ACIAR and Tasmania

Australian Government
Australian Centre for International Agricultural Research

Looking back – Looking forward

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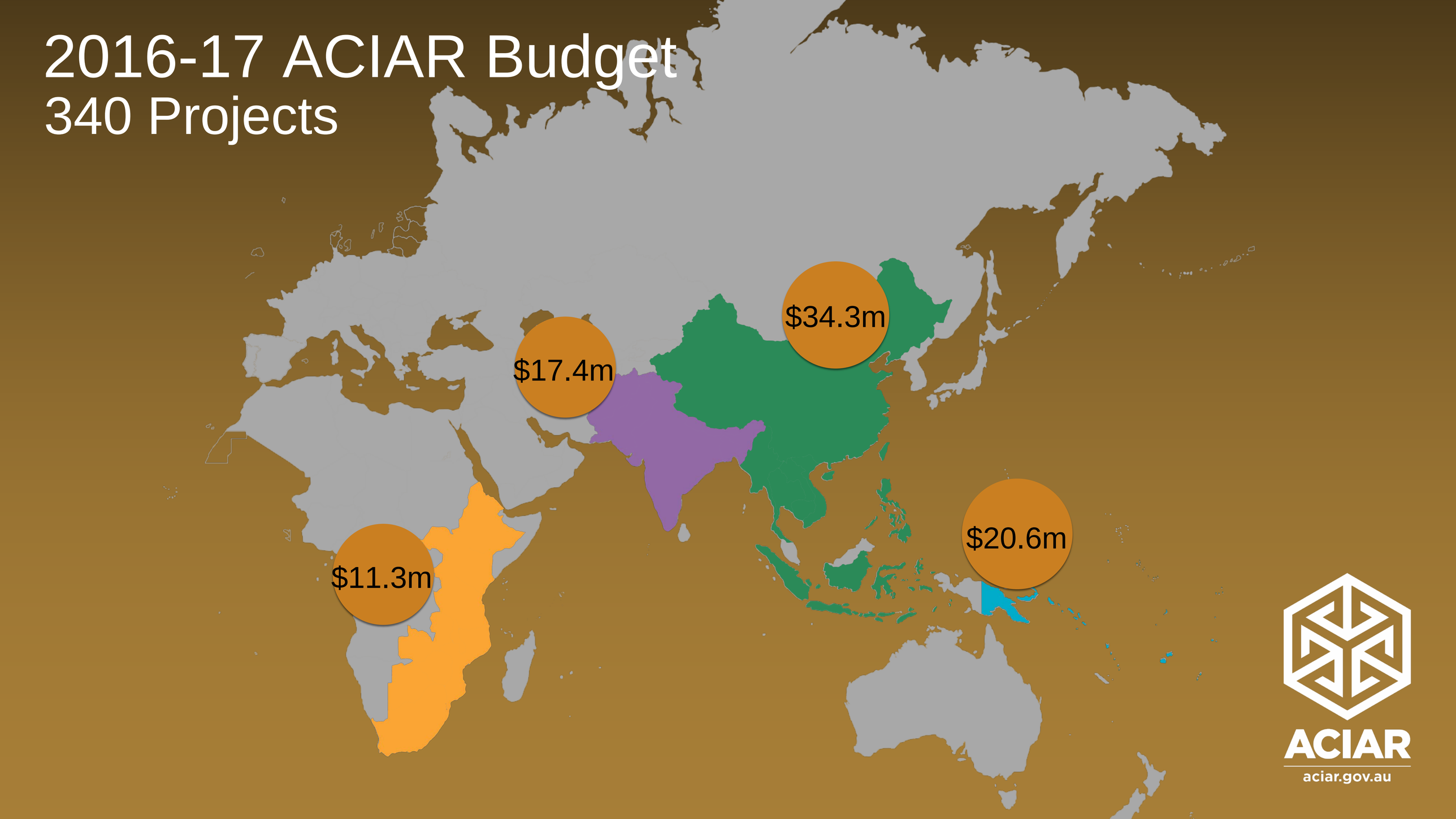
ACIAR’s niche remains…

An independent agency in Australia’s Foreign Affairs portfolio.

Mandate: to amplify the impact of Australia’s outstanding capabilities in agricultural science by brokering and funding agricultural research-for-development partnerships in East Asia, Pacific, South Asia and East and Southern Africa for the benefit of partner countries and Australia .

2016-17 ACIAR Budget
340 Projects



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The tropical regions of the world are the most dynamic in the global economy and growing rapidly

Indonesia today …

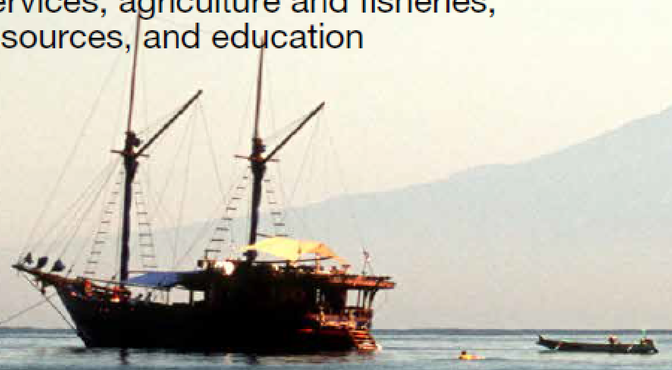
16th-largest economy in the world

45 million members of the consuming class

53% of the population in cities producing **74%** of GDP

55 million skilled workers in the Indonesian economy

$0.5 trillion
market opportunity in consumer services, agriculture and fisheries, resources, and education



… and in 2030

7th-largest economy in the world

135 million members of the consuming class

71% of the population in cities producing **86%** of GDP

113 million skilled workers needed

$1.8 trillion
market opportunity in consumer services, agriculture and fisheries, resources, and education

Source: McKinsey Global Institute, 2012

Tasmania has diverse and highly relevant research expertise including forestry and natural resource management, horticulture, fisheries and livestock sectors – but the opportunities are much wider than that

ACIAR-Tasmania collaboration

Since 1983 Tasmanian institutions have led 15 projects worth $14 million.

13 of these since 2000 and 3 current (value $3.3 mill):

- Livestock (Vietnam)
- Forestry (Indonesia, Vietnam)
- Fisheries (PNG)

Tasmanian institutions have been a partner in many others

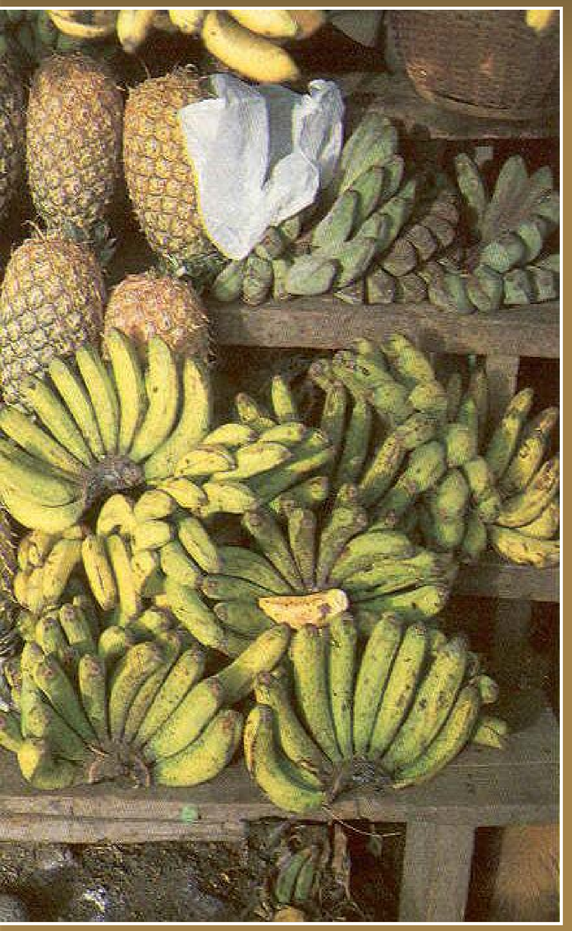
Benefits to Australia

Research delivering benefits to developing countries and Australia.

Benefit to cost ratios for ACIAR projects, as measured by independent evaluations, typically range from 5:1 to 50:1

Benefits to Australia include biosecurity surveillance and response, pest and disease management, new varieties.

Benefits to Australia – one example



The virulent TR4 strain of fusarium wilt has devastated the Cavendish **BANANA** export industry of Asian countries (Malaysia, Indonesia and now Philippines).

Collaborative research in Asia has helped to improve strategies for ‘containing’ the disease and develop new ecologically-based ways of reducing its impact (e.g. use of ground-covers)

Participation in ACIAR research overseas heightened ‘readiness’ of Australian researchers and farmers when a new outbreak was confirmed near Tully in March 2015

Benefits to Tasmania – one example

As a result of recent ACIAR funded UTAS beef projects, Vietnamese researchers undertaking post graduate research at UTAS, on Tasmanian based issues.

<< Nguyen Viet Don lambs being fed high Omega 3 grain

ACIAR wants to invest in potentially transformational research for the farmers of 2050

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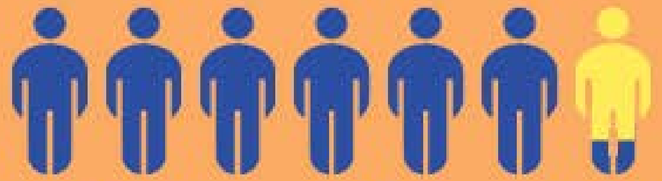
Pressing global challenges..

- To develop more sustainable food systems
  - using less land, water, nutrients & energy per unit output
  - while conserving biodiversity and human livelihoods
- To decouple economic growth from carbon emissions
- To adapt to an increasingly difficult climate
- To increase water productivity
  - Decoupling the 1 litre per calorie relationship
- To increase energy productivity
  - more food energy out per unit of energy input
  - while shifting from fossil fuels to renewable energy
- To do all of this simultaneously

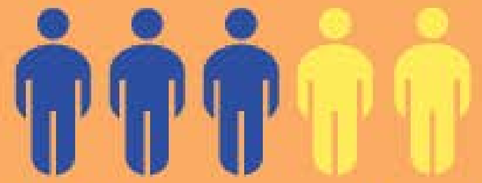
OUT OF A WORLD POPULATION OF 7 BILLION

About 2 billion people suffer from micronutrient malnutrition



Nearly 800 million people suffer from calorie deficiency

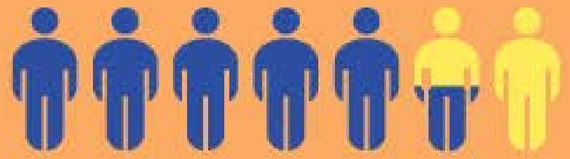
OUT OF 5 BILLION ADULTS WORLDWIDE



Nearly 2 billion are overweight or obese

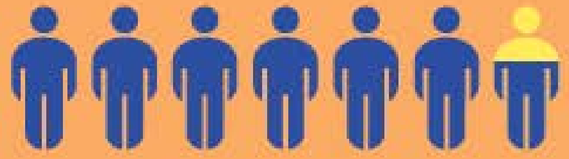
One in 12 has type 2 diabetes

OUT OF 667 MILLION CHILDREN UNDER AGE 5 WORLDWIDE



159 million under age 5 are too short for their age (stunted)

50 million do not weigh enough for their height (wasted)



41 million are overweight

From Promise to Impact. Ending malnutrition by 2030. (IFPRI 2016)

Changing partnerships..

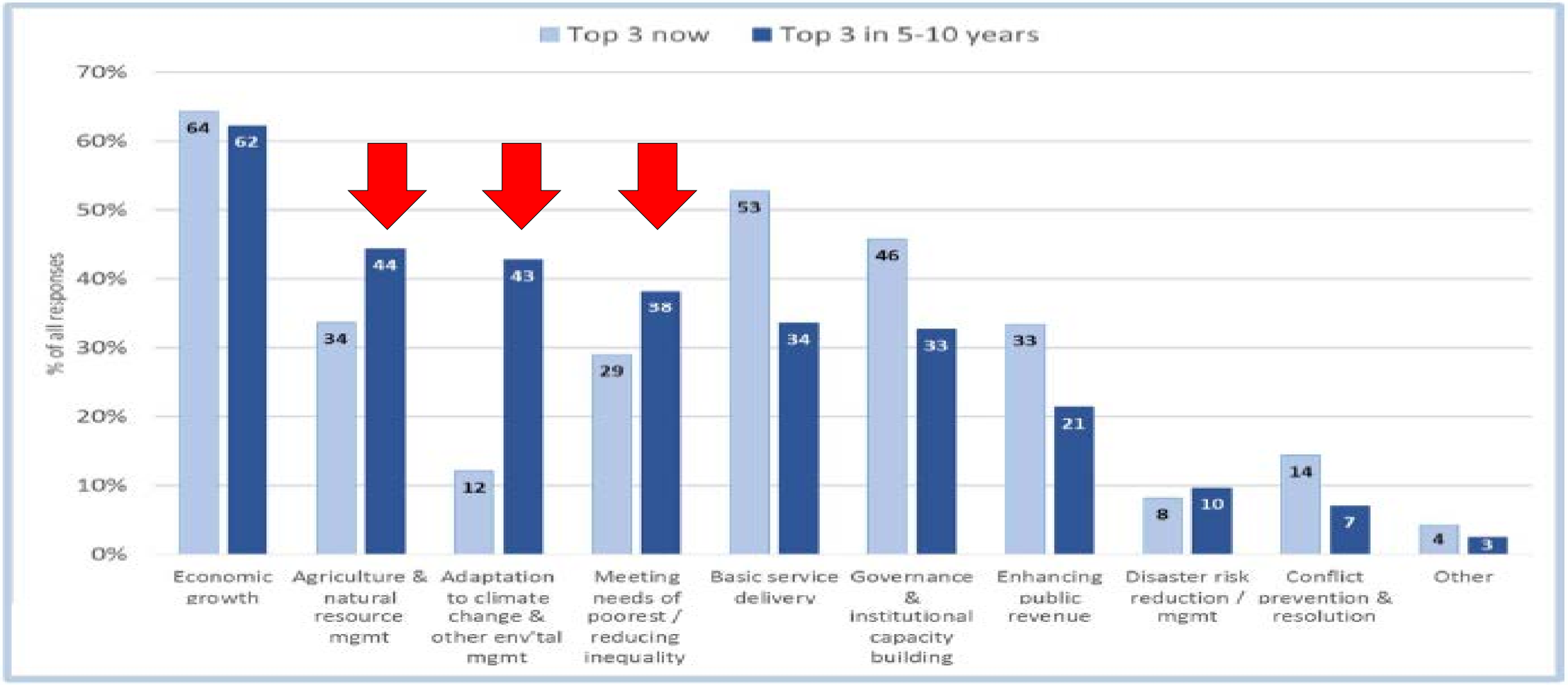
Increasing confidence of national partners

Changing relationships – from prioritisation to negotiation

Increasing direction on priorities from political considerations in-country

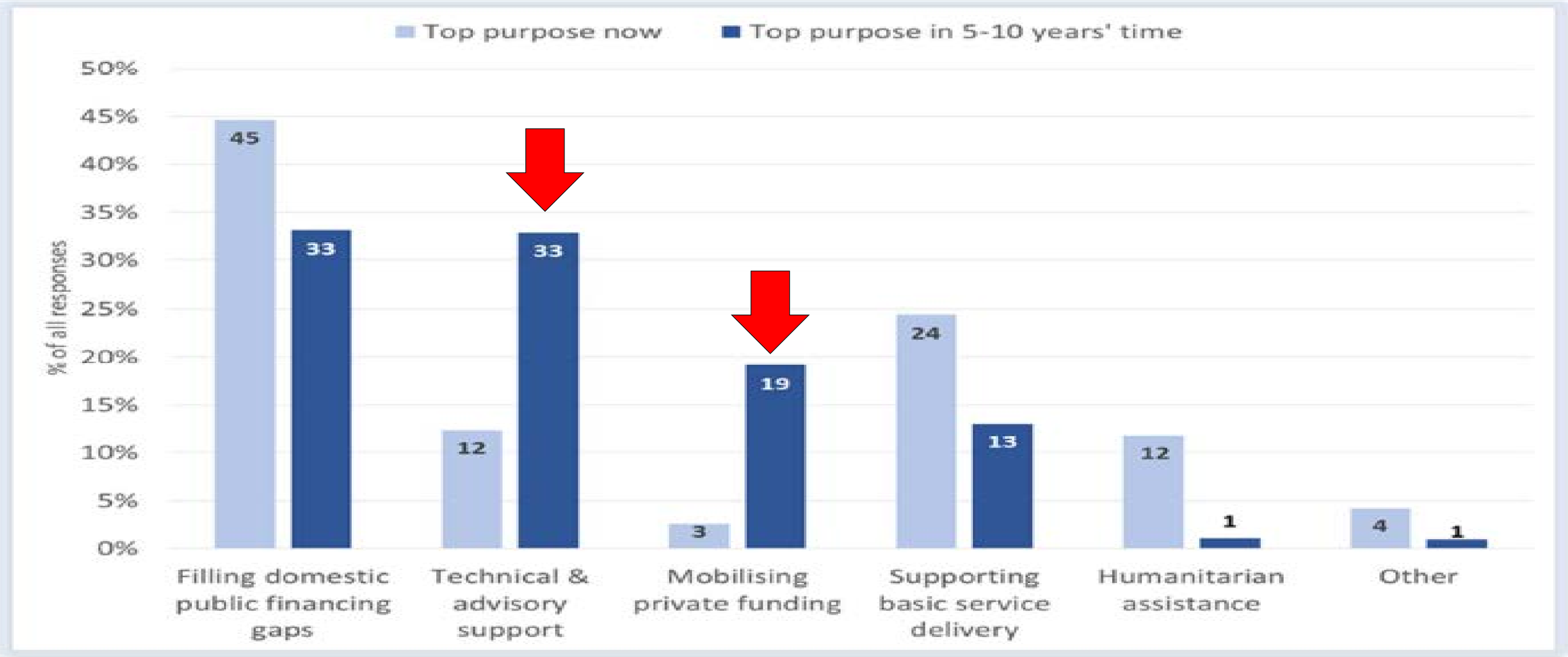
Emerging opportunities for coinvestment

3 main development challenges now and in 5-10 years



From Davies, R. and J. Pickering (2015), "Making Development Cooperation Fit for the Future: A Survey of Partner Countries", *OECD Development Co-operation Working Papers*, No. 20,OECD Publishing.

Top purpose of cooperation now and in 10 years time



From Davies, R. and J. Pickering (2015), "Making Development Cooperation Fit for the Future: A Survey of Partner Countries", *OECD Development Co-operation Working Papers*, No. 20,OECD Publishing.

ACIAR is responding...

A new Strategic Plan 2017-2027 will include:

1. Bilateral research collaboration remains the bedrock

2. Research portfolio is mostly sectoral, but grand challenges are cross-sectoral. ACIAR is developing new cross sectoral themes to which all the research will contribute

3. Capacity building – a wider range of approaches; increased investment, alumni network; grads

4. Evaluating impacts – develop new best practice approaches

ACIAR is responding...

5. Showcasing outcomes – expanding our efforts in communications

6. Longer-term projects – up to ten years? ACIAR seeks to co-invest more strongly in Australian research capacity

7. Potentially transformational research

Potentially transformational research

- Digital Agriculture (e.g. apps, SMS, sensors, telemetry, drones, robotics, data)
- Mechanisation (for smallholders with a gender lens)
- Insurance & finance
- Molecular genetics in dryland cropping
- Seasonal forecasting & risk management
- Climate- resilient farming systems
- Carbon emissions accounting
- Landscape fire management
- Nutrition-sensitive agriculture
- Water policy reform

Working for a better world

more productive and sustainable
agricultural systems for the benefit
of developing countries and
Australia through international
agricultural partnerships

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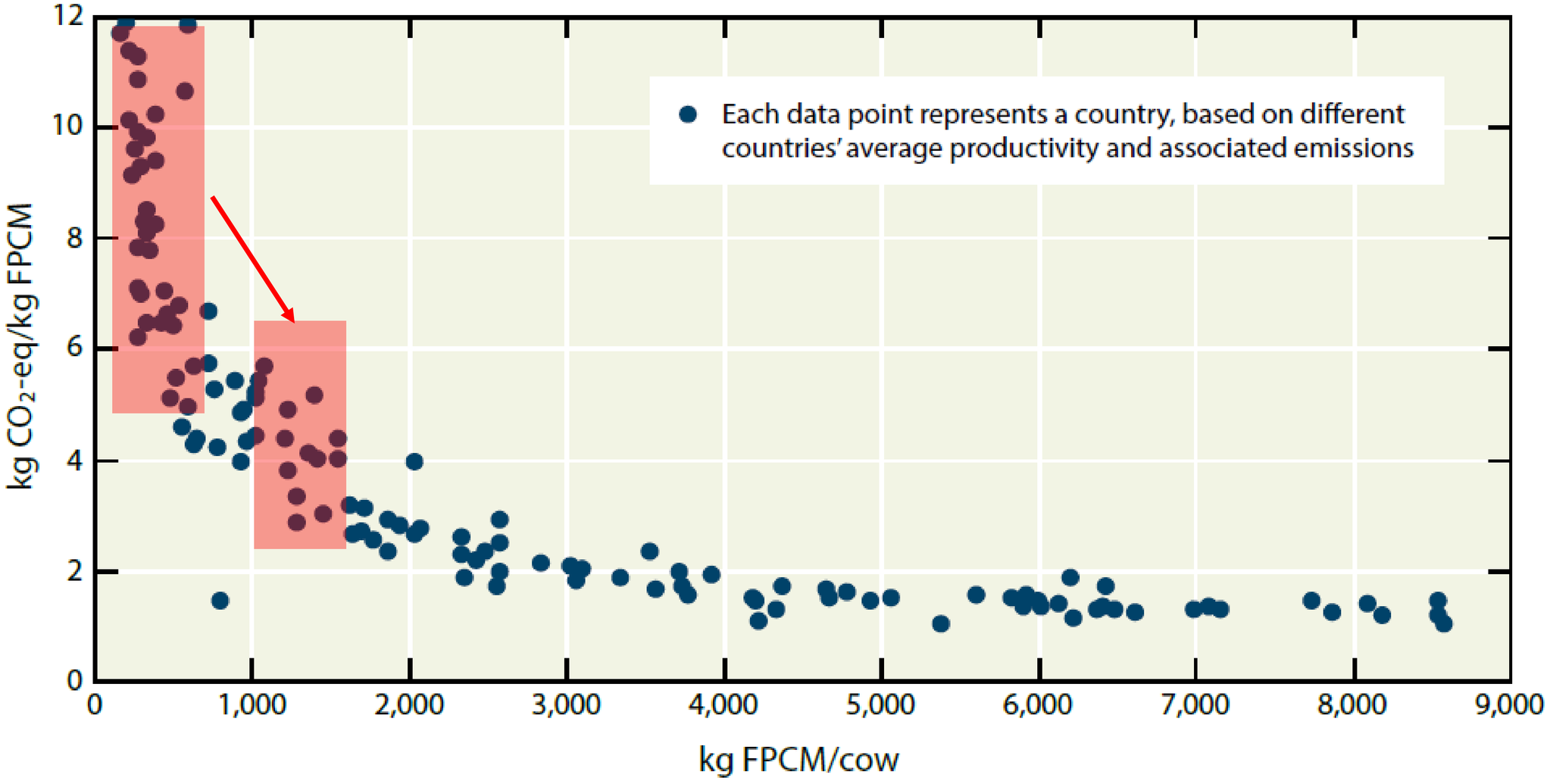
Strategic alignment		Research for development		Delivery partnerships	
Country priorities	Does the proposed research address priority policy areas of the government?	**Researchable Issues**	Are there specific research questions to be answered, including adaptive or applied research questions?	**Australian Partners**	Is the necessary skillset and expertise available in Australia?
Australian priorities	Are there opportunities to engage with the private sector?	**Solvable**	Is the issue solvable by research in the current state of knowledge?	**Country Partners**	Is the necessary skillset and expertise available in country including institutes with a relevant mandate but low capacity that could be strengthened by the collaboration?
	Will the research results have potential to increase gender equality?	**Sustainable**	Is the research proposed 'future proof', i.e. has low likelihood of obsolescence	**Complementarity**	Is there potential for complementarity with investments by the public sector, Australian aid program, or international agencies?
	Will the research results lead to economic empowerment and/or expand economic opportunities for the poor?	**Pro-poor**	Will the research have an impact or be conducted in the poorer area of the country?	**Private sector**	Is the private sector willing and able to collaborate in the research initiatives and co-invest?
Shared benefits	Is there a public or industry interest in both countries that could benefit from the research?	**Women's engagement**	What is the potential to economically empower women and girls in this research in the short and long term?		
		Scalability	What is the feasibility of taking the research outcomes to scale?		

Figure 1: Relationship between emissions intensity and milk yield per dairy cow



Note: FPCM = fat and protein corrected milk

Source: CCAFS, 2016 Livestock development and climate change