

Progress in food security and the importance of Queensland expertise

Daniel Walker & Peter Horne



ACIAR

aciar.gov.au





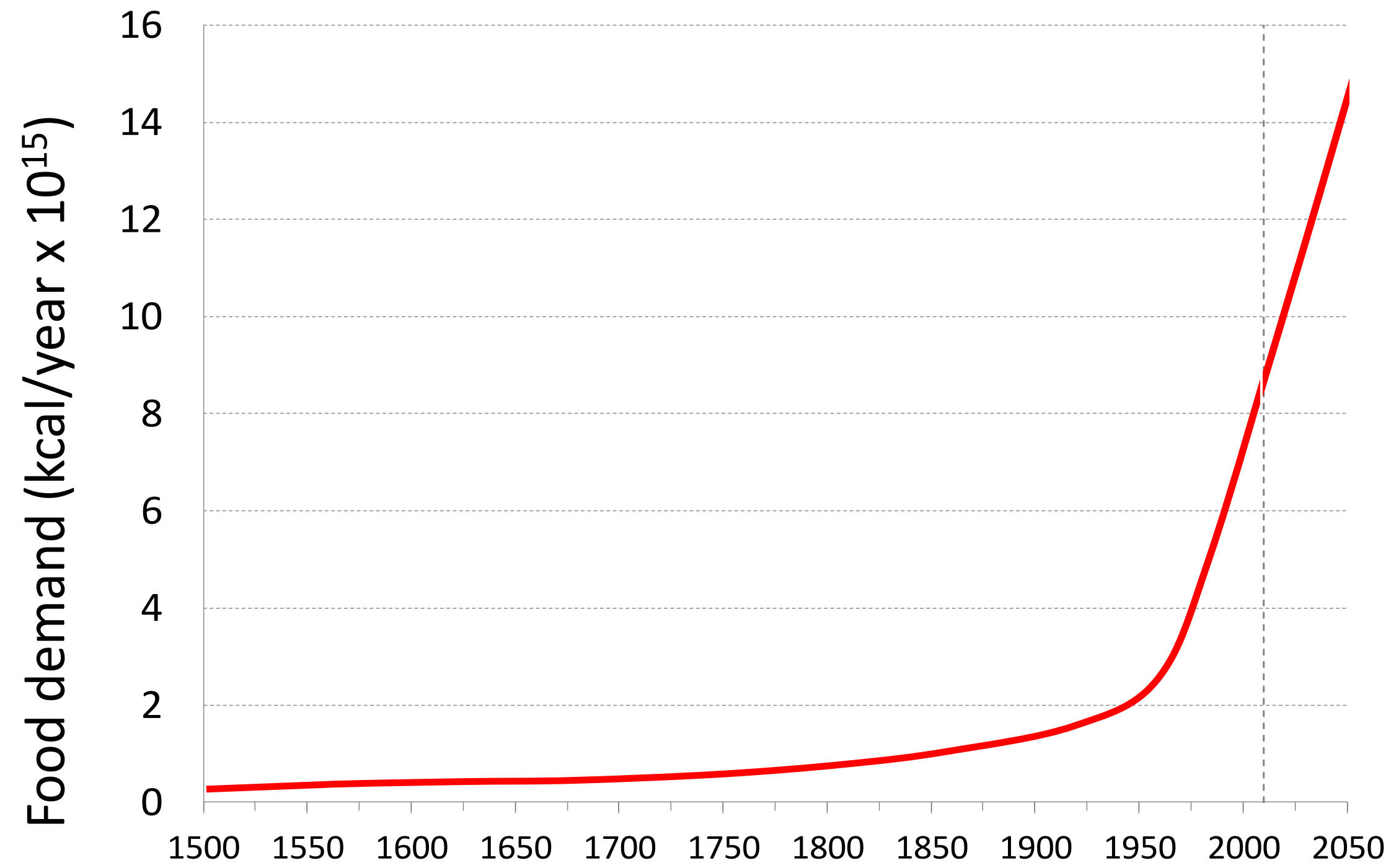
Drakensberg Bushman Rock Art



The Corn Harvest, Bruegel the Elder



New Holland CR10.90



Food & Nutrition Security



- 2.7 billion people live on <\$2 per day, depend significantly on agriculture for livelihoods and spend most of their income on food
- 25% of children are malnourished
- 815 million people acutely or chronically undernourished in 2016, **up from 777 million in 2015**
- A further 2 billion people suffer from micronutrient deficiency, ‘hidden hunger’: effects can be damaging for life
- Food & water insecurity key drivers of human migration and root cause of conflict
- 2 billion people are overweight or obese
- 525 million farmers in the world; 90% smallholders; feed ½ global population
- 50% increase in urban populations by 2050: but due to population growth, overall rural populations will not drop much; rural people are poorer
- **Most farmers are women**
 - most traders and business players are men



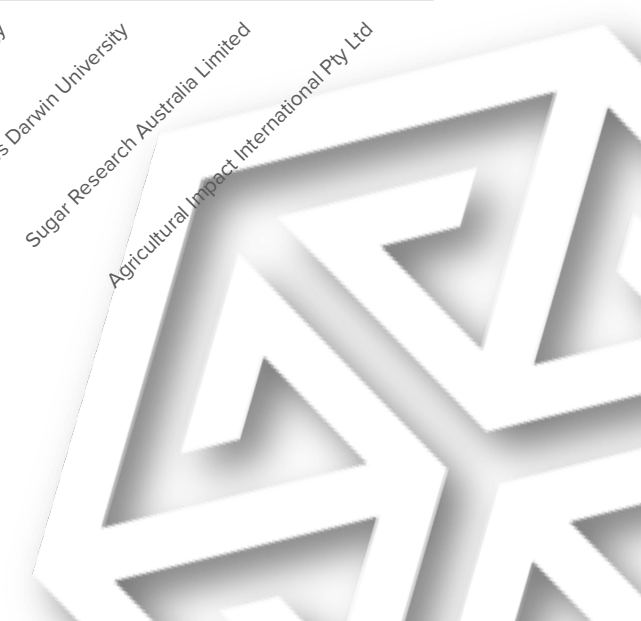
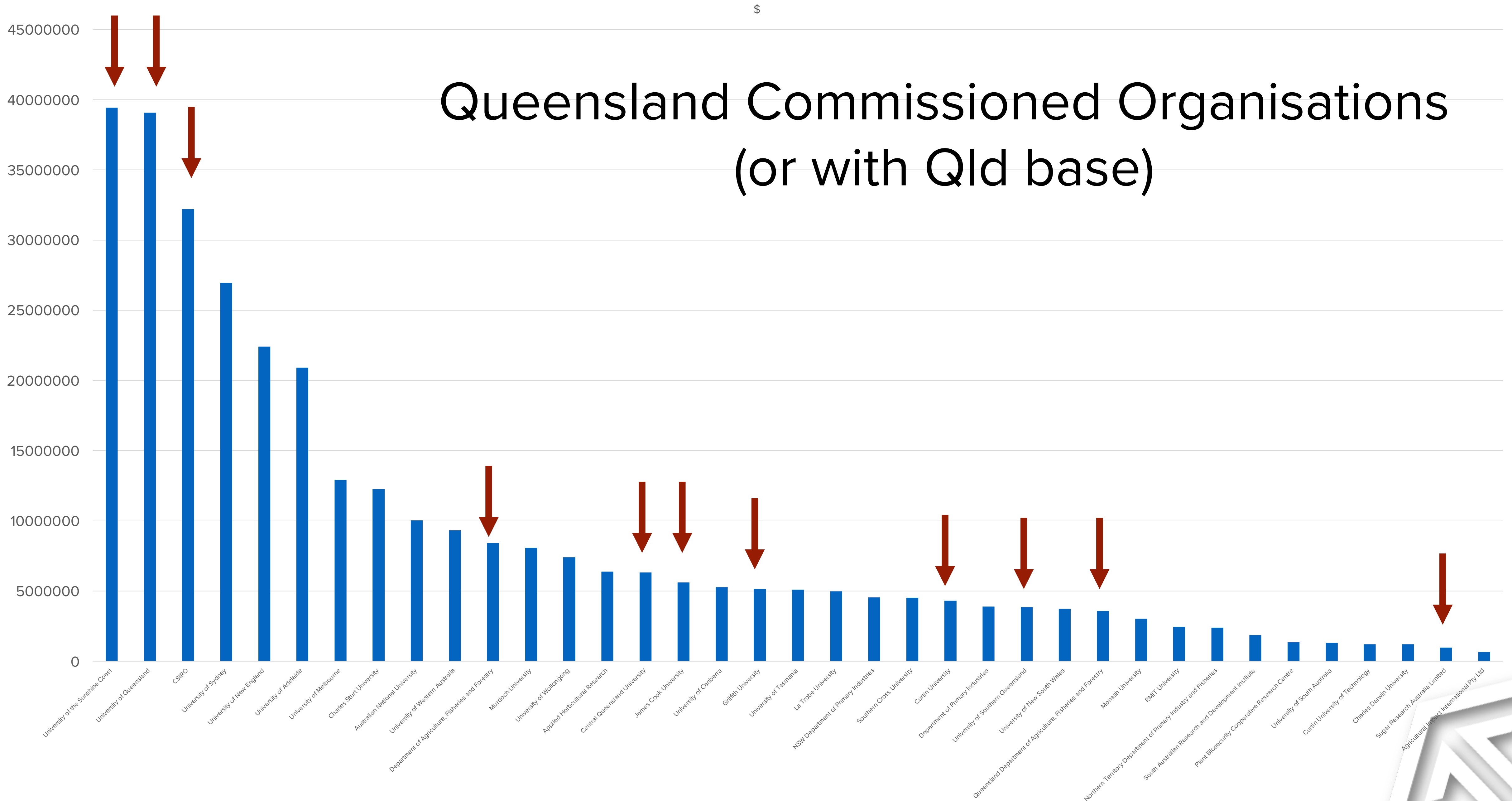


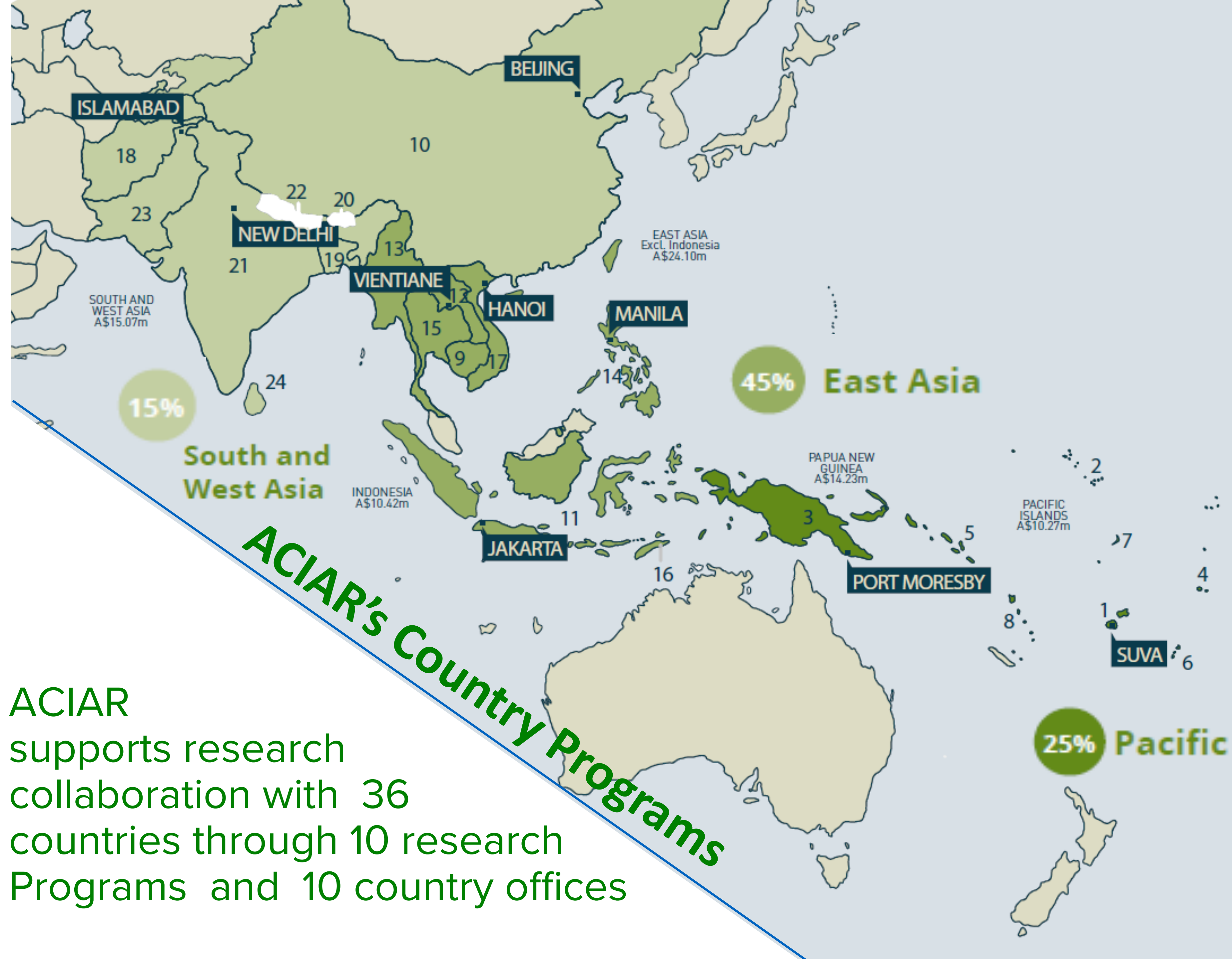
ACIAR 10-YEAR STRATEGY AT A GLANCE

1. Six **High-Level Objectives**: food security and poverty reduction; natural resources and climate change; human nutrition and health; empowerment of women and girls; inclusive agrifood market chains; and building science capacity.
2. Three distinctive **Research Partnership Models**: bilateral country partnerships; multilateral research collaborations and co-investment with development partners; each with their own procurement pathways, governance frameworks, quality assurance and risk management
3. More sophisticated portfolio-level **Monitoring and Evaluation**
4. Refreshed **Capacity Building** program
5. Radical overhaul of PR & comms into a new **Outreach** program



Queensland Commissioned Organisations (or with Qld base)





ACIAR supports research collaboration with 36 countries through 10 research Programs and 10 country offices



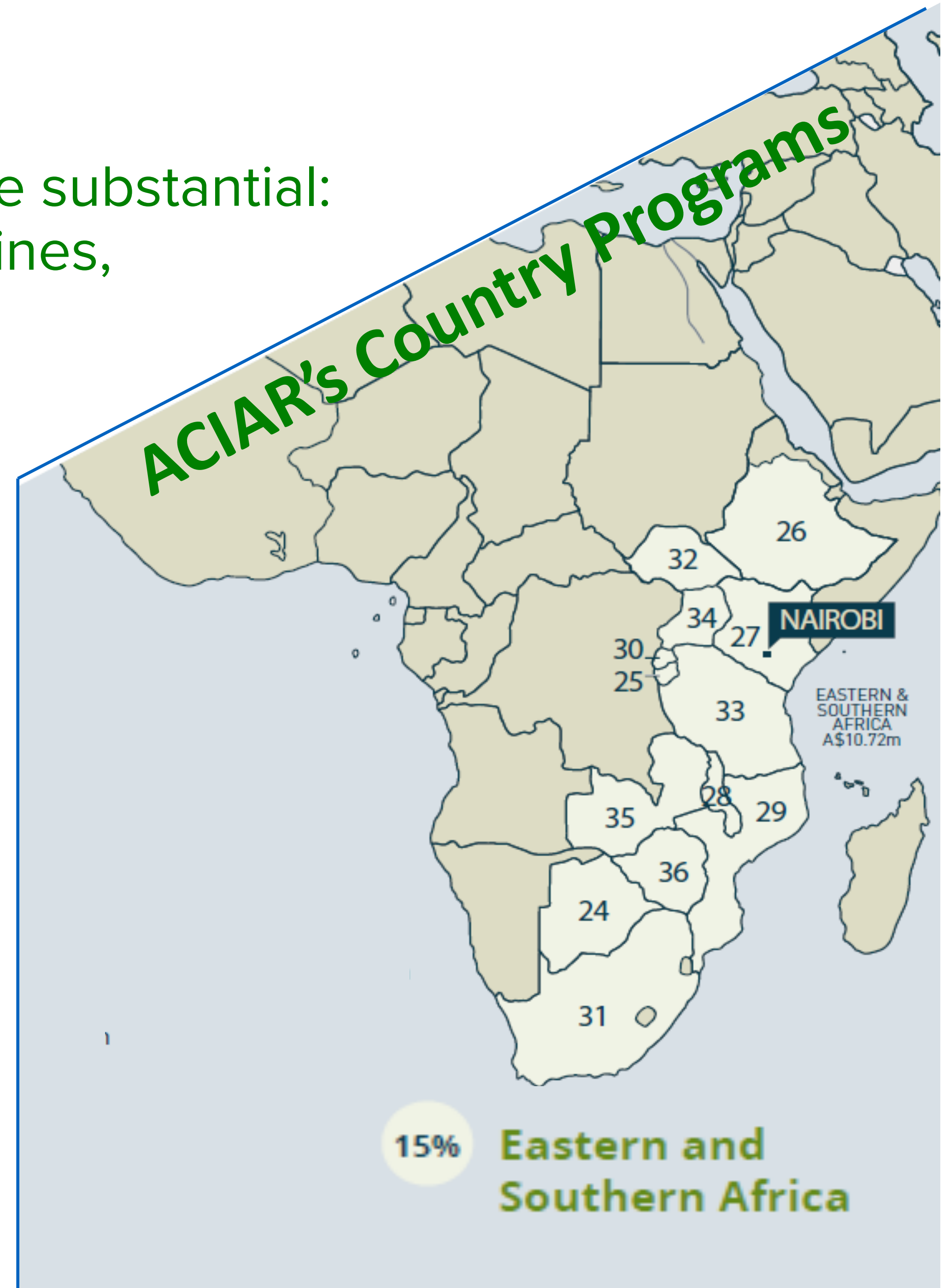


Eleven of these country programs are substantial:
PNG, Timor Leste, Indonesia, Philippines,
Vietnam, Cambodia, Lao, Myanmar,
Bangladesh, India, Pakistan



Our large Pacific and E&S Africa
programs are characterised by
strong regional collaboration

We are increasingly responding
to rapidly changing regional and
country priorities / relationships





To manage our Country Programs we...

Establish and annually review country/regional strategies and partnerships to guide what we invest in where and why

Seek to align priorities of the partner countries and regions with Australia's strengths in research

Fund research projects to underpin these strategies, seeking to **develop and sustain longer term partnerships**

...and over the next 5 years will restructure our country programs to be, in many cases, more-focused and to include a moderate portfolio of (i) **longer-term projects** (ii) **proof of concept projects at scale** and (iii) **science discovery projects**





Current ACIAR-Qld collaborations...

65 projects

Value: **\$112 million**

Involving 9 research agencies in the state

Highly diverse...

Sweet-potato production and marketing (PNG)

Management of Fusarium wilt in bananas (the Philippines)

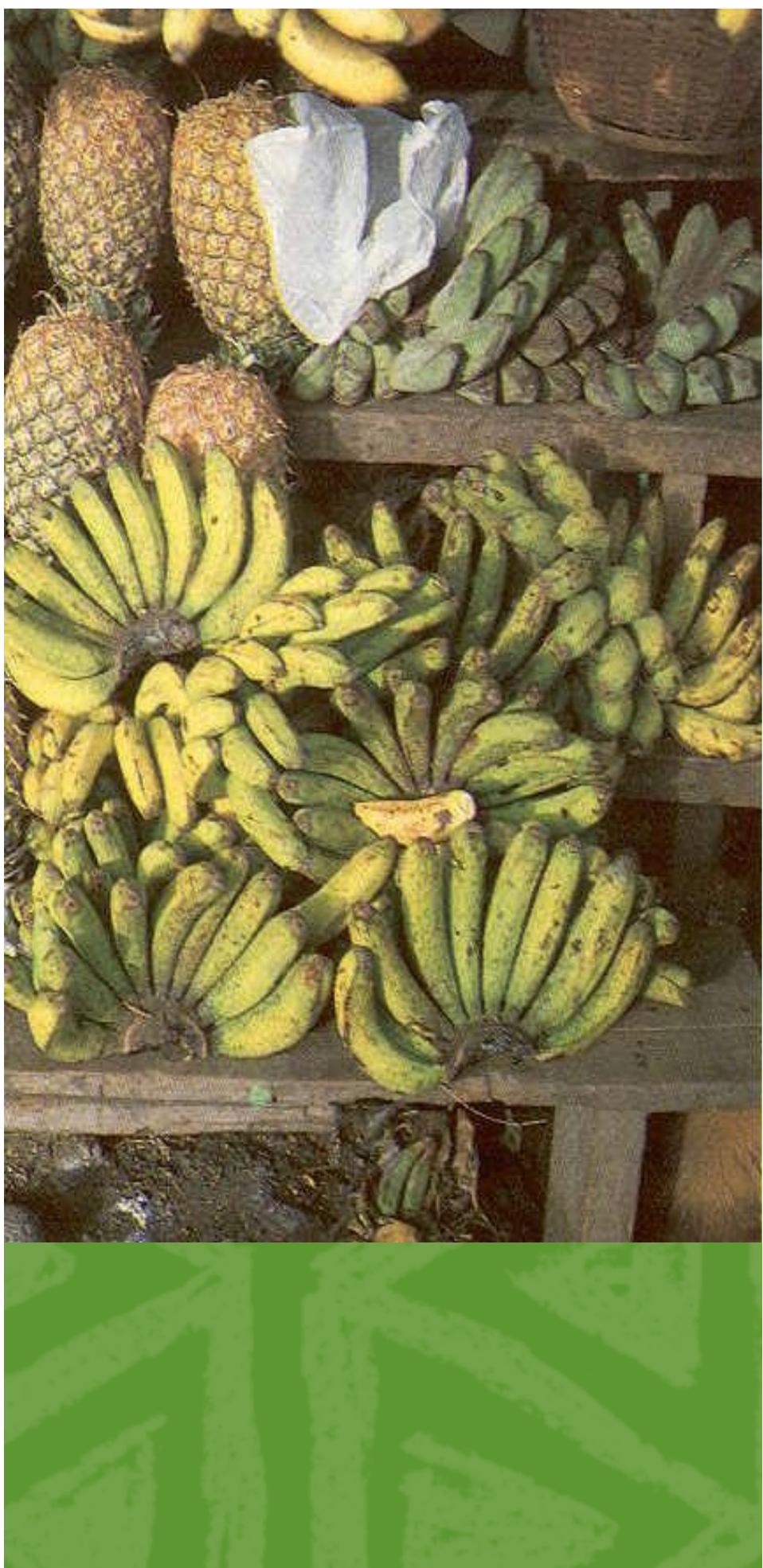
Seaweed production and processing (Pacific Island countries, Indonesia)

Canarium nut industry development (PNG)

Management and production of smallholder cattle in Indonesia and Vanuatu



Example of benefits to Queensland..



Since 1982 ACIAR has supported **>40 Mango research projects in 11 countries (\$10 million over the past ten years).**

A diverse range of production and post harvest issues have been addressed overseas and in Australia.

Current research in Qld: trialling trellised mango for maximum productivity and cyclone resilience





Paula Ibell (Dept of Ag and Fisheries) with trellised mango trial at Walkamin

Common aspirations...

“To achieve more productive and sustainable agricultural systems, **for the benefit of Developing Countries and Australia**, through international agricultural research partnerships”

ACIAR wants to invest with you in the **next generation of researchers**

You will see more **longer-term commitments** from ACIAR

We have a common interest in **communicating the compelling stories** of your work more widely and effectively



IN CLOSING - WE NEED A THIRD AGRICULTURAL REVOLUTION TO FEED THE WORLD EQUITABLY AND SUSTAINABLY

High level goals for agriculture by 2030: e.g.

- doubling water, energy and nutrient productivity
- becoming a net carbon sink
- becoming a net energy producer

Reposition agriculture as integral to the food, health, energy and water systems

Re-engage urban populations with ag and food systems

Rebrand agriculture as sexy, 'new economy'

**ACHIEVING THIS WILL DEPEND ON A NEW GENERATION OF RESEARCHERS
DEDICATED TO INTERNATIONAL RESEARCH COLLABORATION**

