

AUSTRALIAN CENTRE FOR INTERNATIONAL AGRICULTURAL RESEARCH



## **ACIAR's program in the Pacific**

- Works in Papua New Guinea, Fiji, Kiribati, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu
- Through regional and international organizations where appropriate
- Establish partnerships linking Australian and partner country expertise in problem-solving research
- Implementation at 'pilot' level
- Hand over wider 'development' to governments and other agencies





## **ACIAR's program in the Pacific**

R&D and capacity building to address three areas (based on priorities of SPC-LRD)

- 1. improved food and nutritional security;
- 2. integrated and sustainable agriculture, fisheries and forestry resources management and development; and
- 3. improved biosecurity and increased trade in agriculture and forestry products





## **ACIAR's Pacific Crops program**

- In addition to Fisheries and Forestry projects, ACIAR currently has some 20 projects and small research activities in the area of horticulture and agriculture
- Summarised in table circulated to participants
- More details on <u>www.aciar.gov.au</u>
  - see Annual Operating Plan







## Classical model of ACIAR projects

- Identify a 'researchable issue' (often demanding biophysical research – e.g. in crop protection or production agronomy)
- Priority of Australia and national partner country/organization
- Australian expertise available
- Focused, uni-disciplinary project
- "solve the problem and move on"





- Longer-term, 'programmatic' approach
  - PC/2010/090
     Strengthening integrated crop management research in the Pacific Islands in support of sustainable intensification of high-value crop production
  - With SPC, UQ, AVRDC, Fiji-MPI, SI-MAL,
     Samoa-MAF et al.
  - Closely linked with FAO TCPs
  - Improved diagnostics, Plant Clinics, diagnostic research and IPM





- Adding the market focus and 'business' dimension...
- Often involving private sector players and private-public partnerships







- For instance, adding the 'business' dimension to vegetable R&D
  - PARDI PRA/2011/003
     Developing an integrated participatory guarantee system for high-value vegetable crops.
  - PARDI PRA 2012.01
     Evaluating protected cultivation and irrigation technologies for improving climate resilience of vegetable production systems





# PC/2008/003 Strengthening the Fiji papaya industry through applied research and information dissemination

- Private-public partnership
   NWC & KokoSiga (Fj) Ltd, SPC, Fiji-MPI, Qld-DEEDI
- Tackle problems wherever they occur along the supply chain
  - Genetic resources diversify? Seed system?
  - Lumps in fruit plant nutrition?
  - Organic production methods and costs?
  - Post-harvest handling how to improve?
  - Links to markets sea freight instead of air freight?





- Value chain analysis
- A major feature of our Pacific Agribusiness Research-for-development Initiative (PARDI)
- Fitting together the pieces
- With SPC, FACT/IACT, EU-AAACP, AusAID-PHAMA, AusAID-MDF et al.







### ACIAR's Crop Protection R&D New initiatives – broader approaches

- Example of taro R&D
  - PC/2009/003 with SPC Plant Health
     Improving soil health in support of sustainable development in the Pacific
  - PC/2007/118 with SPC BATS
     Developing cleaner export pathways for Pacific agricultural commodities
  - PARDI PRA/2011/004 SPC CePaCT & MAFF
     Developing a clean seed system for marketready taro cultivars in Samoa



## Taro supply chain – research support

production post-harvest markets inputs **PARDI** seed 'Cleaner export PHAMA -Soil health system pathways' project market access project SPC-USP-SFA SPC-UQ **SPC-Kalang PARDI** processing **SPC-USP-SROS PARDI** varieties for markets **Uni Adelaide/USP** 









#### **ACIAR Cocoa research**

- PC/2008/046
   Rehabilitating Cocoa for Improved Livelihoods in the South Pacific
- Pest and disease management in the context of farmer livelihood strategies and market incentives
- PARDI PRA 2011.01
   Facilitating Improved livelihoods for Pacific Cocoa Producer Networks Through Premium Market Access
- Private-public partnerships; linking smallholders to high-value markets





#### Significance of cocowood project

- Coconut research has previously been important to ACIAR but has received reduced emphasis in recent years
- A new look is justified from a smallholder livelihoods perspective
- Paradox: coconuts and copra still the main source of livelihood for many...
   but represent a 'poverty trap' for some.
- Coco-wood may hold key to diversification





#### Significance of cocowood project

- By-products can support sustainability of field production (soil amendments)
  - PC/2009/003 Improving soil health in support of sustainable development in the Pacific
  - Coco-peat to restore carbon content and biological activity of soils (e.g. under taro)
  - Bio-char for nutrient retention





#### Significance of cocowood project

- ... and provide growing medium for highvalue horticulture
  - PARDI PRA/2010/005 Developing commercial breadfruit production systems for the Pacific islands
  - PARDI PRA/2011/004 Developing a clean seed system for market-ready taro cultivars in Samoa
  - Planting material from tissue culture
  - HORT/2008/011 Strategies for using floriculture to improve livelihoods in indigenous Australian and Pacific island communities



## Thank you! We look forward to working with you!

