

PACE-NET Plus Bremen Conference and Think Tanks

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Marrying traditional knowledge and decision support tools for crop resilience in Pacific Island Countries



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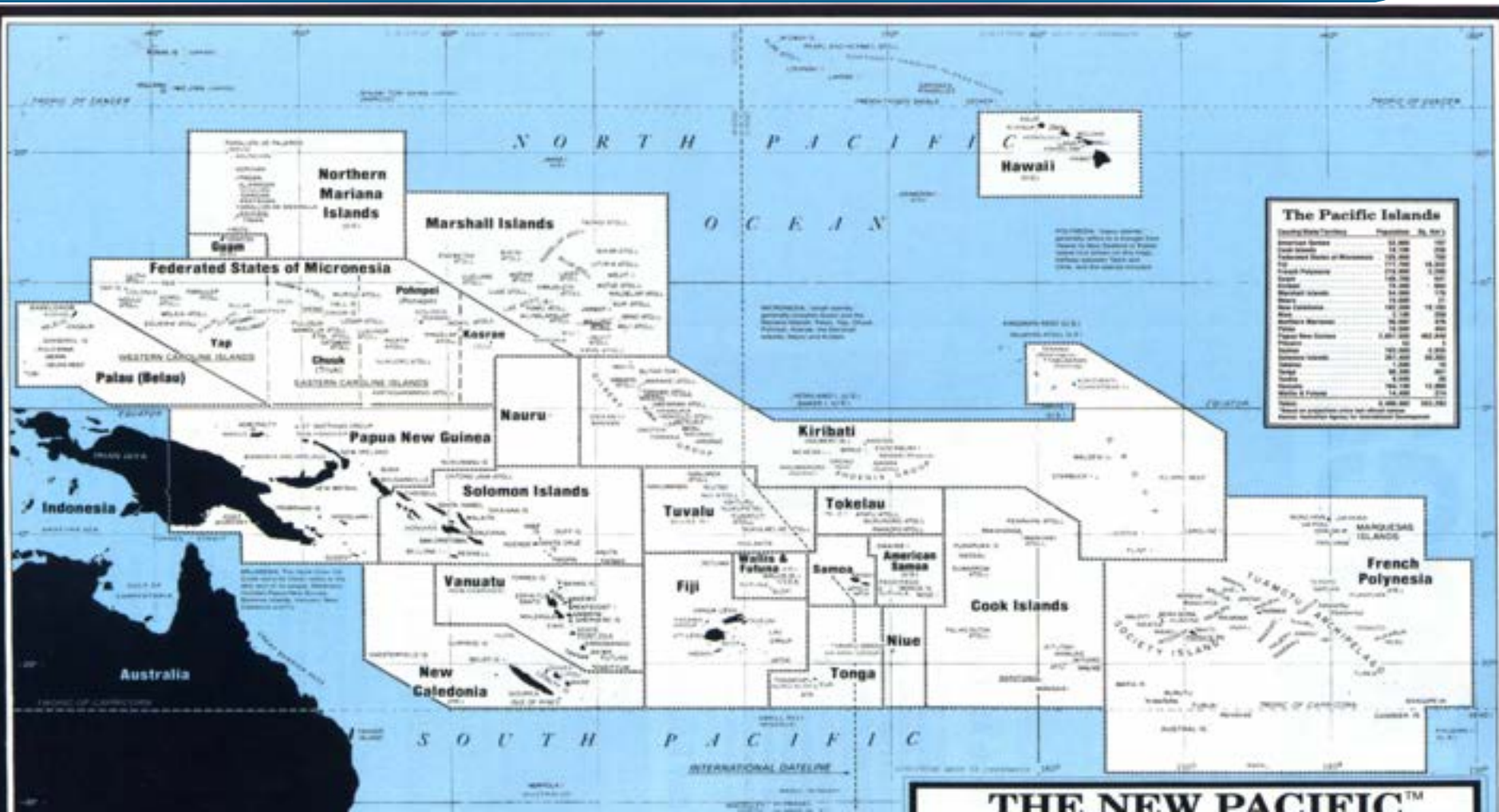
**Pacific Centre for Environment and Sustainable
Development**

The University of the South Pacific, Fiji Islands

Contents

1. Our Realities and Challenges – “If you could smell what the Rock is Cooking!!”
2. Opportunities – Think outside the Rocks and rocks

Pacific Islands Context – The Rocks



Background Information (PICTs)

- All developing countries
- Total Land Area (Islands) – 553,959 km² (PNG 80%)
- Ocean (LOS) – 20 million km²
- Total Population – Still counting
- High exposure to environmental, socio-economic heats
- Geo-political challenges
- Territories (French and English)
- 3 sub-regional (Melanesia, Polynesia, Micronesia)
- National, Regional, International interests

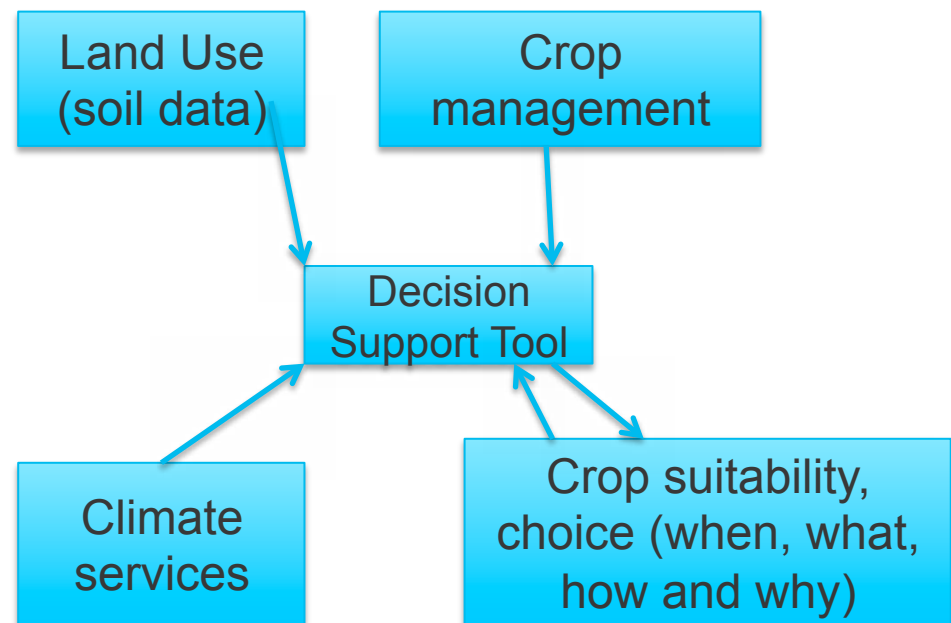


Climate change (one of the many rocks)

- Temperature is increasing (0.1-1°C since 1910)
- Rainfall no clear trend (but 70% rainfed)
- Sea level rise (0.6 – 2mm/yr since 1950) But level not even
- Extreme events increase in occurrence, intensity, frequency and variable distribution
- Reduction of crop growth (yield) (TK and CSM)
- Change in land use, cropping systems (TK and CSM)
- Seasonal shift (miscalculations)
- Food insecurity and loss of livelihoods (rural and urban)
- Always in a mode of recovery

The Opportunities – Think outside the rocks

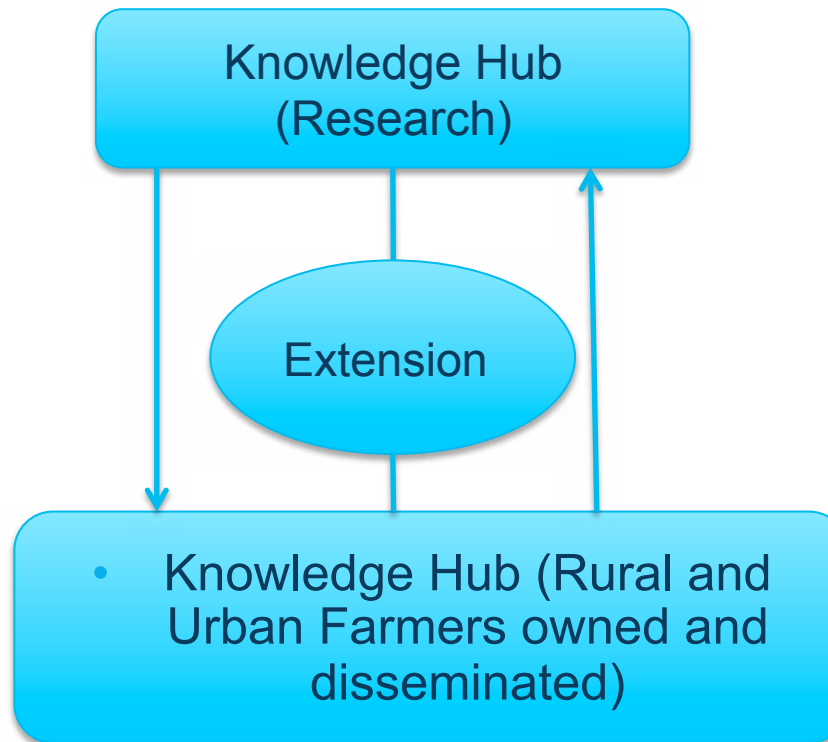
- Solution focused approach
 - Identify and use the various tools – Traditional knowledge, modern science, financial mechanisms, human capacities
 - Taro Leaf Blight story – marrying TK and Modern Scientific Tools
 - Proposed tool – Decision Support Tool
- App for decision making (Engagement)



Research Prioritization

- **Spearhead approach** – pool resources, share responsibilities, respond or proactive, avoid duplications (sharing of lessons learnt and best practices, durable partnerships, trans-disciplinary)
- **Bush fire approach** – involvement of strategic groups, training of researchers, resourcing and drivers, sustainability
- **How could the information from research reach implementing partners/stakeholders?**

EU Knowledge Centres – lessons learnt



Research gaps

- **Impact analysis of community food security projects (how various food security projects at the community or national level affect the livelihood of people, are they effective, efficient, sustainable or not?)**
- **Understanding change in Land Use patterns and practices (all systems) of food production**
- **Domestication of wild crops/trees/ferns, animals that are more resilience for food security**
- **Validation, Calibration and Development of Crop models to assess impacts of Climate change and extreme events on food crops and maximize crop management options for adaptations**
- **The need to link vulnerability assessments to effective implementation (cost benefit analysis, opportunity costs)**
- **What is the real cost of food security? Fueling food security. Cost of access, availability, stability, utilization and health and safety.**
- **Are the Food Security interventions addressing the specific needs of PICs priorities or the one who “knows how to ask” gets rewarded/recognized? - national priorities (NAPA, Development Strategies etc)**
- **Assessment of National Food Security Policies (inc. legislations)**

Final words

- Rocks and rocks existed more than 3000 years ago and they still are
- We need holistic smart approaches to act on rocks (Engagement, Marriage, Honeymoon, Children) Effective, Efficient, Sustainability
- Now is the best time to ACT
- “Challenges made men and women, men and women made nations”

Project partners

