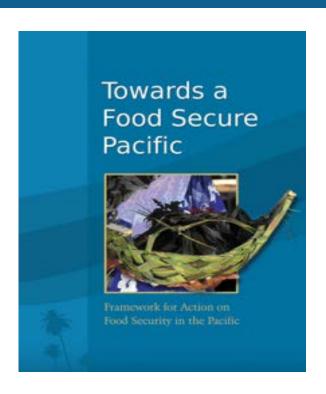


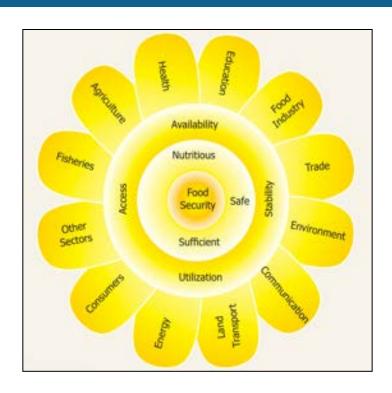






### **FNS in the South Pacific**





n.b. 43% of scientists interviewed (in CTA/PIURN, 2015 Fiji workshop) were not familiar with the Pacific Food Security Policy Framework







# **FNS and Agricultural Innovation**

An Agricultural Innovation System is a <u>network of actors</u> or organisations, and individuals together with supporting institutions and policies in the agricultural and related sectors that <u>bring existing or new products</u>, <u>processes</u>, and forms of organisation <u>into social and economic use</u>. Policies and institutions (formal and informal) shape the way that these actors interact, generate, share and use knowledge as well as jointly learn\*.

\*G20, Tropical Agriculture Platform, 2015



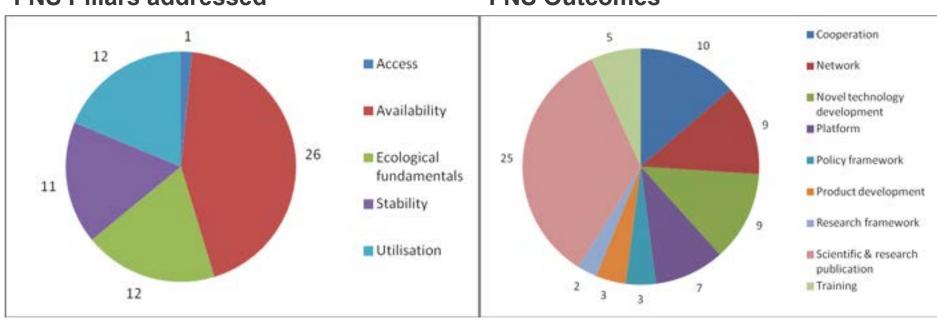




# PAC-EU FNS Research cooperation

#### **FNS Pillars addressed**

#### **FNS Outcomes**



XXX joint PAC –EU FNS research cooperation projects funded by the EU

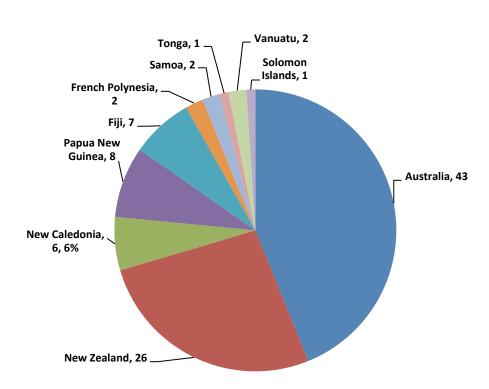
EU Budgetary allocation 1994-2013 = 138.7m Euro (67% of total budget)







### **PAC-EU FNS Research cooperation**



Country representation in joint EU funded Projects		
Australia	43	59 %
New Zealand	26	37%
Papua New Guinea	8	11%
Fiji	7	10%
New Caledonia	6	8%
French Polynesia	2	3%
Samoa	2	3%
Vanuatu	2	3%
Tonga	1	1%
Solomon Islands	1	1%



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# PAC-EU Research Cooperation: H 2020



#### **Towards Horizon 2020:**

- Knowledge and Innovation
- Involvement of all stakeholders (research & education, industry, policy)
- Implement bottom-up priorities in ST&I Agenda







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### **Think Tank outcomes**

#### Aquaculture

- Fish stock shortage
- Challenging socio-economic context (education, market & geodata)
- Profitable perspective for Tuna and reef species: to develop breeding and hatcheries and improved management practices
- Climate Resilient Agricultural Practices
  - Intensified climatic pressure
  - Development of genetic resources to produce adapted crops





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### **Think Tank outcomes**

- Linking Island Microclimate, Water and Soil Management
  - Good monitoring but misunderstanding of environnemental sciences (to tackle soil erosion for example)
- Intellectual Property Rights (IPR)
  - Traditional practices threatened (land rights, sharing genetic resources) by adoption of western models
  - Cooperation issues between partners
  - IPR systems must be complementary and do no harm







### **Think Tank outcomes**

- Joint Initiatives: Proposed Activities
  - 8 proposed joint activities
  - Ex: Research Centre for Pacific Aquaculture:

R&D, industrial / community partnerships and capacity building in tropical aquaculture to drive regional aquaculture development.

- Policy Recommendations at a Glance
  - Necessity of an enabling policy environment
  - Development of a common knowledge system
  - Monitoring FNS activities (agreed indicators & expert panel)







### Innovation Niches driving Future FNS cooperation

- Methodology / Approach
  - Systematic review of existing literature including results generated in first phase of project
  - Identification of innovation niches
  - Prioritization and validation of innovation niches
    - Survey and interviews of stakeholders; scientists, industry actors including farmers & fisher folk, policymakers
    - Case studies







# Innovation niches: Some examples

Innovation niches	Example
Fish stock management	
Aquaculture	Tuna breeding
Genetic resources identification and selection	improved varieties from indigenous stock
Invasive alien species	ICT monitoring
Bioenergy	
Over/Under Nutrition	Nutrient dense local foods
Food safety	Mycotoxin
Food prices stability	Energy efficient transport system
Improved productivity	Integrated agricultural production systems
Climate change	Root nutrient uptake improvement







# Innovation Niches: Preliminary results

- Financing is not adequate to support ST&I co-operation in PAC
- PAC-PAC research cooperation is higher than PAC-EU cooperation New Zealand, Australia, EU ranked in that order
- Great interest in multi-disciplinary research to address challenge
- IPR important but research outputs should not be copyrighted / patented in the Pacific context
- Priority innovation niches over/under-nutrition, fish stock management, aquaculture and food price stability, optimization of local genetic resources.
   n.b. Traditional knowledge / practices in controlling pest & disease, planning crop production, soil & genetic resource management provide opportunities.





# PACE-NET Plus Bremen Conference and Think Tanks

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### **PACE-NET Plus Consortium**





