ACIAR Pacific Crops Program

Richard Markham
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 [www.aciar.gov.au](http://www.aciar.gov.au) – 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”
New initiatives – broader approaches

• 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
New initiatives – broader approaches

• Adding the market focus and ‘business’ dimension...
• Often involving private sector players and private-public partnerships
New initiatives – broader approaches

• 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?
New initiatives – broader approaches

- 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 market-ready taro cultivars in Samoa
Taro supply chain – research support

- **inputs**
  - PARDI seed system
    - SPC-USP-SFA

- **production**
  - Soil health project
    - SPC-UQ
  - ‘Cleaner export pathways’ project
    - SPC-Kalang

- **post-harvest**
  - PARDI processing
    - SPC-USP-SROS

- **markets**
  - PHAMA – market access
  - PARDI varieties for markets
    - Uni Adelaide/USP

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*Coco-wood Project Planning Workshop*

SPC, Suva; 30 July 2012
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 high-value 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!