

Pacific EU ST&I Cooperation & Innovation Niches

in Food Security, Sustainable Agriculture, Marine and Maritime Research and Bioeconomy



Presented by

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(WP2)

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PACE-NET Plus

bi-regional dialogue platform

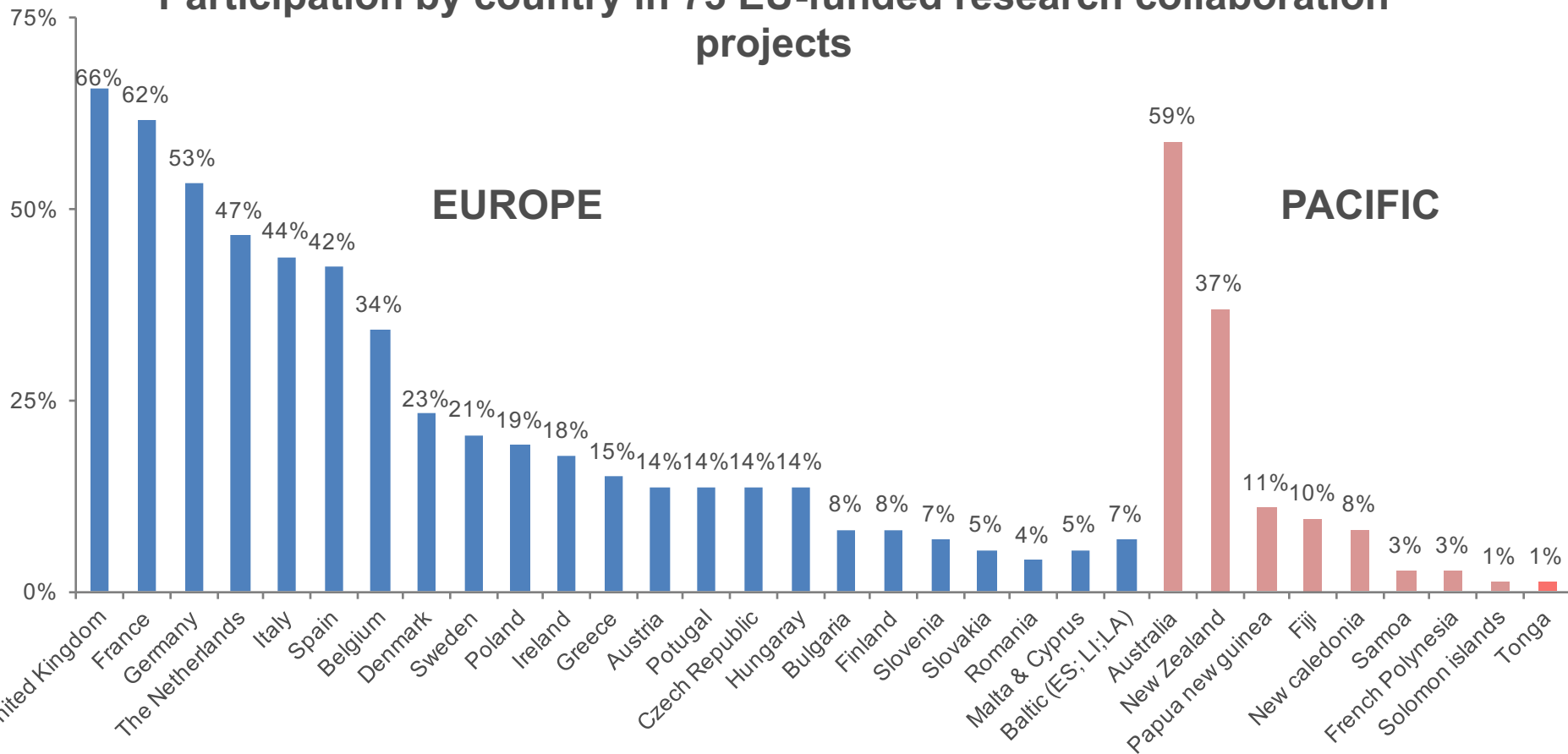
Nadi, 30th June – 01 July 2016

Overview

- **Introduction**
- **State of the art PAC-EU Research Cooperation**
- **Innovation Niches for Future Collaboration**

PAC-EU Research cooperation

Participation by country in 73 EU-funded research collaboration projects



PAC-EU Research Cooperation



- 94% of budget dedicated to projects with **Australia** and/or **New Zealand** as sole Pacific partners
- Low or uneven representation of PICTs; only **3** countries overwhelmingly present: **PNG, Fiji** and **New Caledonia** due to possibly insufficient local capacity
- **PAC-PAC** research cooperation is higher than **PAC-EU** cooperation
- **Discrepancy** between research outputs and **economic** and **sustainable development** priorities.

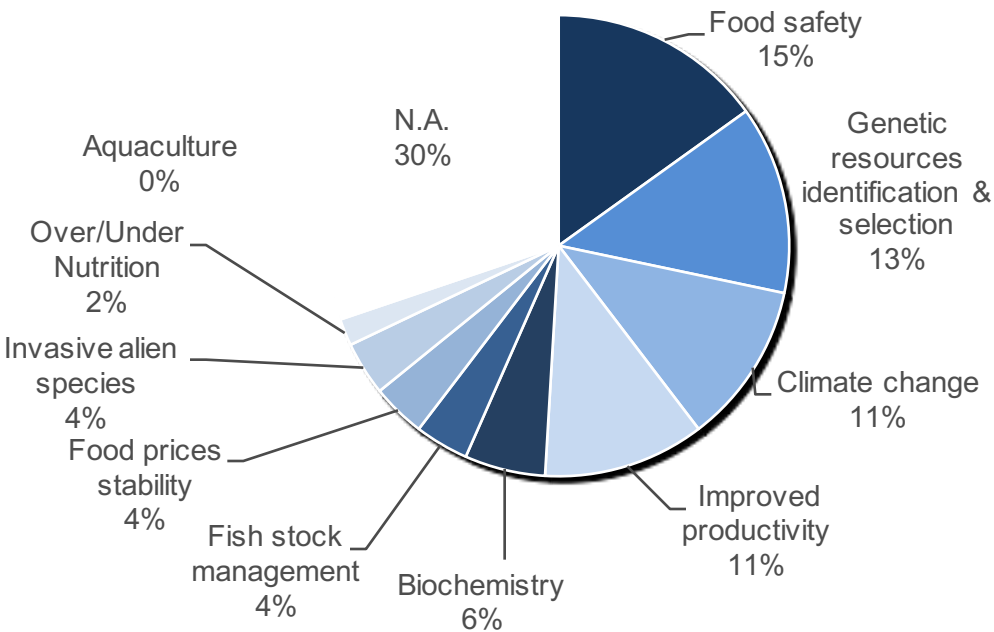
PAC-EU Development Cooperation: EDF Funding



- No **systematic** monitoring of the outcomes
- **Little relationship** between EU research (FP) and development (EDF) funded-projects.
- **Decreasing** EDF budget allocated to the field of food security, sustainable agriculture, marine and maritime research and the bioeconomy

Innovation Niches- 53 completed FP PAC-EU Projects

Distribution



- 1. Food safety
- 2. Genetic resources
- 3. Climate change
- 4. Improved productivity
- 5. Biochemistry
- N.b. Zero collaboration on Aquaculture

Innovation niches: Bremen Think Tank

Innovation niches	Example
Fish stock management	Remote sending tracking;
Aquaculture	Tuna breeding/ hatchery
Genetic resources identification and selection	improved varieties from indigenous stock; preservation of genetic diversity
Invasive alien species	ICT monitoring, DNA barcoding
Bioenergy	Increasing oil content in oil seed
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

Validation of Innovation Niches : *Stakeholder survey*

Innovation Niches	score scientists & policy makers	score farmers
Climate change	4,4	4,5
Improved productivity	4,3	4,5
Over/Under Nutrition	4,5	4,3
Food prices stability	4,3	4,3
Genetic resources identification and selection	4,3	4,3
Invasive alien species	4,0	4,3
Food safety	4,3	4,2
Aquaculture	4,2	4,2
Biochemistry	3,9	4,1
Fish stock management	4,2	3,9

Limitations for Innovation Niches

- **Inadequate Funding and investments to support ST&I activity in PAC**
 - N.b Willingness of private sector and farmers in the PICT to **partner** with scientists and technical experts and **support research, value addition and business development**
- **Little collaboration between scientists and other groups of stakeholders in STI**
 - **23% of farmers has been involved** in research during the last 3 years
 - **75% want to get involve** in research in their area
- **Limited local scientific and technical capacity, to compete in research partnership, to reach the expectation of business development**

Drivers for innovation

- **Strengthen collaboration** within and across research /scientific community and with **farmers** and the **business community**
- Creation of an **enabling environment** including national and Pacific regional **STI policy** and **IPR framework** to facilitate knowledge generation, transfer and optimization; bearing in mind that there is need to adapt the **Western IPR model** to the Pacific socio-economic and cultural context
- Make **funding** available for research and innovation – explore innovative funding mechanisms (e.g. seed funding) and develop research infrastructure

Seed funding presentations

- **Pacific Food Matters:** Converging Traditional Knowledge Solutions with Ecological Science for Climate Resilient Local and Global Food Security. (J Hutchings, NZCER)
- **The Role of Geospatial Information** for Assessing Environmental Livelihood Security in the South Pacific. (E Bruce, UoS)
- **Pilot inventory of traditional knowledge** of ciguatera fish poisoning and its treatment (J Lako, USP)
- **Indigenous food crops** to address community well-being, food security and climate change (S. Wossa, Univ. of Goroka)



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