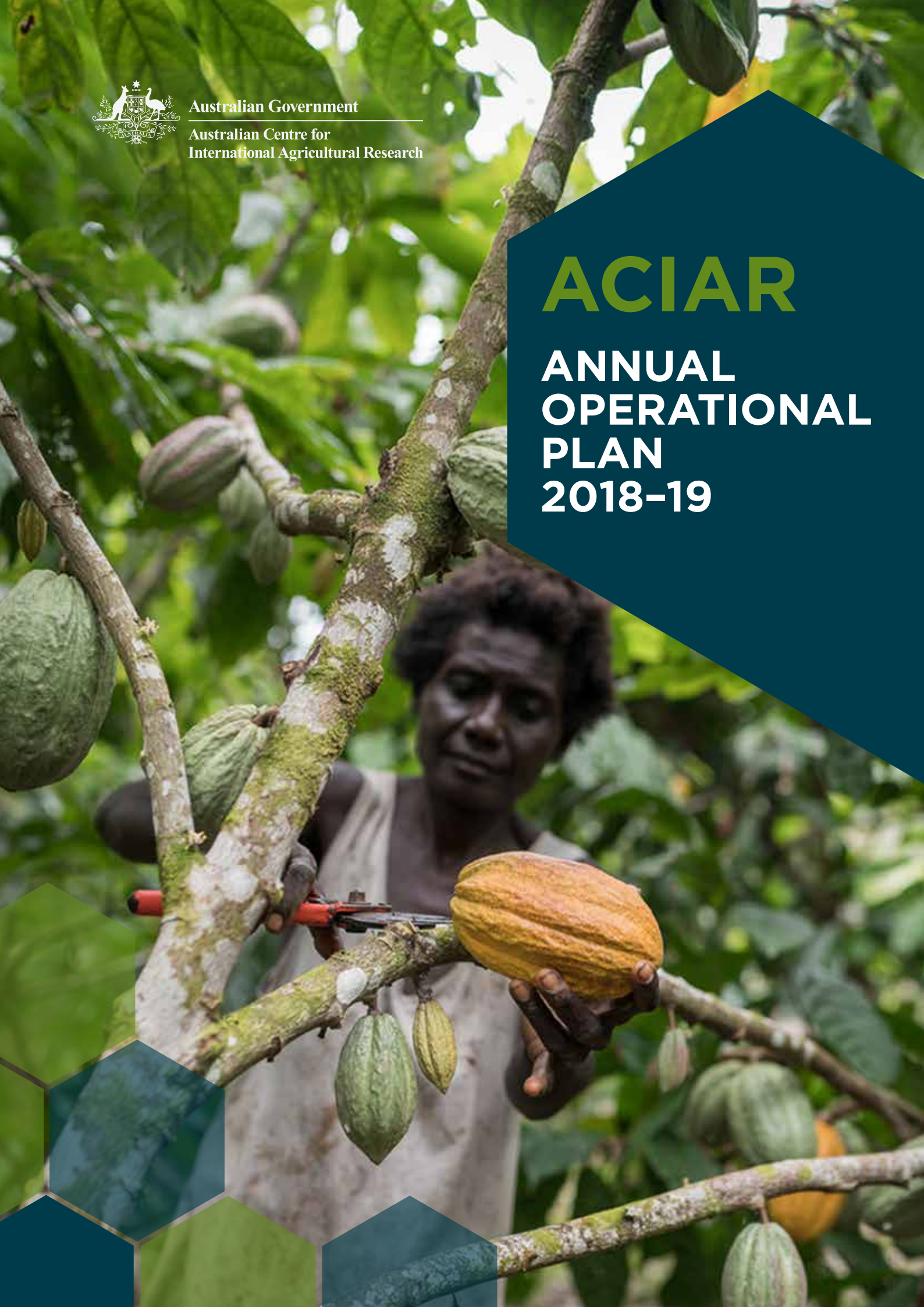





Australian Government
Australian Centre for
International Agricultural Research

ACIAR

ANNUAL OPERATIONAL PLAN 2018-19





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Cover photo: The Transformative Agriculture and Enterprise Development Program (TADEP) is a multidisciplinary research program with the objective of improving the livelihoods of rural Papua New Guineans. Five component research projects collectively aim to foster private sector-led development in agriculture, increase agricultural productive capacity, and improve access to markets for farmers, particularly women farmers. Image: ACIAR/Conor Ashleigh

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1

Overview

Overview

As a research-for-development agency, the Australian Centre for International Agricultural Research (ACIAR) faces the intersecting and complex challenges of how to grow more food, improve human nutrition and reduce poverty using less land, water and energy.

One component of addressing this challenge is to lift the productivity, profitability and sustainability of agriculture, forestry and fisheries sectors in developing countries. Australia has outstanding capabilities in these fields. But technological advances are only part of the solution—advances also must be accessible and equitable to all people in the countries in which we work.

ACIAR works with partner countries to identify research priorities, and then to broker research partnerships and commission research projects. After a project is established, ACIAR monitors progress and outcomes throughout the project cycle to maximise impact and return on investment.

By facilitating collaborative international partnerships between public and private research institutions, ACIAR provides a vehicle for Australia to strategically contribute to poverty reduction and improved livelihoods in developing countries throughout the Indo-Pacific.

Australia's national interests are supported by ACIAR's activity in the region, through contributions to sustainable economic growth and enhanced regional stability, with a particular focus on economic diplomacy and women's economic empowerment.

ACIAR's work aligns closely with Australia's development assistance program, supporting research collaboration, while emphasising human capacity building and private sector-led development that is targeted at agriculture, forestry and fisheries.

In many instances, the outcomes of ACIAR-supported research-for-development programs—such as new technologies and better practices—are mutually beneficial to farmers and primary industries in Australia, as well as in partner countries.

A new strategic approach

The 2018–19 year of operation will be the first full year that ACIAR is guided by its 10-year Strategy 2018–2027. The strategy provides clear objectives for all areas in which ACIAR operates.

ACIAR's vision is a world where poverty has been reduced and the livelihoods of many have been improved through more productive and sustainable agriculture emerging from collaborative international research.

With this vision in mind, ACIAR operates according to six strategic objectives addressing:

- » food security and poverty reduction
- » natural resources and climate change
- » human health and nutrition
- » gender equity and women's empowerment
- » inclusive value chains
- » capacity building.

These objectives are consistent with ACIAR's purpose under its enabling legislation. They reflect the Australian Government's policy imperatives articulated in the Australian Overseas Development Assistance policy framework, the United Nations' Agenda 2030 Sustainable Development Goals and the Paris Agreement under the United Nations' Convention on Climate Change.

Results through partnerships

ACIAR generates and establishes research partnerships through the three pathways of:

- » bilateral country partnerships
- » multilateral research collaborations
- » co-investment alliances with development partners.

Each of the partnership models have their own procurement pathways, governance frameworks, quality assurance and risk management.

ACIAR's strategic objectives



Bilateral partnerships will encompass much of ACIAR's research program in 2018-19, where ACIAR commissions primarily Australian scientists (from universities, CSIRO, state government agencies or private firms) to undertake research projects consistent with jointly agreed priorities informed by regular consultations between ACIAR and partner countries. The Aid Investment Plans of Australia's overseas missions continue to inform ACIAR's bilateral and regional research partnerships. ACIAR intends to invest almost A\$77 million in research projects during 2018-19.

ACIAR investments in multilateral collaborations complement ACIAR's bilateral partnerships. Chief among these global initiatives supported by ACIAR is CGIAR (formerly known as the Consultative Group for International Agricultural Research). ACIAR manages Australia's contribution to CGIAR, which, in 2018-19, will be almost A\$30 million of restricted and unrestricted funding.

Australia's expertise in and commitment to international agricultural research is reflected in ACIAR staff being involved in the highest levels of governance of the CGIAR system. Chapter 2 'Global Program' presents a more detailed description of multilateral partnerships.

Co-investment alliances with development partners will continue to be an emerging partnership pathway for ACIAR, whereby ACIAR co-invests in jointly managed initiatives alongside other donors, such as the Department of Foreign Affairs and Trade (DFAT), the Canadian International Development Research Centre (IDRC), the Syngenta Foundation for Sustainable Agriculture, the Bill and Melinda Gates Foundation and the private sector. These initiatives might be in a single country, across several countries or in a region. This mode of investment is potentially the most suitable for work with the private sector, enabling ACIAR to respond quickly to partnership opportunities.

Research program redesigned

The full implementation of ACIAR's redefined research program coincides with the first full year of operation under the 10-year strategy. During 2017-18, ACIAR consolidated its research portfolio to 10 programs. From July 2018, the program encompasses:

- » key agriculture sectors—crops, fisheries, forestry, horticulture and livestock
- » science and disciplines supporting the sectors—agribusiness, social sciences, soil and land management, water and climate
- » assessment of achievements to guide future investment—impact evaluation.

During 2018-19, the ACIAR research program will support almost 250 bilateral projects. The projects and partnerships will operate in 35 countries in the Indo-Pacific region, as well as in Australia. ACIAR's operations are—to a large extent, but certainly not exclusively—planned and managed on a regional basis. The four regions of operation are:

- » Pacific
- » East and South-East Asia
- » South Asia
- » Eastern and Southern Africa.

The focus of the research program in each country and region is determined through various processes, consultations and forums, which are managed and coordinated by ACIAR's Country Programs. As a result of this process, the research program is designed to address the specific challenges and opportunities arising in the local environment, as well as building on established relationships.

For example, in the Pacific region in 2018-19 there will be individual country or issue-based projects in the Pacific islands as well as a fully integrated regional program—the second phase of the Pacific Agribusiness Research for Development Initiative (PARDI 2)—which consists of a cluster of projects with a crossdisciplinary unifying mechanism. For the Pacific islands, this program will improve rural livelihoods, and make them more resilient through more targeted, sustainable and inclusive agribusiness development.

In contrast, the research program in East and South-East Asia, which is the largest of the four ACIAR regions, has a relatively small investment in regional projects, reflecting the strong bilateral relationships that ACIAR has with individual countries in that region.

Chapter 3 'Research Program' presents regional priorities for 2018-19, and describes current and proposed projects for each region and country.

Evaluating our investment

With more than A\$100 million budgeted for investment in research-for-development programs in the Indo-Pacific region during 2018-19, it is essential that outcomes and benefits are identified and articulated.

ACIAR undertakes and values a vigorous and independent system of impact assessments of its investments, not only for accountability, but importantly, for learning. Understanding the impact of ACIAR investment is critical to improving the efficiency and effectiveness of current and future research-for-development programs. Chapter 4 'Impact Evaluation Program' outlines impact evaluation in detail.

During 2018-19, ACIAR will build on its strong project-level impact evaluation process, to design a more sophisticated portfolio-level monitoring and evaluation system. This will enable better analysis and reporting against our six high-level objectives, and better measurement of our performance against criteria and targets set out in the annual Corporate Plan. The monitoring and evaluation system will also inform portfolio management and outreach.



ACIAR's research structure



Investing in our partners

Building capacity in partner countries is a key priority for ACIAR to extend and maximise the adoption of new knowledge and technologies. During 2018-19, ACIAR is renewing its activities to have a greater focus on leadership and career development through various short and medium-term programs. Our focus on postgraduate training will continue as new initiatives are developed and implemented.

Chapter 5 'Capacity Building Program' presents the work of the Capacity Building Program in 2018-19.

Communicating our efforts

Through its Outreach Program, ACIAR will continue its efforts to increase understanding within Australia of the impact of Australia's aid investment through ACIAR, and ensure that more audiences in Australia and in our partner countries can access, understand and use our research findings. We will do this through various activities, including launching phase 2 of the redesigned ACIAR website, increasing social media following through strategic and informative content, and partnerships with leading media agencies to produce high-exposure content.

Chapter 6 'Outreach Program' outlines this year's plan for communication and outreach.

Supporting our efforts

To be successful in its core business, an organisation needs to have its own house in order. Through the key programs of Finance, Human Resources and Business Systems, ACIAR underpins effective and efficient project development and management, which are integral to managing a diverse portfolio of operations across partner countries. In the 10 overseas ACIAR offices—mostly located at Australian diplomatic posts—country office staff play a key role in managing stakeholder relations and ensuring that partner-country priorities are reflected in ACIAR's work.

Chapter 7 'Corporate Programs' presents the priorities of corporate management in 2018-19.

ACIAR's Gender Equity Policy and Strategy 2017-2022

Promoting gender equity and the empowerment of women and girls is an ongoing priority for ACIAR, and one of our six high-level objectives.

In line with the Australian Government's aid policy, ACIAR is committed to gender equity in the design, delivery and impact of all our activities, to bring sustained change to both women and men.

In parallel with, and complementing the development of, the 10-year Strategy 2018-2027, during 2017-18, ACIAR developed its Gender Equity Policy and Strategy 2017-2022, which was endorsed by the Commission for International Research in December 2017 and approved by the ACIAR Executive in February 2018.

From the outset, the document was framed around both internal (ACIAR as an organisation) and external (ACIAR's funded research programs) objectives. It takes a long-term, principles-based approach to gender equity that applies to the commissioning and management of research, as well as our capacity-building programs and internal people management.

As a clear demonstration of our commitment to gender equity, during 2017-18, gender balance at all levels within ACIAR improved substantially. The proportion of women in senior roles rose from 11% in 2016 to 38% in 2018.

ACIAR will remain committed to gender equity and the empowerment of women and girls in all of its endeavours in 2018-19. Many projects described in Chapter 3 'Research Program' clearly demonstrate this commitment.

Funding and expenditure

Table 1.1: Overview of planned funding and expenditure, 2016-17 to 2018-19

	2016-17 (actual)	2017-18 (estimated actual)	2018-19 (budget estimate)
A\$ million			
Funding			
Administered			
Administered appropriation	93.48	96.88	97.96
Special accounts	17.80	15.55	19.67
Total administered funding	111.28	112.43	117.63
Departmental			
Departmental appropriation	9.49	9.36	9.30
s74 retained revenue receipts ^(a)	1.36	0.55	2.27
Expenses not requiring appropriation ^(b)	0.27	0.44	0.38
Total departmental funding	11.12	10.35	11.95
Total funding	122.40	122.78	129.58
Expenditure			
Administered			
Bilateral partnerships and co-investment alliances and partnerships ^(c)	82.96	82.10	87.02
Multilateral partnerships ^(d)	19.90	20.71	19.11
Capacity Building Program ^(e)	7.81	8.30	9.00
Outreach Program	0.61	1.32	2.50
Total administered costs	111.28	112.43	117.63
Departmental			
Total departmental costs ^(f)	11.12	10.35	11.95
Total expenditure	122.40	122.78	129.58

(a) Revenue from external sources.

(b) Depreciation, amortisation and audit fees.

(c) Includes program support and impact evaluation.

(d) Unrestricted funding to international centres.

(e) Does not include training and communication activity within projects.

(f) Includes salaries, executive, Commission, Policy Advisory Council and corporate support.

Table 1.2: Planned project expenditure, by country, 2018-19

Region and country	Target appropriation budget allocations	ACIAR base appropriation	DFAT and other external funding	2018-19 total allocation
	(%)		A\$ million	
Pacific	24	14.93	4.17	19.10
Papua New Guinea	—	5.36	2.81	8.17
Fiji	—	3.62	—	3.62
Kiribati	—	0.48	0.47	0.95
Samoa	—	1.08	—	1.08
Solomon Islands	—	1.26	0.48	1.74
Tonga	—	1.18	—	1.18
Tuvalu	—	0.19	—	0.19
Vanuatu	—	1.76	0.41	2.17
East and South-East Asia	49	31.45	3.77	35.22
Cambodia	—	2.95	—	2.95
China	—	0.79	—	0.79
Indonesia	—	6.73	3.34	10.07
Lao PDR	—	4.34	0.43	4.77
Mongolia	—	0.19	—	0.19
Myanmar	—	4.36	—	4.36
Philippines	—	4.09	—	4.09
Thailand	—	0.02	—	0.02
Timor-Leste	—	2.39	—	2.39
Vietnam	—	5.59	—	5.59
South Asia	13	8.49	5.09	13.58
Afghanistan	—	—	0.09	0.09
Bangladesh	—	2.96	0.85	3.81
India	—	1.52	1.60	3.12
Nepal	—	0.92	0.80	1.72
Pakistan	—	2.96	1.75	4.71
Sri Lanka	—	0.13	—	0.13
Eastern and Southern Africa	14	8.93	0.00	8.93
Burundi	—	0.15	—	0.15
Ethiopia	—	1.38	—	1.38
Kenya	—	1.39	—	1.39
Malawi	—	0.57	—	0.57
Mozambique	—	0.54	—	0.54
Republic of South Africa	—	0.86	—	0.86
Rwanda	—	0.63	—	0.63
Tanzania	—	1.28	—	1.28
Uganda	—	0.77	—	0.77
Zambia	—	0.41	—	0.41
Zimbabwe	—	0.65	—	0.65
Other	—	0.30	—	0.30
Total project expenditure	100	63.80	13.03	76.83

Table 1.3: External funding expenditure, by country, 2016-17 to 2018-19

	2016-17 (actual)	2017-18 (estimated actual)	2018-19 (budget estimate)
A\$ million			
Pacific			
Papua New Guinea	5.94	3.91	2.81
Pacific island countries	1.39	1.39	1.36
East and South-East Asia			
Indonesia	0.24	1.73	3.34
Lao PDR	—	0.11	0.43
Myanmar	0.52	0.26	—
Timor-Leste	0.02	—	—
Vietnam	—	0.01	—
South Asia			
Afghanistan	3.10	0.48	0.09
Bangladesh	0.43	0.54	0.85
India	1.09	1.27	1.60
Nepal	0.51	0.63	0.80
Pakistan	1.02	1.47	1.75
Other			
Postgraduate scholarships	3.54	3.71	3.45
FAO regional consultation on biotechnologies in sustainable food systems and nutrition	—	0.04	—
Funding under negotiation			3.19
Total	17.80	15.55	19.67

Note: There is no external funding expenditure on projects and programs in Africa.



Vietnam

Table 3.22: Vietnam, key statistics, 2017

Country	GDP per capita (US\$)	Population (million)
Vietnam	2,343	95.54

Source: data.worldbank.org/indicator.

Table 3.23: ACIAR funding to Vietnam, 2016-17 to 2018-19

Year	A\$ million
2016-17 (actual)	4.9
2017-18 (estimated actual)	5.1
2018-19 (budget)	5.6



Country context

Vietnam experienced remarkably rapid economic growth in the two decades following the Doi Moi reforms of the 1980s, lifting millions of people out of poverty. But growth has recently slowed, and many of the gains from the initial wave of reforms have already been realised. Vietnam now faces a challenging period as it negotiates the pitfalls of the ‘middle-income trap’, with growth potentially faltering as wages rise and the country becomes uncompetitively wedged between economies based on cheap labour and those based on stronger institutions and higher productivity. Inequality remains significant and 15 million people continue to live below the national poverty line. Ethnic minorities still have not benefitted equally from economic growth—although they comprise just 15% of the population, they account for around half of those living in poverty.

Aid Investment Plan, Vietnam, 2015-16 to 2019-20 (DFAT)

Vietnam ended 2017 with a growth rate of 6.8%, the highest since 2011. Agriculture remains the third largest contributor to the economy, and accounts for 15.3% of the current GDP, despite the negative impacts from multiple severe floods and storms across the country during the year. Export value of agricultural, especially horticultural, products has increased, due to better quality management and market development.

There have been positive changes in the sector, especially for the two national targeted programs aimed at sustaining agricultural production and increasing the prosperity of farmers in rural areas—agricultural restructuring and new rural development programs.

Food safety is an important concern in Vietnam, and efforts are being made to ensure safe production, partly because of the more stringent quality demands for exported products. Organic farming is increasingly practised throughout the country.

The private sector also receives strong support from the Vietnamese Government. Both established and start-up companies are encouraged to invest in agriculture.

The companies are considered a catalyst for high-tech/internet-of-things applications, which trigger agriculture development for Vietnam.

ACIAR continues to be part of the Australian Government’s commitment to development in Vietnam, which underlines equal partnerships in economic growth, security and innovations.

ACIAR’s Vietnam program is well aligned with Vietnam’s agricultural priorities under the Science and Technological Co-operation Treaty 2014, focusing on agriculture, aquaculture, food security, environment and natural resource management.

It also supports the DFAT Aid Investment Plan 2015-16 to 2019-20 in Vietnam, which aims to:

- » enable and engage the private sector for development
- » assist the development and employment of a highly skilled workforce
- » promote women’s economic empowerment, including ethnic minorities.

ACIAR works closely with the Department of Agriculture and Water Resources, and has actively been participating in the Vietnam–Australia Agricultural Forum.

Country priorities

ACIAR and Vietnam recently signed a strategy for research collaboration for 2017–2027. The strategy is founded on a mutual recognition that the relationship between ACIAR and Vietnam has grown from donor–recipient to partnership, to co-investment, and, possibly, through this period, to trilateral collaboration.

The strategy expresses the desire of both parties to join with the private sector, wherever possible, to catalyse opportunities for poor residents of rural and urban areas through inclusive agribusiness systems. It also highlights a strong focus on transformational opportunities for women in research, agribusiness systems and on farms.

The strategy's 10-year goals include to:

- » establish and sustain long-term international partnerships in research and technology development
- » improve capacity of Vietnam researchers, research managers and development partners to support sustainable and equitable growth through agricultural research
- » improve the skills, livelihoods and incomes of smallholder farmers, including ethnic minorities in mountainous areas of Tay Nguyen and Tay Bac, supported by knowledge networks that allow profitable engagement in domestic and international markets
- » improve human health and nutrition through research on integrated farming systems, nutrition-sensitive agriculture and one health
- » improve quality and safety of meat, fish, vegetables and fruit for domestic consumption
- » develop deeper knowledge of markets that help prevent and reduce economic shocks for participants in the agricultural supply chains
- » reduce inputs of chemicals and fertiliser for a cleaner environment, safer produce, improved soil health, and more profitable sustainable production systems
- » improve resource use efficiency, producing more food with fewer resources
- » implement practices and inform policy-makers to manage climate change impacts in agriculture.

The strategy focuses on the six research themes/sectors of:

- » 1. food safety
- » 2. climate change
- » 3. soil fertility and efficiency of crop-livestock systems
- » 4. market knowledge, access to markets, and skills for better policy analyses
- » 5. use of value from forests
- » 6. aquaculture.

The research themes are focused on Mekong Delta, Central Highlands and North West. While Mekong Delta and Central Highlands have capacity for exporting agricultural products, they face climate change challenges, and share challenges for development—including sloping land conservation, generating better livelihoods for ethnic minorities and economically empowering women. Marine aquaculture research will occur along the coastal line, while forestry research on the plantation and value-added processing might occur across the country. More details on these research themes are available at <vietnam.embassy.gov.au/hnoi/ACIAR_Strategy.html>

2018–19 research program

ACIAR supports 38 projects in Vietnam, 13 of which are specific to this country, and the remainder are part of regional projects. The projects address ACIAR's high-level objectives, as outlined in the 10-year Strategy 2018–2027, and engage with eight of ACIAR's research programs.

The following sections briefly describe ACIAR-supported projects in Vietnam, for each research program. Each project description is referenced to a list at the end of this section, which provides the ACIAR project code and title.

Agricultural Development Policy

In Vietnam and Laos, a project is identifying public policy options to develop forest plantations—by supporting linkages between industry and smallholder producers—and to support the contribution of forest plantations to rural livelihoods, poverty alleviation and environmental sustainability.¹

Another project is developing capacity in policy analysis and engaging with key stakeholders and policy-makers to improve food safety in Vietnam's local and international markets. Foodborne illness is a major public health issue across the East Asian region, and particularly in Vietnam, and food safety risks are likely to increase with rapid intensification of animal food production systems and urbanisation.²

A new short research activity aims to facilitate more robust business activity in the agriculture sector in Vietnam, and increase investment in agriculture by the private sector over the longer term, by proposing changes to existing government policies and/or proposing new policies. This project complements an existing review by the Ministry of Planning and Investment of agricultural policies.³

Agribusiness

Several projects in Vietnam aim to increase the productivity, profitability and sustainability of agricultural production, through market research, market development and value-chain analysis. These projects aim to ensure all farmers have equitable access to opportunities in Vietnam to engage with a growing global economy.

Focusing on women and ethnic minorities in north-western Vietnam, opportunities for smallholder vegetable farmers are being identified through comprehensive market analysis, testing of valuechain and postharvest interventions, and determining best management practices.⁴

A similar approach is being taken by a project in southern Vietnam to improve net income and livelihoods of smallholder mango growers, by identifying opportunities in the fresh and processed mango value chain. The project also aims to overcome selected barriers to competitiveness and emphasise understanding of the roles and opportunities for women in the industry.⁵

A project in Vietnam and Indonesia aims to make smallholder cassava production more profitable and sustainable, by linking value-chain actors to increase the adoption of improved technologies.⁶

Building on earlier research and market development in the Moc Chau district of Vietnam, a project focuses on upscaling off-season vegetable production systems in Vietnam and Myanmar, for the supply of safe produce into urban, wholesale and retail markets.⁷

Five small research activities apply a strategic agribusiness approach to mango research and development in the Asia-Pacific region. In addition to undertaking targeted pilot research and scoping studies, the small research activities will have an important function to create networks, and to engage and collaborate with multiple Australian and key Asia-Pacific research, government and industry partners.

The objectives of the mango agribusiness projects are to:

- » improve communication, collaboration and capacity development (information access)⁸
- » identify market development opportunities and implications in China⁹
- » identify strategic research and development opportunities (particularly for biosecurity) for market entry¹⁰
- » evaluate opportunities for improving mango quality¹¹
- » identify priority opportunities in fruit processing in selected mango markets.¹²

The rapid expansion of growing area for cassava has been closely followed by the emergence of certain pests and diseases, as a result of unchecked transfer of planting materials. A small research project will develop an emergency response and long-term management strategy for cassava mosaic virus in Cambodia and Vietnam.¹³

Another set of projects will address various aspects of understanding and improving market opportunities in Vietnam, and neighbouring countries for some projects. These projects will:

- » examine innovative and inclusive financing of agricultural value chains in Vietnam, Indonesia and Myanmar¹⁴
- » develop a beef trade model and information network in Vietnam and neighbouring countries¹⁵
- » integrate gender and social inclusion into agricultural value-chain research in Vietnam¹⁶
- » increase smallholder linkages to markets, by optimising transport and logistics infrastructure.¹⁷

Crops

Rice industries across Asia, including growers in Vietnam, will reap future benefit from research being conducted at IRRI to identify the genetics responsible for low chalk in rice grain. The project aims to validate functional molecular markers that can routinely be used to reduce chalk in rice breeding programs.¹⁸

Fisheries

ACIAR's aquaculture program in Vietnam has been tailored to complement the Vietnamese Government's significant investment in research infrastructure and staff development for aquaculture. The program focuses on capacity building in key skill areas (genetics and husbandry), as well as the timely transfer and adaptation of suitable aquaculture technologies. Project outputs will benefit industries throughout the Indo-Pacific region, including Australia.

Before 2007, oyster farming in Vietnam was not established. Now, Vietnam produces more than 15,000 tonnes of oysters annually, and oyster farming has spread across 28 provinces. Demand for oysters in the domestic market has increased rapidly, and has a great potential for export.

The rapid development of oyster farming has been driven by the contribution from ACIAR's fisheries research program. Community involvement is growing, and the processing and marketing sectors are expanding.

Currently, an estimated 70% of oysters in Vietnam are raised by smallholder farmers in coastal areas, especially in Hai Phong and Quang Ninh. Several large commercial companies have also seized the opportunity in this sector, and there are private farms specialising in commercial seed production.

Oyster farming has created about 3,000 jobs, including those working in the processing and marketing sectors. A follow-on project aims to increase hatchery-based bivalve production in Vietnam and New South Wales, Australia, to expand opportunities for coastal communities to rear bivalve molluscs.¹⁹ With similar aims to the oyster project, another project is working to scale up community-based sea cucumber culture in Vietnam and the Philippines.²¹

Research to develop giant grouper mariculture aims to collaboratively devise technologies for breeding the fish in captivity, and managing the broodstock and larval rearing in a sustainable and profitable manner.²⁰

Production of cultured half-pearls (mabé) provides significant opportunities for coastal communities to generate an income. Oysters used for mabé production are found in Vietnam, but they are not used for mabé or handicraft production, despite a considerable tourist market.



Using expertise developed in Tonga, this project will assess the feasibility of establishing community-based mabé culture in the Nha Trang area of Vietnam in partnership with the Ministry of Fisheries, Research Institute for Aquaculture.²²

Forestry

Vietnam has about two million hectares of Australian eucalyptus and acacia plantations that supply major processing industries and export markets, generating substantial income for smallholder plantation owners and the people engaged in forest industries. ACIAR's forestry program adds value to these industries through several research and development projects.

One project aims to develop appropriate biological controls for gall wasp, an insect pest of eucalypt plantations in the Mekong region, by importing and testing natural enemies of the pest from Australia. The project will focus on forests in Lao PDR, with some related work in Vietnam, Thailand and Cambodia.²³

A project in Vietnam and Indonesia will help growers of short rotation eucalypt and acacia plantations to improve productivity and profitability. Acacias have been a plantation species of choice in both countries, but bacterial wilt and root rot diseases threaten productivity. Project work will continue to show the benefits and limitations of eucalypts as replacement for acacias.²⁴

Another project in Vietnam and Indonesia also focuses on health of acacia plantations, to reduce the impacts of two very damaging fungal diseases (*Ganoderma* and *Ceratocystis*) that affect acacia plantations throughout South-East Asia.²⁵

Research will continue on the development and adoption of locally-appropriate market-based agroforestry systems and rehabilitation of degraded forests in north-western Vietnam. The project works closely with the Department of Agricultural and Rural Development offices in Son La, Yen Bai and Dien Bien provinces to implement 'exemplar landscapes' to support adoption of the new systems, and improve livelihood options for the H'mong and Thai ethnic minorities living in these provinces.²⁶

Global Program

Work continues on collecting detailed institutional, financial, human resource and research output data from agricultural research agencies to be included in the ASTI database, and on supporting stakeholder access to such information, analysis and support for future policy through various online tools and publications. ASTI provides open-access data and analysis on agricultural research systems in developing countries. This project will be implemented by IFPRI and APAARI, in close collaboration with the main national agricultural research institutes of the region.²⁷

Livestock Systems

Market demand for beef is increasing rapidly in Vietnam, but cannot be met by current levels of domestic production. A project is investigating and implementing whole-farm solutions for smallholder cattle producers in the highlands of north-west Vietnam to shift from extensive to more intensive production systems, so that they can meet market specifications, increase market linkages and improve profitability of smallholder farmers.²⁸

Similarly, demand for goat meat in Vietnam is high, and the goat population of Vietnam has trebled over the past 10 years. A small research activity will deliver models for goat production and marketing systems to capitalise on strong opportunities, and create market linkages for smallholder farmers in areas of Lao PDR to high-value markets in Vietnam.²⁹ Following on from this research, a new project will develop new goat production practices that are sustainable and productive, recognising that expanded goat production using traditional extensive goat raising methods would result in overgrazing of feed resources, negative consequences for the environment and higher incidence of diseases and parasites in livestock.³²

Asia is a major global producer of pork, with South-East Asia and southern China currently providing the majority of regional production. Several projects look to improve smallholder pig enterprises through better product quality and production systems.

Food safety is a significant and growing concern in Vietnam, and presents a barrier to smallholder farmers wishing to sell product in high-value domestic and export markets. Through market-based approaches the Safe Pork project aims to reduce the burden of foodborne disease across various markets in Vietnam.³¹

Credible, consolidated and easy-to-access knowledge underpins improvements to livestock production. A small project continues to update the on-line tool, SoFT (Selection of Forages for the Tropics), ensuring that researchers and development professionals in developing countries have access to the latest information on forages.³⁰

Soil and Land Management

The ACIAR Soil and Land Management Research Program addresses various issues in Vietnam, with the common aim of sustainable resource management to improve livelihoods and productivity.

A short research activity in 2018-19 will seek to understand the current status of inoculant production, distribution and use in the Greater Mekong subregion. The findings will clarify anecdotal evidence of a decline in the use, efficacy and production standards of inoculants that increase nutrient acquisition, particularly, but not limited to, rhizobia and mycorrhizae inoculants. The project will also identify the potential application of recent advances in inoculant delivery.³³

The productivity and sustainability rice-shrimp farming systems in the Mekong Delta of Vietnam is threatened by increasing salinity caused by changing environmental conditions and riverine and tidal flow regulation. Shrimp production is also reduced through recurrent disease outbreaks exacerbated by stocking of poor-quality post-larvae. A project is testing a re-designed rice-shrimp farming system and new varieties of salt-resistant rice. Farm management and institutional arrangements are also being assessed to determine their influence on the productivity of new rice-shrimp farming systems.³⁴

Improving the productivity and sustainable management of low-fertility sands through improved water and nutrient-use efficiency, and reduced exploitation and contamination, are common priorities for south-central coastal Vietnam and Western Australia. A project is looking to improve planning, regulation and use of groundwater, by developing a groundwater model and technologies to increase productivity.³⁵

Increasing numbers of smallholder farmers in Laos and northern Vietnam are growing maize on sloping land to meet demand for concentrate livestock feeds by Chinese and South-East Asian poultry, pig and cattle industries. A project is helping farmers adopt maize-based farming systems that reduce soil degradation, while improving smallholder livelihoods and economic viability.³⁶

Water and Climate

A new project is assessing ways to reduce agricultural emissions in the Asia-Pacific, and offset methods appropriate to developing countries (using Fiji and Vietnam as pilot examples). The project leverages the success of Australian emissions accounting, carbon farming offset methods and emission-reduction research in the agricultural and land sectors. It will develop a governance checklist enabling user countries to identify, adopt and manage locally appropriate emission-reduction options. It will also provide a detailed analysis of potential cobenefits to food security and existing capacity gaps to using carbon farming methods or emission-reduction options in Fiji and Vietnam, in delivering to their commitments under the Paris Agreement (COP21).³⁷

2018-19 project outputs

- » Preliminary recommendations provided for improved market linkages, productivity, food safety, group governance and household livelihoods in smallholder vegetable and temperate fruit systems.
- » Knowledge of existing agricultural development policies for food security in Vietnam increased.
- » One integrated agriculture and forestry systems land-use plan prepared by a multisector planning forum in North-West Vietnam.
- » Research partnerships initiated to improve smallholder incomes in the north-western highlands region, through identifying improved market information, market access and value-chain competitiveness for high-value fruits and vegetables.
- » Opportunities and constraints for smallholder production and marketing of cassava in different agro-economic settings assessed.

- » Hatchery production and farming techniques for edible oysters made available, and large-scale industry development supported.
- » Culture methods for mabé production made available, and the feasibility of community-based handicraft production assessed.
- » Pond-based sea cucumber production methods developed, and market analysis help farmers maximise income.
- » Hatchery guidelines for giant grouper made available, and research capacity of fisheries organisations strengthened.
- » A regional model created to develop an understanding of the flow of beef products and beef cattle.
- » Potential incentive-based approaches to reduce risks associated with pig diseases and porkborne illnesses in pork value chains documented.
- » Competitiveness of smallholder pig producers in north-western Vietnam assessed.
- » A greater understanding of inoculant use and production gained, with potential future application of the technology in the Greater Mekong subregion.
- » A program to improve agricultural productivity and sustainability on sloping lands in the northwestern highlands started.
- » The use of digital data collection applications explored.

Five-year region outcomes

- » Advanced integration of farm enterprises covering cropping, livestock and forestry with improved and holistic agricultural systems.
- » Reduced poverty, by linking disadvantaged smallholders to markets.
- » Development of policy options to encourage high-value timber production and higher incomes.
- » Better food safety and farmer incomes, by enabling participation in export supply chains.
- » Development and application of scientific and policy options to assess climate limitations and variability.

Country Manager, Vietnam

Ms Nguyen Thi Thanh An

Research Program Managers

To be appointed, Agribusiness

Dr Eric Huttner, Crops

Dr Ann Fleming, Fisheries

Dr Nora Devoe, Forestry

Ms Mellissa Wood, Global Program

Dr Werner Stur/Dr Anna Okello, Livestock Systems

Dr Robert Edis, Soil and Land Management

Dr Robyn Johnston, Water and Climate

For information about Agricultural Development Policy projects, contact Dr Daniel Walker

Contact details are provided in Appendix 2



Current and proposed projects

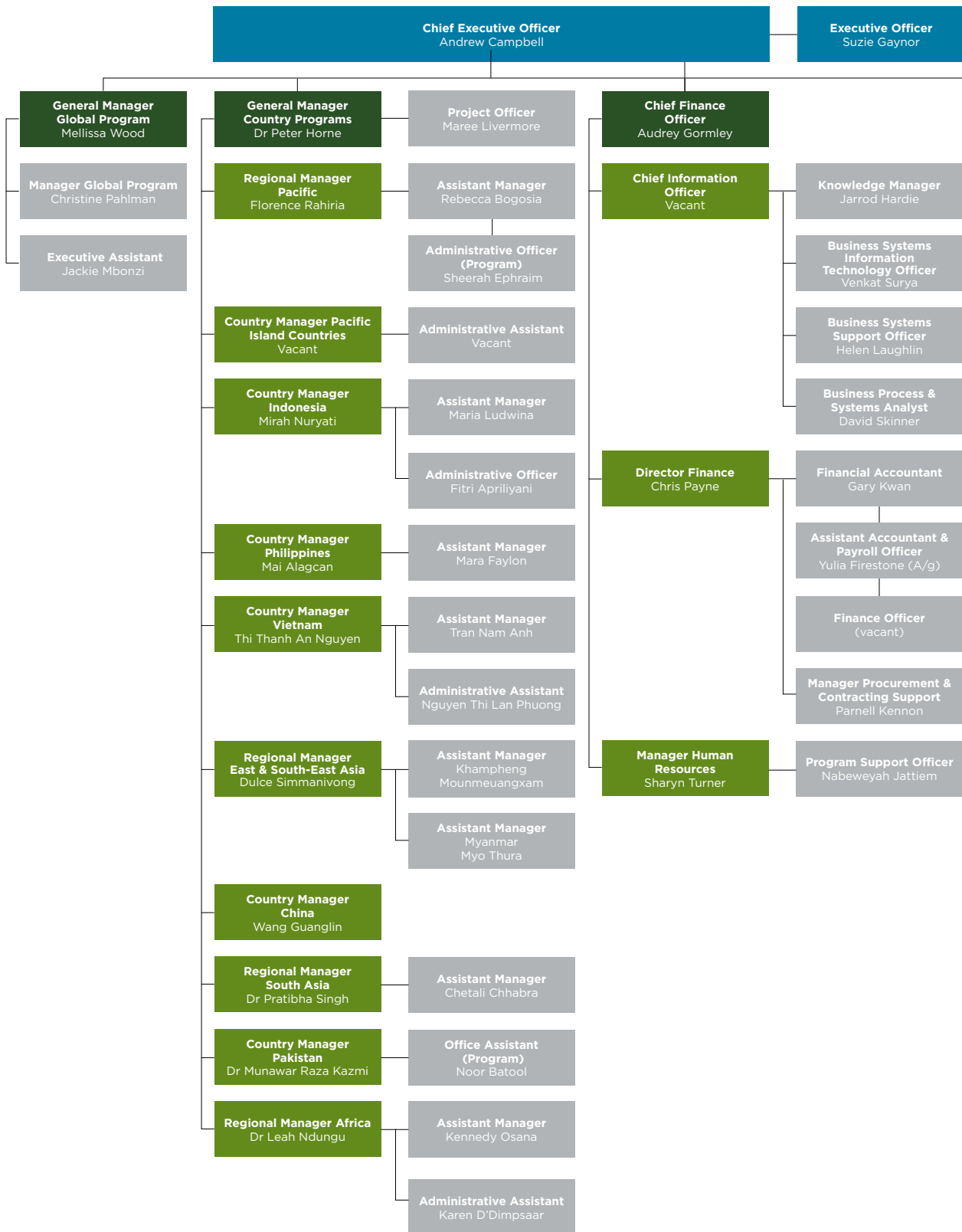
1. **ADP/2014/047**—Improving policies for forest plantations to balance smallholder, industry and environmental needs in Lao PDR and Vietnam
2. **ADP/2016/140**—Policy analysis of food safety and trade in Vietnam
3. **ADP/2018/120**—Evaluating and improving policies for attracting investment in the agricultural sector in Vietnam
4. **AGB/2012/059**—Towards more profitable and sustainable vegetable production systems in north-western Vietnam
5. **AGB/2012/061**—Improving smallholder farmer incomes through strategic market development in mango supply chains in southern Vietnam
6. **AGB/2012/078**—Developing value-chain linkages to enhance the adoption of profitable and sustainable cassava production systems in Vietnam and Indonesia
7. **AGB/2014/035**—Improving livelihoods in Myanmar and Vietnam through vegetable value chains
8. **AGB/2016/006**—Supporting access to mango research information, communication, collaboration and capacity development
9. **AGB/2016/007**—Challenges and opportunities for meeting requirements of China mango markets
10. **AGB/2016/008**—Opportunities and strategies to improve biosecurity, market access and trade for selected mango markets
11. **AGB/2016/009**—Enhancing mango fruit quality in Asian mango chains
12. **AGB/2016/010**—Priority opportunities in tropical fruit processing in selected mango markets
13. **AGB/2016/032**—Developing an emergency response and long-term management strategy for cassava mosaic virus in Cambodia and Vietnam
14. **AGB/2016/163**—Innovative and inclusive agriculture value-chain financing
15. **AGB/2016/196**—Sustainable and inclusive development of the cattle and beef industry in South-East Asia and China
16. **AGB/2017/008**—Integrating gender and social inclusion into agricultural value chain research in Vietnam
17. **AGB/2017/036**—Enhancing smallholder linkages to markets by optimising transport and logistics infrastructure
18. **CIM/2016/046**—Breeding for low chalk in rice
19. **FIS/2010/100**—Enhancing bivalve production in northern Vietnam and Australia
20. **FIS/2012/101**—Developing technologies for giant grouper (*Epinephelus lanceolatus*) aquaculture in Vietnam, the Philippines and Australia
21. **FIS/2016/122**—Increasing technical skills supporting community-based sea cucumber production in Vietnam and the Philippines
22. **FIS/2016/126**—Half-pearl industry development in Tonga and Vietnam
23. **FST/2012/091**—Biological control of galling insect pests of eucalypt plantations in the Mekong region
24. **FST/2014/064**—Maximising productivity of eucalyptus and acacia plantations for growers in Indonesia and Vietnam
25. **FST/2014/068**—Management strategies for acacia plantation diseases in Indonesia and Vietnam
26. **FST/2016/152**—Developing and promoting market-based agroforestry and forest rehabilitation options for north-western Vietnam
27. **GP/2016/093**—Monitoring agricultural research investments, capacity and impact in South-East Asia and the Pacific
28. **LPS/2015/037**—Intensification of beef cattle production in upland cropping systems in north-western Vietnam
29. **LPS/2016/027**—Assessing goat production and marketing systems in Lao PDR and market linkages into Vietnam
30. **LPS/2016/097**—Update of SoFT (selection of forages for the tropics)
31. **LS/2016/143**—Safe pork: market-based approaches to improving the safety of pork in Vietnam
32. **LS/2017/034**—Smallholder goats systems and marketing in Lao PDR and Vietnam
33. **SLaM/2018/123**—Assessment of biofertilisers for enhancing agriculture in Mekong region countries
34. **SMCN/2010/083**—Improving the sustainability of rice-shrimp farming systems in the Mekong Delta, Vietnam
35. **SMCN/2012/069**—Integrated water, soil and nutrient management for sustainable farming systems in south-central coastal Vietnam and Australia
36. **SMCN/2014/049**—Improving maize-based farming systems on sloping lands in Vietnam and Lao PDR
37. **LWR/2017/029**—Emission-reduction options for nationally determined contributions (NDCs) in the Asia-Pacific region, Fiji and Vietnam



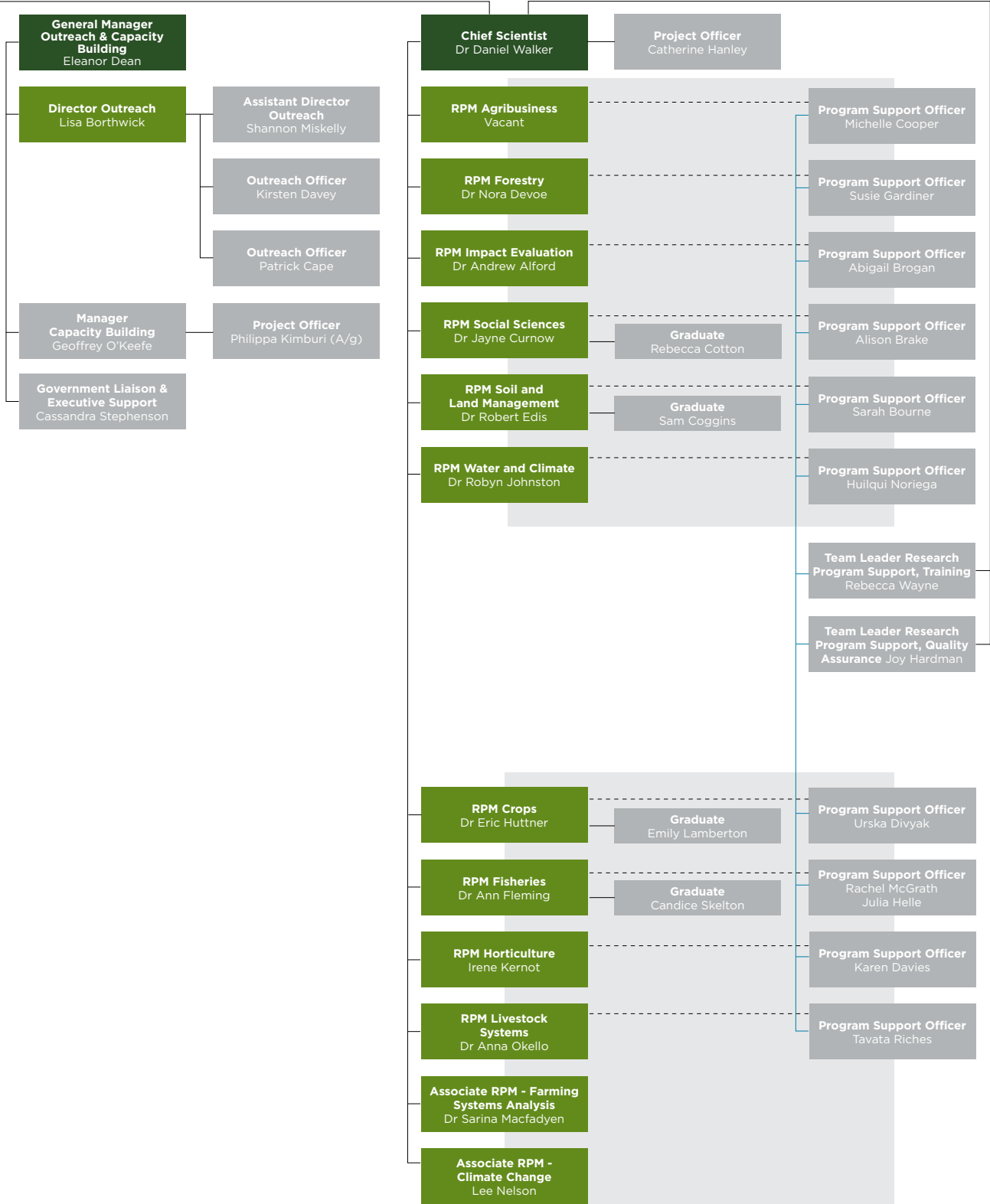
Appendices



Appendix 1 Organisational structure



Positions and staff current for six months up until December 2018
RPM - Research Program Manager



Appendix 2 ACIAR directory

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Research Program Managers

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Appendix 3 Commissioned organisation and project leader for current and proposed projects

Project title	Project code	Commissioned organisation	Project leader
Agricultural Development Policy Research Program			
Policy and institutional reforms to improve horticultural markets in Pakistan	ADP/2014/043	Monash University	Dr Thilak Mallawaarachchi
Improved seaweed culture and postharvest waste utilisation in South-East Asia	SMAR/2008/025	Southern Cross University	Assoc Prof Symon Dworjany
Agricultural policy research to support natural resource management in Indonesia's upland landscapes	ADP/2015/043	The University of Adelaide	Prof Randy Stringer
Understanding the drivers of successful and inclusive rural regional transformation: sharing experiences and policy advice in Bangladesh, China, Indonesia and Pakistan	ADP/2017/024	The University of Adelaide	Prof Christopher Findlay
Improving policies for forest plantations to balance smallholder, industry and environmental needs in Lao PDR and Vietnam	ADP/2014/047	The University of Melbourne	Prof Rod Keenan
Strengthening incentives for improved grassland management in China and Mongolia	ADP/2012/107	The University of Queensland	Dr Colin Brown
Creating wealth in smallholders farms through efficient credit systems in Pakistan	ADP/2016/028	The University of Queensland	Assoc Prof John Steen
Evaluating and improving policies for attracting investment in the agricultural sector in Vietnam	ADP/2018/120	The University of Sydney	Dr Tiho Ancev
Policy analysis of food safety and trade in Vietnam	ADP/2016/140	The University of Western Australia	Dr Elizabeth Petersen
Efficient participatory irrigation institutions to support productive and sustainable agriculture in south Asia	ADP/2014/045	University of South Australia	Prof Lin Crase
Developing competitive and inclusive value chains of pulses in Pakistan	ADP/2017/004	University of Tasmania	Dr Rajendra Adhikari
Policy drivers for public-private partnerships in pacific organics: improving extension policy through an evidence-based approach	ADP/2018/131	University of the Sunshine Coast	Assoc Prof Christine Jacobson
Agribusiness Research Program			
Improving livelihoods in Myanmar and Vietnam through vegetable value chains	AGB/2014/035	Applied Horticultural Research	Dr Gordon Rogers
Analysis of the private sector landscape in Myanmar: opportunities for inclusive agribusiness	AGB/2018/125	Business for Millenium Development	Mr Mark Ingram
Increasing the sustainability, productivity and economic value of coffee farming systems and value chains in the Central Highlands region of Vietnam	AGB/2018/208	CIRAD	Mr Philippe Vaast
Enhancing smallholder linkages to markets by optimising transport and logistics infrastructure	AGB/2017/036	CSIRO Land and Water	Dr Chris Chilcott
Improving smallholder farmer incomes through strategic market development in mango supply chains in southern Vietnam	AGB/2012/061	Griffith University	Dr Robin Roberts
Supporting access to mango research information, communication, collaboration and capacity development	AGB/2016/006	Griffith University	Dr Robin Roberts
Challenges and opportunities for meeting requirements of China mango markets	AGB/2016/007	Griffith University	Dr Robin Roberts

Project title	Project code	Commissioned organisation	Project leader
Opportunities and strategies to improve biosecurity, market access and trade for selected mango markets	AGB/2016/008	Griffith University	Dr Robin Roberts
Enhancing mango fruit quality in Asian mango chains	AGB/2016/009	Griffith University	Dr Robin Roberts
Priority opportunities in tropical fruit processing in selected mango markets	AGB/2016/010	Griffith University	Prof Chengrong Chen
Developing an emergency response and long-term management strategy for cassava mosaic virus in Cambodia and Vietnam	AGB/2016/032	International Center for Tropical Agriculture	Dr Nami Minato
Inclusive agriculture value chain financing	AGB/2016/163	International Food Policy Research Institute	Dr Alan de Brauw
Integrating gender and social inclusion into agricultural value chain research in Vietnam	AGB/2017/008	International Potato Center	Ms Nozomi Kawarazuka
Pacific Agribusiness Research in Development Initiative Phase 2 (PARDI 2)	AGB/2014/057	Pacific Australia Reforestation Company	Dr Lex Thomson
Improving market integration for high value fruit and vegetable production systems in Indonesia	AGB/2009/060	The University of Adelaide	Prof Randy Stringer
Towards more profitable and sustainable vegetable production systems in north-western Vietnam	AGB/2012/059	The University of Adelaide	Dr Wendy Umberger
Improving milk supply, competitiveness and livelihoods in smallholder dairy chains in Indonesia	AGB/2012/099	The University of Adelaide	Dr Wendy Umberger
Impact assessment of cocoa interventions in Vanuatu	AGB/2016/053	The University of Adelaide	Dr Alexandra Peralta
Revision and update of Markets for the Poor (M4P) and Agribusiness Master Class (AMC)	AGB/2018/121	The University of Adelaide	Dr Wendy Umberger
Improving smallholder incomes in the north-western highlands of Vietnam by increasing access and competitiveness in regional temperate and subtropical fruit markets	AGB/2012/060	The University of Queensland	Mr Oleg Nicetic
Developing value-chain linkages to enhance the adoption of profitable and sustainable cassava production systems in Vietnam and Indonesia	AGB/2012/078	The University of Queensland	Dr Dominic Smith
Developing vegetable and fruit value chains and integrating them with community development in the southern Philippines	AGB/2012/109	The University of Queensland	Dr Phillip Currey
Sustainable and inclusive development of the cattle and beef industry in Vietnam and trade relationships with other countries in the region	AGB/2016/196	The University of Queensland	Dr Dominic Smith
Developing vegetable and fruit value chains and integrating them with community development in the southern Philippines	AGB/2017/039	The University of Queensland	Dr Gomathy Palaniappan
Strengthening leadership, coordination and economic development of the temperate fruit industry in northern Vietnam	AGB/2018/171	The University of Queensland	Mr Oleg Nicetic
Inclusive agribusiness-led development for high-value fruit and vegetable in the southern Philippines	AGB/2018/196	The University of Queensland	Dr Neal Menzies
Evaluating smallholder livelihoods and sustainability in Indonesian coffee and cocoa value chains	AGB/2010/099	The University of Sydney	Dr Jeff Neilson
Increasing the sustainability, productivity and economic value of coffee and black pepper farming systems and value chains in the Central Highlands region of Vietnam.	AGB/2018/175	World Agroforestry Centre	Dr La Nguyen
Crops Research Program			
Increasing productivity and profitability of pulse production in cereal based cropping systems in Pakistan	CIM/2015/041	Charles Sturt University	Dr Ata Rehman

Project title	Project code	Commissioned organisation	Project leader
Insect tolerant chickpea for Bangladesh	CIM/2016/039	CSIRO Agriculture and Food	Dr TJ Higgins
Understanding drill-seeding of rice techniques and business models	CIM/2018/113	Deakin University	Dr John Hornbuckle
Improving post-rainy sorghum varieties to meet the growing grain and fodder demand in India	CIM/2007/120	International Crops Research Institute for the Semi-Arid Tropics	Dr Vincent Vadez
Identification of sources of resistance to wheat blast and their deployment in wheat varieties adapted to Bangladesh	CIM/2016/219	International Maize and Wheat Improvement Center	Dr Pawan Kumar Kumar
Sustainable and resilient farming systems intensification in the Eastern Gangetic Plains (SRFSI)	CSE/2011/077	International Maize and Wheat Improvement Center	Dr Thakur Tiwari
Sustainable intensification of maize-legume cropping systems for food security in eastern and southern Africa II (SIMLESA II)	CSE/2013/008	International Maize and Wheat Improvement Center	Dr Mulugetta Mekuria
Farm mechanisation and conservation agriculture for sustainable intensification	FSC/2012/047	International Maize and Wheat Improvement Center	Dr Bruno Gerard
Breeding for low chalk in rice	CIM/2016/046	International Rice Research Institute	Dr Nese Sreenivasulu
Protection of stored grains against insect pests	CIM/2017/031	Plant Biosecurity Cooperative Research Centre	Dr David Eagling
Value chain and policy interventions to accelerate adoption of Happy Seeder zero tillage in rice-wheat farming systems across the Gangetic Plains	CSE/2017/101	The University of Adelaide	Dr Adam Loch
Developing a foundation for the long-term management of basal stem rot of oil palm in Papua New Guinea and Solomon Islands	CIM/2012/086	The University of Queensland	Assoc Prof Ian Godwin
Identifying Eastern Gangetic Plains Soil Constraints	CROP/2018/210	The University of Queensland	Dr Neal Menzies
Mitigating the effects of stripe rust on wheat production in South Asia and eastern Africa	CIM/2014/081	The University of Sydney	Prof Robert Park
Sustainable intensification and diversification in the lowland rice system in Northwest Cambodia	CSE/2015/044	The University of Sydney	Assoc Prof Daniel Tan
Incorporating salt-tolerant wheat and pulses into smallholder farming systems in southern Bangladesh	CIM/2014/076	The University of Western Australia	Prof William Erskine
Agricultural innovations for communities for intensified and sustainable farming systems in Timor-Leste (AI-Com)	CIM/2014/082	The University of Western Australia	Prof William Erskine
Faba Bean in Ethiopia - Mitigating disease constraints to improve productivity and sustainability	CIM/2017/030	The University of Western Australia	Prof Martin Barbetti
Enhancing farm-household management decision-making for increased productivity in the Eastern Gangetic Plains	CSE/2012/108	The University of Western Australia	Dr Fay Rola-Rubzen
Establishing the international mungbean improvement network	CIM/2014/079	The World Vegetable Center	Dr Ramakrishnan Nair
Improved mungbean harvesting and seed production systems for Bangladesh, Myanmar and Pakistan	CIM/2016/174	The World Vegetable Center	Dr Ramakrishnan Nair
Fisheries Research Program			
Building research and project management skills in fisheries staff in Papua New Guinea	FIS/2010/055	University of Tasmania	Prof Janelle Allison
Enhancing bivalve production in northern Vietnam and Australia	FIS/2010/100	Department of Primary Industries (NSW)	Dr Wayne O'Connor

Project title	Project code	Commissioned organisation	Project leader
Improving the design of irrigation infrastructure to increase fisheries production in floodplain wetlands of the Lower Mekong and Murray-Darling Basins	FIS/2012/100	Department of Primary Industries (NSW)	Dr Craig Boys
Developing technologies for giant grouper (<i>Epinephelus lanceolatus</i>) aquaculture in Vietnam, the Philippines and Australia	FIS/2012/101	University of the Sunshine Coast	Prof Abigail Elizur
Sustainable management of sport fisheries for communities in Papua New Guinea	FIS/2013/015	James Cook University	Assoc Prof Marcus Sheaves
Quantifying biophysical and community impacts of improved fish passage in Lao PDR and Myanmar	FIS/2014/041	Charles Sturt University	Dr Lee Baumgartner
Research for development of lobster growout technology in Indonesia	FIS/2014/059	James Cook University	Dr Clive Jones
Developing pearl industry-based livelihoods in the western Pacific	FIS/2014/060	James Cook University	Prof Paul Southgate
Improving technical and institutional capacity to support development of mariculture-based livelihoods and industry in New Ireland, Papua New Guinea	FIS/2014/061	James Cook University	Prof Paul Southgate
Improving technologies for inland aquaculture in Papua New Guinea	FIS/2014/062	University of New South Wales	Dr Jesmond Sammut
Restoring damaged coral reefs using mass coral larval reseeding	FIS/2014/063	Southern Cross University	Dr Peter Harrison
Improving seaweed production and processing opportunities in Indonesia.	FIS/2015/038	James Cook University	Dr Aji Nugroho
Improving fishery management in support of better governance of Myanmar's inland and delta fisheries	FIS/2015/046	WorldFish Center	Mr Micheael Akester
Description and risk assessment of the bycatch communities in the Gulf of Papua prawn fishery	FIS/2016/049	CSIRO Oceans and Atmosphere	Mr Gary Fry
Harvest strategies for Indonesian tropical tuna fisheries to increase sustainable benefits	FIS/2016/116	CSIRO National Collections and Marine Infrastructure	Dr Campbell Davies
Increasing technical skills supporting community-based sea cucumber production in Vietnam and the Philippines	FIS/2016/122	University of the Sunshine Coast	Prof Paul Southgate
Half-pearl industry development in Tonga and Vietnam	FIS/2016/126	University of the Sunshine Coast	Prof Paul Southgate
Reef colonisation and socioeconomic impacts from trochus translocations to Samoa	FIS/2016/128	Southern Cross University	Mr Steve Purcell
Accelerating the development of finfish mariculture in Cambodia through south-south research cooperation with Indonesia	FIS/2016/130	University of the Sunshine Coast	Assoc Prof Nicholas Paul
Development of rice fish systems in the Ayeyarwaddy Delta, Myanmar	FIS/2016/135	WorldFish Center	Dr Michael Phillips
Strengthening and scaling community-based approaches to Pacific coastal fisheries management in support of the New Song	FIS/2016/300	University of Wollongong	Dr Neil Andrew
Assessing production of giant freshwater prawns in reservoirs in Sri Lanka	FIS/2017/002	James Cook University	Dr Clive Jones
Assessing fisheries mitigation measures at Xayaburi Dam in Lao PDR	FIS/2017/016	Charles Sturt University	Dr Lee Baumgartner
A nutrition-sensitive approach to coastal fisheries management and development in Timor-Leste and Nusa Tenggara Timur Province, Indonesia	FIS/2017/032	WorldFish Center	Dr David Mills
Evaluating processes and outcomes in south-south research collaboration - finfish mariculture development in Cambodia through cooperation with Indonesia	FIS/2018/115	University of Tasmania	Prof Janelle Allison

Project title	Project code	Commissioned organisation	Project leader
Extending capacity of fish identification skills for improved fisheries assessments	FIS/2018/116	CSIRO National Collections and Marine Infrastructure	Dr William White
Baseline monitoring and evaluation of long-term impacts on fish stocks from coral restoration	FIS/2018/128	Southern Cross University	Dr Peter Harrison
Monitoring and evaluation of socio-economic impacts of pearl-based livelihood development	FIS/2018/129	Sustineo	Assoc Prof Katja Mikhailovich
Extension activities for PNG's shark fishery	FIS/2018/150	CSIRO National Collections and Marine Infrastructure	Dr William White
Forestry Research Program			
Domestication and breeding of sandalwood in Fiji and Tonga	FST/2016/158	CSIRO - Australian Tree Seed Centre	Mr David Bush
Developing integrated options and accelerating scaling up of agroforestry for improved food security and resilient livelihoods in Eastern Africa - Trees for Food Security - 2	FST/2015/039	CSIRO Ecosystem Sciences	Dr Philip Smethurst
Maximising productivity of Eucalyptus and Acacia plantations for growers in Indonesia and Vietnam	FST/2014/064	CSIRO Forestry and Forest Products	Dr Daniel Mendham
Improving community fire management and peatland restoration in Indonesia	FST/2016/144	CSIRO Forestry and Forest Products	Dr Daniel Mendham
Development of durable engineered wood products in Papua New Guinea and Australia	FST/2014/065	Department of Agriculture and Fisheries (Qld)	Dr Henri Bailleres
Improving returns from community teak plantings in Solomon Islands	FST/2014/066	Griffith University	Dr Tim Blumfield
Developing DNA-based chain of custody systems for legally-sourced teak	FST/2016/025	The University of Adelaide	Prof Andrew Lowe
Enhancing livelihoods through improved forest management in Nepal	FST/2017/037	The University of Adelaide	Dr Ian Nuberg
Enhancing value added wood processing in Papua New Guinea	FST/2012/092	The University of Melbourne	Assoc Prof Barbara Ozarska
Teak-based agroforestry systems to enhance and diversify smallholder livelihoods in Luang Prabang province of Lao PDR	FST/2012/041	The University of Queensland	Dr Mark Dieters
Improving agroforestry policy for sloping land in Fiji	FST/2016/147	The University of Queensland	Dr Tyron Venn
Enhance the formation of heartwood in sandalwood in Vanuatu	FST/2016/054	The University of Western Australia	Dr Liz Barbour
Advancing enhanced wood manufacturing industries in Laos and Australia	FST/2016/151	The University of Melbourne	Assoc Prof Barbara Ozarska
Management strategies for Acacia plantation diseases in Indonesia and Vietnam;	FST/2014/068	University of Tasmania	Dr Caroline Mohammed
Biological control of galling insect pests of eucalypt plantations in the Mekong region	FST/2012/091	University of the Sunshine Coast	Dr Simon Lawson
Enhancing value added products and environmental benefits from agroforestry systems in Papua New Guinea and the Pacific	FST/2014/067	University of the Sunshine Coast	Prof Helen Wallace
Improvement and management of teak and sandalwood in Papua New Guinea and Australia	FST/2014/069	University of the Sunshine Coast	Dr Tony Page
Enhancing private sector-led development of the canarium nut industry in Papua New Guinea	FST/2014/099	University of the Sunshine Coast	Prof Helen Wallace
Enhancing community-based commercial forestry in Indonesia	FST/2015/040	University of the Sunshine Coast	Dr Digby Race
Developing sandalwood community and smallholder plantation sector in Yogyakarta	FST/2016/024	University of the Sunshine Coast	Dr Tony Page

Project title	Project code	Commissioned organisation	Project leader
Enabling community forestry in Papua New Guinea	FST/2016/153	University of the Sunshine Coast	Mr Grahame Applegate
Enhancing returns from high-value agroforestry species in Vanuatu	FST/2016/154	University of the Sunshine Coast	Dr Tony Page
Enhancing private sector-led development of the canarium industry in PNG - phase 2	FST/2017/038	University of the Sunshine Coast	Prof Helen Wallace
Developing value chain innovation platforms to improve food security in east and southern Africa	FST/2014/093	World Agroforestry Centre	Dr Clement Okla
Developing and promoting market-based agroforestry options and integrated landscape management for smallholder forestry in Indonesia (Kanoppi2)	FST/2016/141	World Agroforestry Centre	Mr Aulia Perdana
Developing and promoting market-based agroforestry and forest rehabilitation options for northwest Vietnam	FST/2016/152	World Agroforestry Centre	Dr La Nguyen
Global Program			
Demand-led plant breeding and accelerating new variety adoption in sub-Saharan Africa	FSC/2013/019	The University of Queensland	Prof Gabrielle Persley
Monitoring Agricultural Research Investments, capacity and impact in South-East Asia and the Pacific	GP/2016/093	International Food Policy Research Institute	Mr Gert-Jan Stads
Schools as platforms to increase dietary diversity, improve nutrition and enhance livelihoods and environmental sustainability in Kenya, Ethiopia, Tanzania and Uganda	GP/2018/101	Bioversity International	Dr Danny Hunter
Pacific Plant Biosecurity Capacity Building Program	GP/2018/103	Kalang Consultancy Services	Mr Rob Duthie
Demand-led plant breeding and accelerating new variety adoption in Sub-Sahara Africa	GP/2018/108	The University of Queensland	Prof Gabrielle Persley
Improving plant biosecurity in the Pacific Islands	GP/2018/109	Kalang Consultancy Services	Mr Bill Magee
Horticulture Research Program			
Improved postharvest management of fruit and vegetables in the southern Philippines and Australia	HORT/2012/098	Applied Horticultural Research	Dr Jenny Ekman
Developing vegetable value chains to meet evolving market expectations in the Philippines	HORT/2016/188	Applied Horticultural Research	Dr Gordon Rogers
Research into scaling up use of african leafy vegetables for nutrition in Kenya	HORT/2017/012	Bioversity International	Dr Danny Hunter
Integrating protected cropping systems into high value vegetable value chains in the Pacific and Australia	HORT/2014/080	Central Queensland University	Prof Phil Brown
Supporting commercial sweetpotato production and marketing in the Papua New Guinea highlands	HORT/2014/097	Central Queensland University	Prof Phil Brown
Strengthening vegetable value chains in Pakistan for greater community livelihood benefits	HORT/2016/012	Centre for Agriculture and Bioscience International	Dr Babar Bajwa
Bogia coconut syndrome in Papua New Guinea: developing biological knowledge and a risk management strategy	HORT/2012/087	Charles Sturt University	Dr Geoff Gurr
Developing improved crop protection options in support of intensification of sweetpotato production in Papua New Guinea	HORT/2014/083	Charles Sturt University	Dr Geoff Gurr
Integrated management of Fusarium wilt of bananas in the Philippines and Australia	HORT/2012/097	Department of Agriculture and Fisheries (Qld)	Mr Anthony Pattison
Integrated disease management strategies for the productive, profitable and sustainable production of high-quality papaya fruit in the southern Philippines and Australia	HORT/2012/113	Department of Agriculture and Fisheries (Qld)	Dr Nandita Pathania

Project title	Project code	Commissioned organisation	Project leader
Aligning genetic resources, production and post-harvest systems to market opportunities for Pacific island and Australian cocoa	HORT/2014/078	Department of Agriculture and Fisheries (Qld)	Mr Yan Diczbalis
Development of area-wide management approaches for fruit flies in mango for Indonesia, Philippines, Australia and the Asia-Pacific region	HORT/2015/042	Department of Agriculture and Fisheries (Qld)	Mr Stefano De Faveri
Basic research on the cocoa pod borer in Papua New Guinea to permit effective pest management	HORT/2018/114	Department of Primary Industries (NSW)	Dr Olivia Reynolds
Enterprise-driven transformation of family cocoa production in East Sepik, Madang, New Ireland and Chimbu Provinces of Papua New Guinea	HORT/2014/096	La Trobe University	Dr Phil Keane
Defining the biotic constraints to fresh taro from Samoa gaining market access to Australia	HORT/2017/014	Plant & Food Research	Dr Robert Fullerton
Coconuts for Pacific Livelihoods	HORT/2017/025	Secretariat of the Pacific Community	Mrs Logotonu Waqainabete
Exploring coffee genetic resources for the Pacific Islands	HORT/2016/057	Southern Cross University	Dr Wayne Hancock
Integrated disease management of sugarcane streak mosaic in Indonesia	HORT/2012/083	Sugar Research Australia	Dr Robert Magarey
Integrated crop management strategies for root and tuber crops: strengthening national and regional capacities in Papua New Guinea, Fiji, Samoa, Solomon Islands and Tonga	HORT/2010/065	The University of Queensland	Dr Michael Furlong
Optimising tissue culture of coconut in support of saving the Pacific regional genebank	HORT/2016/056	The University of Queensland	Assoc Prof Steve Adkins
Responding to emerging pest and disease threats to horticulture in the Pacific Islands	HORT/2016/185	The University of Queensland	Dr Michael Furlong
Improved management strategies for cocoa in Papua New Guinea	HORT/2012/026	The University of Sydney	Prof David Guest
Developing the cocoa value chain in Bougainville	HORT/2014/094	The University of Sydney	Prof David Guest
Enhanced fruit production and postharvest handling systems for Fiji, Samoa, and Tonga	HORT/2014/077	University of the Sunshine Coast	Prof Steven Underhill
Impact Evaluation Research Program			
Development of mixed-method approaches to impact assessments of Philippines research projects	IAP/2017/010	CSIRO Agriculture and Food	Ms Alison Laing
Livestock Systems Research Program			
Establishing the linkages between foodborne bacterial enteropathies and malnutrition in Timor-Leste	LS/2018/184	Australian National University	Dr Ben Polkinghorne
Point of Care diagnostics	LS/2018/203	CSIRO - Australian Animal Health Laboratory	Dr John Allen
Integrating herbaceous forage legumes into crop and livestock systems in East Nusa Tenggara, Indonesia	LPS/2012/064	CSIRO Agriculture and Food	Dr Lindsay Bell
Developing profitable dairy and sheep meat production systems in central Tibet - China	LPS/2014/036	CSIRO Agriculture and Food	Dr Dianne Mayberry
Potential of new Australian old man saltbush varieties to fill ruminant feed gaps in arid and saline areas of Pakistan	LPS/2016/022	CSIRO Agriculture and Food	Dr Hayley Norman
Improving cattle production in the Myanmar Central Dry Zone through improved animal nutrition, health and management	LS/2016/132	CSIRO Agriculture and Food	Dr Dianne Mayberry
Establishing the project: Improving cattle health and production in Myanmar	LS/2018/100	CSIRO Agriculture and Food	Dr Dianne Mayberry
Smallholder Livestock Futures in South-East Asia	LS/2018/107	CSIRO Agriculture and Food	Dr Mario Herrero

Project title	Project code	Commissioned organisation	Project leader
Update of SoFT (Selection of Forages for the Tropics)	LPS/2016/097	International Center for Tropical Agriculture	Dr Michael Peters
Safe Pork: Market based approaches to improving the safety of pork in Vietnam	LS/2016/143	International Livestock Research Institute	Dr Fred Unger
Impact assessment of Taenia solium control in Phongsali province, Lao PDR and development of future opportunities for the control of zoonotic parasitic infections	LS/2018/201	Murdoch University	Dr Amanda Ash
Improving the bee industry in Fiji, Papua New Guinea and Solomon Islands	LS/2014/042	Southern Cross University	Dr David Lloyd
Novel approaches for increasing participation in the honeybee industries of the Pacific	LS/2017/100	Southern Cross University	Dr David Lloyd
SLEEK and livestock GHG, Kenya	LS/2018/202	The Mullion Group	Dr Robert Waterworth
Improving smallholder dairy and beef profitability by enhancing farm production and value chain management in Pakistan	LPS/2016/011	The University of Melbourne	Dr David McGill
Smallholder goat value chains in Pakistan; challenges and research opportunities	LPS/2016/096	The University of Melbourne	Dr Angus Campbell
Improving farmer livelihoods by developing market-oriented small ruminant production systems in Myanmar	LS/2014/056	The University of Melbourne	Dr Angus Campbell
Enhancing small ruminant production to benefit farming families in Sindh and Punjab, Pakistan	LS/2018/105	The University of Melbourne	Dr Rebecca Doyle
Improving the production and competitiveness of Australian and Philippines pig production through better health and disease control	AH/2012/066	The University of Queensland	Dr Pat Blackall
Profitable feeding strategies for smallholder cattle in Indonesia	LPS/2013/021	The University of Queensland	Prof Dennis Poppi
Increasing the productivity and market options of smallholder beef cattle farmers in Vanuatu	LPS/2014/037	The University of Queensland	Dr Simon Quigley
Smallholder cattle enterprise development in Timor-Leste	LPS/2014/038	The University of Queensland	Dr Geoffry Fordyce
Identifying husbandry options for smallholder pig farmers in Timor-Leste	LS/2017/102	The University of Queensland	Dr Tamsin Barnes
Research opportunities for smallholder beef cattle systems in Pacific Island countries	LS/2018/102	The University of Queensland	Dr Scott Waldron
Diversifying rural poultry production in Myanmar - opportunities for small-scale farmers	LS/2018/106	The University of Queensland	Dr Joerg Henning
Village-based biosecurity for livestock disease risk management in Cambodia	AH/2011/014	The University of Sydney	Dr Russell Bush
Enhancing transboundary livestock disease risk management in Lao PDR	AH/2012/067	The University of Sydney	Dr Russell Bush
Development of a market-driven biosecure beef production system in Lao PDR	AH/2012/068	The University of Sydney	Dr Russell Bush
Strengthening food and nutrition security through family poultry and crop integration in Tanzania and Zambia	FSC/2012/023	The University of Sydney	Assoc Prof Robyn Alders
Investigating and improving pig husbandry and health in Timor-Leste	LS/2012/065	The University of Sydney	Dr Jenny-Ann Toribio
Trilateral support to smallholder cattle systems research in Timor-Leste	LS/2017/035	University of Mataram	Dr Dahlanuddin Dahlanuddin
CropCow initial training and project development activities	GMCP/2018/130	University of New England	Dr Heather Burrow
Assessment of markets and production constraints to small ruminant farming in the Pacific island countries	LPS/2016/021	University of New England	Dr Frances Cowley

Project title	Project code	Commissioned organisation	Project leader
Assessing goat production and marketing systems in Lao PDR and market linkages into Vietnam	LPS/2016/027	University of New England	Dr Stephen Walkden-Brown
Improving smallholder beef value chains in rain-fed cropping systems in Indonesia	LS/2015/047	University of New England	Dr Heather Burrow
Improving smallholder beef supply and livelihoods through cattle-palm system integration in Indonesia	LS/2015/048	University of New England	Dr John Ackerman
High quality markets and value chains for small-scale and emerging beef cattle farmers in South Africa (Stage 2)	LS/2016/276	University of New England	Dr Heather Burrow
Improving small ruminant production and marketing in Fiji and Samoa	LS/2017/033	University of New England	Dr Frances Cowley
Goat production systems and marketing in Laos and Vietnam	LS/2017/034	University of New England	Dr Stephen Walkden-Brown
Intensification of beef cattle production in upland cropping systems in Northwest Vietnam	LPS/2015/037	University of Tasmania	Dr Stephen Ives
Social Sciences Research Program			
Climate smart agriculture opportunities for enhanced food production in PNG	ASEM/2017/026	Australian National University	Mr Steven Crimp
Promoting traditional vegetable production and consumption for improved livelihoods in Papua New Guinea and northern Australia	ASEM/2012/084	Charles Darwin University	Ms Tania Paul
Strengthening livelihoods for food security amongst cocoa and oil palm farming communities in Papua New Guinea	ASEM/2012/072	Curtin University	Dr Gina Koczberski
Identifying opportunities and constraints for rural women's engagement in small-scale agricultural enterprises in Papua New Guinea	ASEM/2014/054	Curtin University	Dr Gina Koczberski
Improving livelihoods of smallholder coffee communities in Papua New Guinea	ASEM/2016/100	Curtin University	Prof George Curry
Smallholder farmer decision-making and technology adoption in southern Lao PDR: opportunities and constraints	ASEM/2014/052	James Cook University	Dr Kim Alexander
Improving food security in the northern uplands of Lao PDR: identifying drivers and overcoming barriers	ASEM/2012/073	Monash University	Dr Paulo Santos
Analysing gender transformative approaches to agricultural development with ethnic minority communities in Vietnam	SSS/2018/139	Murdoch University	Dr Rochelle Spencer
Improving the methods and impacts of agricultural extension in Western Mindanao, Philippines	ASEM/2012/063	RMIT University	Mr Noel Vock
The potential of International Landcare	ASEM/2018/117	RMIT University	Dr Mary Johnson
Action ready climate knowledge to improve disaster risk management for small holder farmers in the Philippines	ASEM/2014/051	South Australian Research and Development Institute	Mr Peter Hayman
Improving market engagement, postharvest management and productivity of the Cambodian and Lao PDR vegetable industries	ASEM/2012/081	The University of Adelaide	Mr Jeremy Badgery-Parker
Uptake of agricultural technologies amongst farmers in Battambang and Pailin provinces, Cambodia	ASEM/2013/003	The University of Melbourne	Dr Brian Cook
Developing cassava production and marketing systems to enhance smallholder livelihoods in Cambodia, Lao PDR and Myanmar	ASEM/2014/053	The University of Queensland	Dr Dominic Smith
Climate-smart landscapes for promoting sustainability of Pacific Island agricultural systems	ASEM/2016/101	The University of Western Australia	Dr Eloise Biggs

Project title	Project code	Commissioned organisation	Project leader
Improving opportunities for economic development for women smallholders in rural Papua New Guinea	ASEM/2014/095	University of Canberra	Prof Barbara Pamphilon
Enhancing livelihoods through Forest and Landscape Restoration	ASEM/2016/103	University of the Sunshine Coast	Dr John Herbohn
Soil and Land Management Research Program			
Improving water and nutrient management to enable double cropping in the rice growing lowlands of Lao PDR and Cambodia	SMCN/2012/071	Charles Sturt University	Dr Philip Eberbach
Land resource evaluation for productive and resilient landscapes in the Central Dry Zone of Myanmar	SMCN/2014/075	CSIRO Agriculture and Food	Dr Anthony Ringrose-Voase
Soil management in Pacific Islands: investigating nutrient cycling and development of the soils portal	SMCN/2016/111	CSIRO Agriculture and Food	Dr Ben Macdonald
Inoculants for plant nutrition use in Greater Mekong Region	SLAM/2018/123	Deakin University	Dr Didier Lesueur
Sustainable productivity improvements in allium and solanaceous vegetable crops in Indonesia and sub-tropical Australia	SMCN/2009/056	Department of Agriculture and Fisheries (Qld)	Dr Stephen Harper
Soil and nutrient management strategies for sustainable vegetable production in southern Philippines	SMCN/2012/029	Department of Agriculture and Fisheries (Qld)	Dr Stephen Harper
Improving soil and water management and crop productivity of dryland agriculture systems of Aceh and NSW	SMCN/2012/103	Department of Primary Industries (NSW)	Dr Malem McLeod
Land management of diverse rubber-based systems in southern Philippines	SLAM/2017/040	Griffith University	Prof Chengrong Chen
Trial of eddy covariance flux towers and Chameleon sensors for evaluating peatland restoration in Indonesia	SLAM/2018/122	La Trobe University	Dr Samantha Grover
X-projects and synthesis, Cambodia	SLAM/2018/127	Murdoch University	Dr Davina Boyd
Integrated water, soil and nutrient management for sustainable farming systems in south central coastal Vietnam and Australia	SMCN/2012/069	Murdoch University	Prof Richard Bell
Land suitability assessment and site-specific soil management for Cambodian uplands	SMCN/2016/237	Murdoch University	Dr Wendy Vance
Improving soil health, agricultural productivity and food security on atolls	SMCN/2014/089	Secretariat of the Pacific Community	Dr Siosia Halavatau
Management practices for profitable crop livestock systems for Cambodia and Lao PDR	SMCN/2012/075	The University of Adelaide	Dr Matthew Denton
Management of nutrients for improved profitability and sustainability of crop production in Central Myanmar	SMCN/2014/044	The University of Melbourne	Prof Deli Chen
Mainstreaming research in Myanmar's Agricultural and Veterinary Universities	SLAM/2017/041	The University of Queensland	Prof Kaye Basford
Sustaining soil fertility in support of intensification of sweetpotato cropping systems	SMCN/2012/105	The University of Queensland	Prof Neal Menzies
Improving maize-based farming systems on sloping lands in Vietnam and Lao PDR	SMCN/2014/049	The University of Queensland	Prof Michael Bell
Optimising soil management and health in Papua New Guinea integrated cocoa farming systems	SMCN/2014/048	The University of Sydney	Assoc Prof Damien Field
Farmer participatory crop benchmarking in the Central Dry Zone of Myanmar	SLAM/2018/206	University of New England	Prof David Herridge
Increasing productivity of legume-based farming systems in the central dry zone of Myanmar	SMCN/2011/047	University of New England	Prof David Herridge

Project title	Project code	Commissioned organisation	Project leader
Improving the sustainability of rice-shrimp farming systems in the Mekong Delta, Vietnam	SMCN/2010/083	University of New South Wales	Assoc Prof Jesmond Sammut
Integrated resource management for vegetable production in Lao PDR and Cambodia	SMCN/2014/088	University of Southern Queensland	Dr Alice Melland
Water and Climate Research Program			
Transforming smallholder irrigation into profitable and self-sustaining systems in southern Africa	LWR/2016/137	Australian National University	Prof Jamie Pittock
Improving groundwater management to enhance agriculture and farming livelihoods in Pakistan	LWR/2015/036	Charles Sturt University	Dr Jehangir Punthakey
Salinity Pakistan	LWR/2017/027	Charles Sturt University	Dr Michael Mitchell
Water management for small-holder farmers – out-scaling ACIAR research in Andhra Pradesh Drought Mitigation Program	WAC/2018/164	CSIRO Agriculture and Food	Dr Uday Nidumolu
Cropping system intensification in the salt-affected coastal zones of Bangladesh and West Bengal, India	LWR/2014/073	CSIRO Land and Water	Dr Mohammed Mainuddin
A virtual irrigation academy to improve water productivity in Malawi, Tanzania and South Africa	LWR/2014/085	CSIRO Land and Water	Dr Richard Stirzaker
Promoting socially inclusive and sustainable agricultural intensification in West Bengal and Bangladesh	LWR/2014/072	CSIRO Sustainable Agriculture Flagship	Dr Christian Roth
Digital Earth Africa Business Case	LWR/2018/119	Geoscience Australia	Dr Stuart Minchin
Integrated catchment management and capacity building for improving livelihoods in Afghanistan	LWR/2008/047	International Center for Agricultural Research in the Dry Areas	Dr Yashpal Singh Saharawat
Foresight for sustainable food systems in the Eastern Gangetic Plains	WAC/2018/168	International Food Policy Research Institute	Dr Avinash Kishore
Nutrient management for diversified cropping in Bangladesh (NUMAN)	LWR/2016/136	Murdoch University	Prof Richard Bell
Pilot project on commercialisation of smallholders' conservation agriculture based planters in Bangladesh	LWR/2018/111	Murdoch University	Prof Richard Bell
Aquifer characterisation, artificial recharge and reuse of suddenly available water in South Bihar	WAC/2018/211	Nalanda University	Dr Avinash Kishore
Agriculture based emission-reduction options to supports NDCs in Vietnam and Fiji	LWR/2017/029	Queensland University of Technology	Prof Peter Grace
Support for NDC reporting for Fiji using FLINT (Full Lands Integration Tool)	LWR/2018/118	The Mullion Group	Dr Robert Waterworth
Developing approaches to enhance farmer water management skills in Balochistan, Punjab and Sindh in Pakistan.	LWR/2014/074	University of Canberra	Dr Sandra Heaney-Mustafa
Institutions to support intensification, integrated decision making and inclusiveness in agriculture in the East Gangetic Plain	LWR/2018/104	University of South Australia	Prof Lin Crase
Improving dry season agriculture for marginal and tenant farmers in the Eastern Gangetic Plains through conjunctive use of pond and groundwater resources	LWR/2012/079	University of Southern Queensland	Mr Erik Schmidt

Project list current at 1 November 2018

Appendix 4 Location of commissioned organisation for current and proposed projects

Project title	Project code	Commissioned organisation
Australian Capital Territory		
Improving opportunities for economic development for women smallholders in rural Papua New Guinea	ASEM/2014/095	University of Canberra
Climate Smart Agriculture opportunities for enhanced food production in PNG	ASEM/2017/026	Australian National University
Insect tolerant chickpea for Bangladesh	CIM/2016/039	CSIRO Agriculture and Food
Protection of stored grains against insect pests	CIM/2017/031	Plant Biosecurity Cooperative Research Centre
Monitoring and evaluation of socio-economic impacts of pearl-based livelihood development	FIS/2018/129	Sustineo
Domestication and breeding of sandalwood in Fiji and Tonga	FST/2016/158	CSIRO - Australian Tree Seed Centre
Development of mixed-method approaches to impact assessments of Philippines research projects	IAP/2017/010	CSIRO Agriculture and Food
Establishing the linkages between foodborne bacterial enteropathies and malnutrition in Timor Leste	LS/2018/184	Australian National University
SLEEK and livestock GHG, Kenya	LS/2018/202	The Mullion Group
Cropping system intensification in the salt-affected coastal zones of Bangladesh and West Bengal, India	LWR/2014/073	CSIRO Land and Water
Developing approaches to enhance farmer water management skills in Balochistan, Punjab and Sindh in Pakistan	LWR/2014/074	University of Canberra
A virtual irrigation academy to improve water productivity in Malawi, Tanzania and South Africa	LWR/2014/085	CSIRO Land and Water
Transforming smallholder irrigation into profitable and self-sustaining systems in southern Africa	LWR/2016/137	Australian National University
Support for NDC reporting for Fiji using FLINT (Full Lands Integration Tool)	LWR/2018/118	The Mullion Group
Digital Earth Africa Business Case	LWR/2018/119	Geoscience Australia
Land resource evaluation for productive and resilient landscapes in the Central Dry Zone of Myanmar	SMCN/2014/075	CSIRO Agriculture and Food
Soil management in Pacific Islands: investigating nutrient cycling and development of the soils portal	SMCN/2016/111	CSIRO Agriculture and Food
New South Wales		
Evaluating and improving policies for attracting investment in the agricultural sector in Vietnam	ADP/2018/120	The University of Sydney
Evaluating smallholder livelihoods and sustainability in Indonesian coffee and cocoa value chains	AGB/2010/099	The University of Sydney
Improving livelihoods in Myanmar and Vietnam through vegetable value chains	AGB/2014/035	Applied Horticultural Research
Pacific Agribusiness Research in Development Initiative, phase 2 (PARDI 2)	AGB/2014/057	Pacific Australia Reforestation Company
Village-based biosecurity for livestock disease risk management in Cambodia	AH/2011/014	The University of Sydney
Enhancing transboundary livestock disease risk management in Lao PDR	AH/2012/067	The University of Sydney
Development of a market-driven biosecure beef production system in Lao PDR	AH/2012/068	The University of Sydney
Mitigating the effects of stripe rust on wheat production in South Asia and eastern Africa	CIM/2014/081	The University of Sydney

Project title	Project code	Commissioned organisation
Increasing productivity and profitability of pulse production in cereal based cropping systems in Pakistan	CIM/2015/041	Charles Sturt University
Understanding drill-seeding of rice techniques and business models	CIM/2018/113	Deakin University
Sustainable intensification and diversification in the lowland rice system in Northwest Cambodia	CSE/2015/044	The University of Sydney
Enhancing bivalve production in northern Vietnam and Australia	FIS/2010/100	Department of Primary Industries
Improving the design of irrigation infrastructure to increase fisheries production in floodplain wetlands of the Lower Mekong and Murray-Darling Basins	FIS/2012/100	Department of Primary Industries
Quantifying biophysical and community impacts of improved fish passage in Lao PDR and Myanmar	FIS/2014/041	Charles Sturt University
Improving technologies for inland aquaculture in Papua New Guinea	FIS/2014/062	University of New South Wales
Restoring damaged coral reefs using mass coral larval reseeding	FIS/2014/063	Southern Cross University
Reef colonisation and socioeconomic impacts from trochus translocations to Samoa	FIS/2016/128	Southern Cross University
Strengthening and scaling community-based approaches to Pacific coastal fisheries management in support of the New Song	FIS/2016/300	University of Wollongong
Assessing fisheries mitigation measures at Xayaburi Dam in Lao PDR	FIS/2017/016	Charles Sturt University
Baseline monitoring and evaluation of long-term impacts on fish stocks from coral restoration	FIS/2018/128	Southern Cross University
Strengthening food and nutrition security through family poultry and crop integration in Tanzania and Zambia	FSC/2012/023	The University of Sydney
CropCow initial training and project development activities	GMCP/2018/130	University of New England
Pacific Plant Biosecurity Capacity Building Program	GP/2018/103	Kalang Consultancy Services
Improving plant biosecurity in the Pacific Islands	GP/2018/109	Kalang Consultancy Services
Improved management strategies for cocoa in Papua New Guinea	HORT/2012/026	The University of Sydney
Bogia coconut syndrome in Papua New Guinea: developing biological knowledge and a risk management strategy	HORT/2012/087	Charles Sturt University
Improved postharvest management of fruit and vegetables in the southern Philippines and Australia	HORT/2012/098	Applied Horticultural Research
Developing improved crop protection options in support of intensification of sweetpotato production in Papua New Guinea	HORT/2014/083	Charles Sturt University
Developing the cocoa value chain in Bougainville	HORT/2014/094	The University of Sydney
Exploring coffee genetic resources for the Pacific Islands	HORT/2016/057	Southern Cross University
Developing vegetable value chains to meet evolving market expectations in the Philippines	HORT/2016/188	Applied Horticultural Research
Basic research on the cocoa pod borer in Papua New Guinea to permit effective pest management	HORT/2018/114	Department of Primary Industries
Assessment of markets and production constraints to small ruminant farming in the Pacific Island Countries	LPS/2016/021	University of New England
Assessing goat production and marketing systems in Lao PDR and market linkages into Vietnam	LPS/2016/027	University of New England
Investigating and improving pig husbandry and health in Timor-Leste	LS/2012/065	The University of Sydney
Improving the bee industry in Fiji, Papua New Guinea and Solomon Islands	LS/2014/042	Southern Cross University
Improving smallholder beef value chains in rain-fed cropping systems in Indonesia	LS/2015/047	University of New England
Improving smallholder beef supply and livelihoods through cattle-palm system integration in Indonesia	LS/2015/048	University of New England
High quality markets and value chains for small-scale and emerging beef cattle farmers in South Africa (Stage 2)	LS/2016/276	University of New England

Project title	Project code	Commissioned organisation
Improving small ruminant production and marketing in Fiji and Samoa	LS/2017/033	University of New England
Goat production systems and marketing in Laos and Vietnam	LS/2017/034	University of New England
Novel approaches for increasing participation in the honeybee industries of the Pacific	LS/2017/100	Southern Cross University
Improving groundwater management to enhance agriculture and farming livelihoods in Pakistan	LWR/2015/036	Charles Sturt University
Salinity Pakistan	LWR/2017/027	Charles Sturt University
Farmer participatory crop benchmarking in the Central Dry Zone of Myanmar	SLAM/2018/206	University of New England
Improved seaweed culture and postharvest waste utilisation in South-East Asia	SMAR/2008/025	Southern Cross University
Improving the sustainability of rice-shrimp farming systems in the Mekong Delta, Vietnam	SMCN/2010/083	University of New South Wales
Increasing productivity of legume-based farming systems in the central dry zone of Myanmar	SMCN/2011/047	University of New England
Improving water and nutrient management to enable double cropping in the rice growing lowlands of Lao PDR and Cambodia	SMCN/2012/071	Charles Sturt University
Improving soil and water management and crop productivity of dryland agriculture systems of Aceh and NSW	SMCN/2012/103	Department of Primary Industries
Optimising soil management and health in Papua New Guinea integrated cocoa farming systems	SMCN/2014/048	The University of Sydney
Northern Territory		
Enhancing smallholder linkages to markets by optimising transport and logistics infrastructure	AGB/2017/036	CSIRO Land and Water
Promoting traditional vegetable production and consumption for improved livelihoods in Papua New Guinea and northern Australia	ASEM/2012/084	Charles Darwin University
Queensland		
Strengthening incentives for improved grassland management in China and Mongolia	ADP/2012/107	The University of Queensland
Creating wealth in smallholders farms through efficient credit systems in Pakistan	ADP/2016/028	The University of Queensland
Policy drivers for public-private partnerships in Pacific organics: improving extension policy through an evidence-based approach	ADP/2018/131	University of the Sunshine Coast
Improving smallholder incomes in the north-western highlands of Vietnam by increasing access and competitiveness in regional temperate and subtropical fruit markets	AGB/2012/060	The University of Queensland
Improving smallholder farmer incomes through strategic market development in mango supply chains in southern Vietnam	AGB/2012/061	Griffith University
Developing value-chain linkages to enhance the adoption of profitable and sustainable cassava production systems in Vietnam and Indonesia	AGB/2012/078	The University of Queensland
Developing vegetable and fruit value chains and integrating them with community development in the southern Philippines	AGB/2012/109	The University of Queensland
Supporting access to mango research information, communication, collaboration and capacity development	AGB/2016/006	Griffith University
Challenges and opportunities for meeting requirements of China mango markets	AGB/2016/007	Griffith University
Opportunities and strategies to improve biosecurity, market access and trade for selected mango markets	AGB/2016/008	Griffith University
Enhancing mango fruit quality in Asian mango chains	AGB/2016/009	Griffith University
Priority opportunities in tropical fruit processing in selected mango markets	AGB/2016/010	Griffith University
Sustainable and inclusive development of the cattle and beef industry in Vietnam and trade relationships with other countries in the region	AGB/2016/196	The University of Queensland

Project title	Project code	Commissioned organisation
Developing vegetable and fruit value chains and integrating them with community development in the southern Philippines	AGB/2017/039	The University of Queensland
Strengthening leadership, coordination and economic development of the temperate fruit industry in northern Vietnam	AGB/2018/171	The University of Queensland
Inclusive agribusiness-led development for high-value fruit and vegetable in the southern Philippines	AGB/2018/196	The University of Queensland
Improving the production and competitiveness of Australian and Philippines pig production through better health and disease control	AH/2012/066	The University of Queensland
Smallholder farmer decision-making and technology adoption in southern Lao PDR: opportunities and constraints	ASEM/2014/052	James Cook University
Developing cassava production and marketing systems to enhance smallholder livelihoods in Cambodia, Lao PDR and Myanmar	ASEM/2014/053	The University of Queensland
Enhancing livelihoods through forest and landscape restoration	ASEM/2016/103	University of the Sunshine Coast
Developing a foundation for the long-term management of basal stem rot of oil palm in Papua New Guinea and Solomon Islands	CIM/2012/086	The University of Queensland
Identifying Eastern Gangetic Plains Soil Constraints	CROP/2018/210	The University of Queensland
Developing technologies for giant grouper (<i>Epinephelus lanceolatus</i>) aquaculture in Vietnam, the Philippines and Australia	FIS/2012/101	University of the Sunshine Coast
Sustainable management of sport fisheries for communities in Papua New Guinea	FIS/2013/015	James Cook University
Research for development of lobster growout technology in Indonesia	FIS/2014/059	James Cook University
Developing pearl industry-based livelihoods in the western Pacific	FIS/2014/060	James Cook University
Improving technical and institutional capacity to support development of mariculture-based livelihoods and industry in New Ireland, Papua New Guinea	FIS/2014/061	James Cook University
Improving seaweed production and processing opportunities in Indonesia.	FIS/2015/038	James Cook University
Description and risk assessment of the bycatch communities in the Gulf of Papua prawn fishery	FIS/2016/049	CSIRO Oceans and Atmosphere
Increasing technical skills supporting community-based sea cucumber production in Vietnam and the Philippines	FIS/2016/122	University of the Sunshine Coast
Half-pearl industry development in Tonga and Vietnam	FIS/2016/126	University of the Sunshine Coast
Accelerating the development of finfish mariculture in Cambodia through south-south research cooperation with Indonesia	FIS/2016/130	University of the Sunshine Coast
Assessing production of giant freshwater prawns in reservoirs in Sri Lanka	FIS/2017/002	James Cook University
Demand led plant variety design for emerging markets in Africa	FSC/2013/019	The University of Queensland
Teak-based agroforestry systems to enhance and diversify smallholder livelihoods in Luang Prabang province of Lao PDR	FST/2012/041	The University of Queensland
Biological control of galling insect pests of eucalypt plantations in the Mekong region	FST/2012/091	University of the Sunshine Coast
Development of durable engineered wood products in Papua New Guinea and Australia	FST/2014/065	Department of Agriculture and Fisheries
Improving returns from community teak plantings in Solomon Islands	FST/2014/066	Griffith University
Enhancing value added products and environmental benefits from agroforestry systems in Papua New Guinea and the Pacific	FST/2014/067	University of the Sunshine Coast
Improvement and management of teak and sandalwood in Papua New Guinea and Australia	FST/2014/069	University of the Sunshine Coast
Enhancing private sector-led development of the canarium nut industry in Papua New Guinea	FST/2014/099	University of the Sunshine Coast

Project title	Project code	Commissioned organisation
Enhancing community-based commercial forestry in Indonesia	FST/2015/040	University of the Sunshine Coast
Developing sandalwood community and smallholder plantation sector in Yogyakarta	FST/2016/024	University of the Sunshine Coast
Improving agroforestry policy for sloping land in Fiji	FST/2016/147	The University of Queensland
Enabling community forestry in Papua New Guinea	FST/2016/153	University of the Sunshine Coast
Enhancing returns from high-value agroforestry species in Vanuatu	FST/2016/154	University of the Sunshine Coast
Enhancing private sector-led development of the canarium industry in PNG - phase 2	FST/2017/038	University of the Sunshine Coast
Demand-led plant breeding and accelerating new variety adoption in Sub-Saharan Africa	GP/2018/108	The University of Queensland
Integrated crop management strategies for root and tuber crops: strengthening national and regional capacities in Papua New Guinea, Fiji, Samoa, Solomon Islands and Tonga	HORT/2010/065	The University of Queensland
Integrated disease management of sugarcane streak mosaic in Indonesia	HORT/2012/083	Sugar Research Australia
Integrated management of Fusarium wilt of bananas in the Philippines and Australia	HORT/2012/097	Department of Agriculture and Fisheries
Integrated disease management strategies for the productive, profitable and sustainable production of high-quality papaya fruit in the southern Philippines and Australia	HORT/2012/113	Department of Agriculture and Fisheries
Enhanced fruit production and postharvest handling systems for Fiji, Samoa, and Tonga	HORT/2014/077	University of the Sunshine Coast
Aligning genetic resources, production and post-harvest systems to market opportunities for Pacific island and Australian cocoa	HORT/2014/078	Department of Agriculture and Fisheries
Integrating protected cropping systems into high value vegetable value chains in the Pacific and Australia	HORT/2014/080	Central Queensland University
Supporting commercial sweetpotato production and marketing in the Papua New Guinea highlands	HORT/2014/097	Central Queensland University
Development of area-wide management approaches for fruit flies in mango for Indonesia, Philippines, Australia and the Asia-Pacific region	HORT/2015/042	Department of Agriculture and Fisheries
Optimising tissue culture of coconut in support of saving the Pacific regional genebank	HORT/2016/056	The University of Queensland
Responding to emerging pest and disease threats to horticulture in the Pacific Islands	HORT/2016/185	The University of Queensland
Integrating herbaceous forage legumes into crop and livestock systems in East Nusa Tenggara, Indonesia	LPS/2012/064	CSIRO Agriculture and Food
Profitable feeding strategies for smallholder cattle in Indonesia	LPS/2013/021	The University of Queensland
Developing profitable dairy and sheep meat production systems in central Tibet - China	LPS/2014/036	CSIRO Agriculture and Food
Increasing the productivity and market options of smallholder beef cattle farmers in Vanuatu	LPS/2014/037	The University of Queensland
Smallholder cattle enterprise development in Timor-Leste	LPS/2014/038	The University of Queensland
Improving cattle production in the Myanmar Central Dry Zone through improved animal nutrition, health and management	LS/2016/132	CSIRO Agriculture and Food
Identifying husbandry options for smallholder pig farmers in Timor-Leste	LS/2017/102	The University of Queensland
Establishing the project: Improving cattle health and production in Myanmar	LS/2018/100	CSIRO Agriculture and Food
Research opportunities for smallholder beef cattle systems in Pacific Island countries	LS/2018/102	The University of Queensland
Diversifying rural poultry production in Myanmar – opportunities for small-scale farmers	LS/2018/106	The University of Queensland

Project title	Project code	Commissioned organisation
Smallholder livestock futures in South-East Asia	LS/2018/107	CSIRO Agriculture and Food
Improving dry season agriculture for marginal and tenant farmers in the Eastern Gangetic Plains through conjunctive use of pond and groundwater resources	LWR/2012/079	University of Southern Queensland
Promoting socially inclusive and sustainable agricultural intensification in West Bengal and Bangladesh	LWR/2014/072	CSIRO Sustainable Agriculture Flagship
Agriculture based emission-reduction options to supports NDCs in Vietnam and Fiji	LWR/2017/029	Queensland University of Technology
Land management of diverse rubber-based systems in southern Philippines	SLAM/2017/040	Griffith University
Mainstreaming research in Myanmar's agricultural and veterinary universities	SLAM/2017/041	The University of Queensland
Sustainable productivity improvements in allium and solanaceous vegetable crops in Indonesia and sub-tropical Australia	SMCN/2009/056	Department of Agriculture and Fisheries
Soil and nutrient management strategies for sustainable vegetable production in southern Philippines	SMCN/2012/029	Department of Agriculture and Fisheries
Sustaining soil fertility in support of intensification of sweetpotato cropping systems	SMCN/2012/105	The University of Queensland
Improving maize-based farming systems on sloping lands in Vietnam and Lao PDR	SMCN/2014/049	The University of Queensland
Integrated resource management for vegetable production in Lao PDR and Cambodia	SMCN/2014/088	University of Southern Queensland
South Australia		
Efficient participatory irrigation institutions to support productive and sustainable agriculture in south Asia	ADP/2014/045	University of South Australia
Agricultural policy research to support natural resource management in Indonesia's upland landscapes	ADP/2015/043	The University of Adelaide
Understanding the drivers of successful and inclusive rural regional transformation: sharing experiences and policy advice in Bangladesh, China, Indonesia and Pakistan	ADP/2017/024	The University of Adelaide
Improving market integration for high value fruit and vegetable production systems in Indonesia	AGB/2009/060	The University of Adelaide
Towards more profitable and sustainable vegetable production systems in north-western Vietnam	AGB/2012/059	The University of Adelaide
Improving milk supply, competitiveness and livelihoods in smallholder dairy chains in Indonesia	AGB/2012/099	The University of Adelaide
Impact assessment of cocoa interventions in Vanuatu	AGB/2016/053	The University of Adelaide
Revision and update of Markets for the Poor (M4P) and Agribusiness Master Class (AMC)	AGB/2018/121	The University of Adelaide
Improving market engagement, postharvest management and productivity of the Cambodian and Lao PDR vegetable industries	ASEM/2012/081	The University of Adelaide
Action ready climate knowledge to improve disaster risk management for small holder farmers in the Philippines	ASEM/2014/051	South Australian Research and Development Institute
Value chain and policy interventions to accelerate adoption of Happy Seeder zero tillage in rice-wheat farming systems across the Gangetic Plains	CSE/2017/101	The University of Adelaide
Developing DNA-based chain of custody systems for legally-sourced teak	FST/2016/025	The University of Adelaide
Enhancing livelihoods through improved forest management in Nepal	FST/2017/037	The University of Adelaide
Institutions to support intensification, integrated decision making and inclusiveness in agriculture in the East Gangetic Plain	LWR/2018/104	University of South Australia
Management practices for profitable crop livestock systems for Cambodia and Lao PDR	SMCN/2012/075	The University of Adelaide
Water management for small-holder farmers - out-scaling ACIAR research in Andhra Pradesh Drought Mitigation Program	WAC/2018/164	CSIRO Agriculture and Food

Project title	Project code	Commissioned organisation
Tasmania		
Developing competitive and inclusive value chains of pulses in Pakistan	ADP/2017/004	University of Tasmania
Building research and project management skills in fisheries staff in Papua New Guinea	FIS/2010/055	University of Tasmania
Harvest strategies for Indonesian tropical tuna fisheries to increase sustainable benefits	FIS/2016/116	CSIRO National Collections and Marine Infrastructure
Evaluating processes and outcomes in south-south research collaboration - finfish mariculture development in Cambodia through cooperation with Indonesia	FIS/2018/115	University of Tasmania
Extending capacity of fish identification skills for improved fisheries assessments	FIS/2018/116	CSIRO National Collections and Marine Infrastructure
Extension activities for PNG's shark fishery	FIS/2018/150	CSIRO National Collections and Marine Infrastructure
Maximising productivity of Eucalyptus and Acacia plantations for growers in Indonesia and Vietnam	FST/2014/064	CSIRO Forestry and Forest Products
Management strategies for Acacia plantation diseases in Indonesia and Vietnam	FST/2014/068	University of Tasmania
Developing integrated options and accelerating scaling up of agroforestry for improved food security and resilient livelihoods in Eastern Africa - Trees for Food Security - 2	FST/2015/039	CSIRO Ecosystem Sciences
Improving community fire management and peatland restoration in Indonesia	FST/2016/144	CSIRO Forestry and Forest Products
Intensification of beef cattle production in upland cropping systems in Northwest Vietnam	LPS/2015/037	University of Tasmania
Victoria		
Policy and institutional reforms to improve horticultural markets in Pakistan	ADP/2014/043	Monash University
Improving policies for forest plantations to balance smallholder, industry and environmental needs in Lao PDR and Vietnam	ADP/2014/047	The University of Melbourne
Analysis of the private sector landscape in Myanmar: opportunities for inclusive agribusiness	AGB/2018/125	Business for Millenium Development
Improving the methods and impacts of agricultural extension in Western Mindanao, Philippines	ASEM/2012/063	RMIT University
Improving food security in the northern uplands of Lao PDR: identifying drivers and overcoming barriers	ASEM/2012/073	Monash University
Uptake of agricultural technologies amongst farmers in Battambang and Pailin provinces, Cambodia	ASEM/2013/003	The University of Melbourne
The potential of International Landcare	ASEM/2018/117	RMIT University
Enhancing value added wood processing in Papua New Guinea	FST/2012/092	The University of Melbourne
Advancing enhanced wood manufacturing industries in Laos and Australia	FST/2016/151	The University of Melbourne
Enterprise-driven transformation of family cocoa production in East Sepik, Madang, New Ireland and Chimbu Provinces of Papua New Guinea	HORT/2014/096	La Trobe University
Improving smallholder dairy and beef profitability by enhancing farm production and value chain management in Pakistan	LPS/2016/011	The University of Melbourne
Smallholder goat value chains in Pakistan; challenges and research opportunities	LPS/2016/096	The University of Melbourne
Improving farmer livelihoods by developing market-oriented small ruminant production systems in Myanmar	LS/2014/056	The University of Melbourne
Enhancing small ruminant production to benefit farming families in Sindh and Punjab, Pakistan	LS/2018/105	The University of Melbourne
Point of Care diagnostics	LS/2018/203	CSIRO - Australian Animal Health Laboratory
Trial of eddy covariance flux towers and Chameleon sensors for evaluating peatland restoration in Indonesia	SLAM/2018/122	La Trobe University

Project title	Project code	Commissioned organisation
Inoculants for plant nutrition use in Greater Mekong Region	SLAM/2018/123	Deakin University
Management of nutrients for improved profitability and sustainability of crop production in Central Myanmar	SMCN/2014/044	The University of Melbourne
Western Australia		
Policy analysis of food safety and trade in Vietnam	ADP/2016/140	The University of Western Australia
Strengthening livelihoods for food security amongst cocoa and oil palm farming communities in Papua New Guinea	ASEM/2012/072	Curtin University
Identifying opportunities and constraints for rural women's engagement in small-scale agricultural enterprises in Papua New Guinea	ASEM/2014/054	Curtin University
Improving livelihoods of smallholder coffee communities in Papua New Guinea	ASEM/2016/100	Curtin University
Climate-smart landscapes for promoting sustainability of Pacific Island agricultural systems	ASEM/2016/101	The University of Western Australia
Incorporating salt-tolerant wheat and pulses into smallholder farming systems in southern Bangladesh	CIM/2014/076	The University of Western Australia
Agricultural innovations for communities for intensified and sustainable farming systems in Timor-Leste (AI-Com)	CIM/2014/082	The University of Western Australia
Faba bean in Ethiopia - mitigating disease constraints to improve productivity and sustainability	CIM/2017/030	The University of Western Australia
Enhancing farm-household management decision-making for increased productivity in the Eastern Gangetic Plains	CSE/2012/108	The University of Western Australia
Enhance the formation of heartwood in sandalwood in Vanuatu	FST/2016/054	The University of Western Australia
Potential of new Australian old man saltbush varieties to fill ruminant feed gaps in arid and saline areas of Pakistan	LPS/2016/022	CSIRO Agriculture and Food
Impact assessment of Taenia solium control in Phongsali province, Lao PDR and development of future opportunities for the control of zoonotic parasitic infections	LS/2018/201	Murdoch University
Nutrient management for diversified cropping in Bangladesh (NUMAN)	LWR/2016/136	Murdoch University
Pilot project on commercialisation of smallholders' conservation agriculture based planters in Bangladesh	LWR/2018/111	Murdoch University
X-projects and synthesis, Cambodia	SLAM/2018/127	Murdoch University
Integrated water, soil and nutrient management for sustainable farming systems in south central coastal Vietnam and Australia	SMCN/2012/069	Murdoch University
Land suitability assessment and site-specific soil management for Cambodian uplands	SMCN/2016/237	Murdoch University
Analysing gender transformative approaches to agricultural development with ethnic minority communities in Vietnam	SSS/2018/139	Murdoch University
International		
Developing an emergency response and long-term management strategy for cassava mosaic virus in Cambodia and Vietnam	AGB/2016/032	International Center for Tropical Agriculture
Inclusive agriculture value chain financing	AGB/2016/163	International Food Policy Research Institute
Integrating gender and social inclusion into agricultural value chain research in Vietnam	AGB/2017/008	International Potato Center
Increasing the sustainability, productivity and economic value of coffee and black pepper farming systems and value chains in the Central Highlands region of Vietnam.	AGB/2018/175	World Agroforestry Centre
Increasing the sustainability, productivity and economic value of coffee farming systems and value chains in the Central Highlands region of Vietnam	AGB/2018/208	CIRAD
Improving post-rainy sorghum varieties to meet the growing grain and fodder demand in India	CIM/2007/120	International Crops Research Institute for the Semi Arid Tropics

Project title	Project code	Commissioned organisation
Establishing the international mungbean improvement network	CIM/2014/079	The World Vegetable Center
Breeding for low chalk in rice	CIM/2016/046	International Rice Research Institute
Improved mungbean harvesting and seed production systems for Bangladesh, Myanmar and Pakistan	CIM/2016/174	The World Vegetable Center
Identification of sources of resistance to wheat blast and their deployment in wheat varieties adapted to Bangladesh	CIM/2016/219	International Maize and Wheat Improvement Center
Sustainable and resilient farming systems intensification in the Eastern Gangetic Plains (SRFSI)	CSE/2011/077	International Maize and Wheat Improvement Center
Sustainable intensification of maize-legume cropping systems for food security in eastern and southern Africa II (SIMLESA II)	CSE/2013/008	International Maize and Wheat Improvement Center
Improving fishery management in support of better governance of Myanmar's inland and delta fisheries	FIS/2015/046	WorldFish Center
Development of rice fish systems in the Ayeyarwaddy Delta, Myanmar	FIS/2016/135	WorldFish Center
A nutrition-sensitive approach to coastal fisheries management and development in Timor-Leste and Nusa Tenggara Timur Province, Indonesia	FIS/2017/032	WorldFish Center
Farm mechanisation and conservation agriculture for sustainable intensification	FSC/2012/047	International Maize and Wheat Improvement Center
Developing value chain innovation platforms to improve food security in east and southern Africa	FST/2014/093	World Agroforestry Centre
Developing and promoting market-based agroforestry options and integrated landscape management for smallholder forestry in Indonesia (Kanoppi2)	FST/2016/141	World Agroforestry Centre
Developing and promoting market-based agroforestry and forest rehabilitation options for northwest Vietnam	FST/2016/152	World Agroforestry Centre
Monitoring Agricultural Research Investments, capacity and impact in South-East Asia and the Pacific	GP/2016/093	International Food Policy Research Institute
Schools as platforms to increase dietary diversity, improve nutrition and enhance livelihoods and environmental sustainability in Kenya, Ethiopia, Tanzania and Uganda	GP/2018/101	Bioversity International
Strengthening vegetable value chains in Pakistan for greater community livelihood benefits	HORT/2016/012	Centre for Agriculture and Bioscience International
Research into scaling up use of African Leafy Vegetables for nutrition in Kenya	HORT/2017/012	Bioversity International
Defining the biotic constraints to fresh taro from Samoa gaining market access to Australia	HORT/2017/014	Plant & Food Research
Coconuts for Pacific Livelihoods	HORT/2017/025	Secretariat of the Pacific Community
Update of SoFT (Selection of Forages for the Tropics)	LPS/2016/097	International Center for Tropical Agriculture
Safe Pork: Market based approaches to improving the safety of pork in Vietnam	LS/2016/143	International Livestock Research Institute
Trilateral support to smallholder cattle systems research in Timor-Leste	LS/2017/035	University of Mataram
Integrated catchment management and capacity building for improving livelihoods in Afghanistan	LWR/2008/047	International Center for Agricultural Research in the Dry Areas
Improving soil health, agricultural productivity and food security on atolls	SMCN/2014/089	Secretariat of the Pacific Community
Foresight for sustainable food systems in the Eastern Gangetic Plains	WAC/2018/168	International Food Policy Research Institute
Aquifer characterisation, artificial recharge and reuse of suddenly available water in South Bihar	WAC/2018/211	Nalanda University

Project list current at 1 November 2018

Appendix 5 Information sources

GDP per capita (US\$)

<https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

Accessed 31 October 2018

Population (million)

<https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ES>

Accessed 31 October 2018

Human Development Index ranking

<http://hdr.undp.org/en/countries>

Accessed 31 October 2018

Abbreviations and acronyms

AAUN	Australia Africa Universities Network
ACIAR	Australian Centre for International Agricultural Research
ADP	Agricultural development policy (former ACIAR research program)
AfricaRice	Africa Rice Center
AGB	Agribusiness (ACIAR research program)
AH	Animal Health (former ACIAR research program)
APAARI	Asia-Pacific Association of Agricultural Research Institutions
ASEAN	Association of Southeast Asian Nations
ASEM	Agricultural Systems and Management (former ACIAR research program)
ASTI	Agricultural Science and Technology Indicators
CABI	Centre for Agriculture and Biosciences International
CGIAR	formerly the Consultative Group on International Agricultural Research
CIAT	International Centre for Tropical Agriculture
CIFOR	Center for International Forestry Research
CIM	Crop Improvement and Management (former ACIAR research program)
CIMMYT	International Maize and Wheat Improvement Center
CIP	International Potato Center
COGENT	Global Coconut Genetic Resources Network
CSE	Cropping Systems and Economics (former ACIAR research program)
CSIRO	Commonwealth Scientific and Industrial Research Organisation (Australia)
CultiAF	Cultivate Africa's Future
DFAT	Department of Foreign Affairs and Trade (Australia)
FIS	Fisheries (ACIAR research program)
FST	Forestry (ACIAR research program)
GDP	gross domestic product
GFAR	Global Forum on Agricultural Research
GP	Global Program (ACIAR program)
HORT	Horticulture (ACIAR research program)
IAP	Impact Assessment (ACIAR research program)
ICARDA	International Center for Agricultural Research in the Dry Areas
ICRAF	World Agroforestry Centre
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDRC	Canada's International Development Research Centre
IFPRI	International Food Policy Research Institute (USA)
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
IRRI	International Rice Research Institute

IWMI	International Water Management Institute
LPS	Livestock Production Systems (former ACIAR research program)
LS	Livestock Systems (ACIAR research program)
LWR	Land and Water Resources (former ACIAR research program)
MBA	Masters of Business Administration
MoU	Memorandum of Understanding
PARDI	Pacific Agribusiness Research for Development Initiative II
PNG	Papua New Guinea
ROU	Record of Understanding
SDG	Sustainable Development Goal
SLaM	Soil and Land Management (ACIAR research program)
SMCN	Soil Management and Crop Nutrition
SoFT	SoFT (Selection of Forages for the Tropics)
SPC	The Pacific Community (formerly the South Pacific Commission)
SSS	Social Sciences (ACIAR research program)
US	United States of America
WAC	Water and Climate (ACIAR research program)
WorldFish	CGIAR Research Program Fish
WorldVeg	World Vegetable Center

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