

Indonesia

A\$7.6 million

investment in agricultural
research for development

27 projects



17

Bilateral and regional
research projects



10

Small projects and research
activities



13

Projects specific to
Indonesia



14

Regional projects

Note: Additional projects may be commissioned during 2024–25.



Agriculture, fisheries and forestry are key sectors within the Indonesian economy. The sectors employ approximately one-third of Indonesia's labour force, and is dominated by smallholder farmers. The sectors contributed more than 14% to the country's gross domestic product and accounted for approximately 40% of total employment in 2023.

The Indonesian Government has placed self-sufficiency in specific agricultural products high on the national agenda. At the same time climate change is having a significant impact on Indonesia's agricultural production and there is increasing demand for food traceability. Indonesia is taking action to improve the climate resilience of agricultural systems and to increase productivity through the adoption of technology and practices that reduce long distribution chains from farmers to consumers, reduce the carbon footprint of produce and distribute economic growth evenly.

The key strategies for agricultural development in Indonesia are focused on increasing added value and competitiveness of products, improving infrastructure, increasing diversification, enhancing individual and institutional capacity, and promoting business-oriented smallholder farmers.

Rural communities

Despite strong development across primary production sectors, challenges remain for rural communities and smallholders. About 42% of Indonesia's 283 million people live in rural areas and there is widespread poverty and high levels of malnutrition among farmers in some areas.

The rural sectors face the challenge of a declining workforce and aging workers. Young people are not attracted to working in agriculture and programs are required to involve and incentivise the younger generation to engage. Digital technologies may offer a potential pathway for the participation of youth in agricultural value chains, but this must be complemented by profitable and meaningful livelihoods.

Political and economic environment

Following the legislative and presidential election in 2024, the new President and his administration will commence duty in October 2024. BAPPENAS (National Development Planning Ministry) is developing the RPJMN 2025–29 (Medium-Term Development Plan) to help guide the new government to prioritise key strategic issues. The status and focus on agriculture, fisheries and forestry in this new administration is yet to be revealed.

Climate change

Indonesia is located on the Pacific Ring of Fire, increasing the country's risk of natural disasters, including volcanic eruptions, earthquakes, tsunamis, forest fires and landslides. Additionally, with the impacts of climate change increasing the threat of severe drought and flooding, there are frequent and often severe impacts on infrastructure and ecosystems. These natural disasters can have a serious impact on food production, significantly limiting the quality, availability and accessibility of resources and compromising the stability of food systems in country.

About 180 million Indonesians live in coastal areas. Their lives, property and livelihoods are vulnerable to rising sea levels and an increasing incidence of weather-related disasters. Climate change and natural disasters also lead to environmental degradation in coastal areas, which in turn affects community stability and livelihoods.

Food insecurity

In 2022, Indonesia was ranked 63 of 133 countries in the global food security index. The challenges to food security in Indonesia include unsustainable agriculture practices, extreme weather events, natural disasters and economic disruption. In addition, income reduction and disruptions to food distribution logistics also impact food and nutrition security.

Reducing food waste and food loss, improving infrastructure in supply chains, combating climate change, strengthening biosecurity for both plants and animal, increasing production and food diversification will be crucial to reducing the impact and risk of food insecurity.



Partnering with Australia

As well as being geographical neighbours, Indonesia and Australia share common interests and challenges in social, political and economic aspects.

The year of 2024 marks the 75th anniversary of diplomatic relations between Indonesia and Australia. This milestone highlights the commitment between the 2 countries to strengthen strategic cooperation in the Indo-Pacific region, where the future and responsibilities to maintain stability are collectively shared.

Through ACIAR, Australia works with partners in Indonesia to support agricultural research for development. In 2023, ACIAR expanded its research partnership with the National Research and Innovation Agency (BRIN) and 9 of Indonesia's leading universities such as IPB, University of Gadjah Mada, University of Mataram and University of Diponegoro. At the same time, the ACIAR partnership with the Ministry of Agriculture was refreshed to ensure that research outcomes support the Ministry with science-based inputs for its policy recommendation processes.

Consistent with Australia's International Development Policy to enhance support for gender equality and support all people to fulfill their potential, the ACIAR program in Indonesia recognises the importance and increasing role of women in the agriculture sector, and the importance of maintaining young people in agriculture. The involvement of young farmers is promoted and facilitated by the government's Millennial Farmers Program, which operates in 15 provinces to support a process of farmer regeneration in anticipation of a future modern, adaptive and digitalised agriculture environment.

Country priorities

ACIAR works with Australian and in-country partners in Indonesia to support Indonesia's efforts to address the challenges that a growing population and an increasingly variable climate imposes on rural livelihoods, resource management and food production systems.

Through a series of Memorandums of Understanding, ACIAR is committed to partnering with BRIN, the Ministry of Agriculture and 9 of Indonesia's leading universities to continue existing collaborations as well as explore potential areas for future partnership. During 2024–25, ACIAR is in consultation with BAPPENAS to explore new partnership models focused on upscaling the results and outcomes of concluded and mature projects, to meet the goals of the RPJMN 2025–29 (Medium-Term Development Plan).

In 2024–25, ACIAR will engage with partners to explore areas where Australia's knowledge and innovation could be used to help address Indonesia's challenges in the following areas:

- » biosecurity (plant and animal)
- » climate change mitigation and adaptation
- » improving productivity and sustainability
- » restoring peatland, marine and land ecosystem
- » reducing food loss and waste
- » other issues of comparative benefits for both countries.

The building of individual and institutional capacity in Indonesia is a critical part of Australia's support of agricultural development. Through the John Allwright Fellowship Program, ACIAR provides opportunities to Indonesian partner institutions to strengthen their capacity as well as to empower researchers with specific agricultural competencies and knowledge.

The impact of the transition of Indonesia's R&D ecosystem in recent years has identified a gap in the number of researchers and an immediate need to rebuild numbers and capacity of senior, mid-level and junior personnel. The John Dillon Fellowship and Meryl Williams Fellowship programs will contribute to addressing these requirements and strengthen the leadership capability of the partner researchers.

2024–25 research program

In 2024–25, ACIAR supports 27 agricultural research-for-development projects in Indonesia, 13 of which are specific to this country and the remainder are part of regional projects.

The projects address the high-level objectives outlined in the ACIAR 10-Year Strategy 2018–2027, as well as specific issues and opportunities identified by partner countries and ACIAR.

All research investments have the underlying goal of contributing to:

- » agrifood systems and rural communities resilient to the impacts to climate change
- » equitable research benefits and outcomes for all community members
- » increased scientific and policy capability of individuals and partner institutions.






Country Manager, Indonesia




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Research Program Managers

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Current and proposed projects in Indonesia, 2024–25

Program	Project title & code	Country	Start	End	Total investment
	Agribusiness				
	Creating resilient communities through smallholder-inclusive tourism markets in Indonesia AGB/2021/125	Indonesia	01/07/23	31/12/28	A\$2,800,000
	Evidence to underpin Indonesia's agtech transformation AGB/2023/155	Indonesia	01/09/24	31/08/27	A\$1,497,866
	Crops				
	International Mungbean Improvement Network (Phase 2) CROP/2019/144	Bangladesh, India, Indonesia, Kenya, Myanmar	01/07/20	30/06/25	A\$2,257,184
	Fisheries				
	A nutrition-sensitive approach to fisheries management and development in Timor-Leste and Nusa Tenggara Timur Province, Indonesia FIS/2017/032	Indonesia, Timor-Leste	01/09/21	31/07/25	A\$2,465,139
	FishTech: integrating technical fisheries solutions into river development programs across Southeast Asia FIS/2018/153	Cambodia, Indonesia, Laos, Myanmar, Thailand	01/01/20	31/12/25	A\$8,509,334
	Enhancing maritime environmental governance in Indonesia and the Philippines FIS/2023/185	Indonesia, Philippines	01/07/24	30/06/27	A\$2,272,727
	The value of using a South-South triangular cooperation approach in mariculture for Cambodia and Indonesia FIS/2024/105	Cambodia, Indonesia	01/04/24	31/12/25	A\$382,908
	Increasing capacity in population biology and harvest strategy implementation for sustainable tuna fishing and food security in Indonesia FIS/2024/110	Indonesia	01/06/24	31/03/26	A\$499,414
	Forestry				
	Managing risk in Southeast Asian forest biosecurity FST/2018/179	Indonesia, Vietnam	24/09/21	31/12/25	A\$1,900,220
	Retaining the jewels in the crown: Kalimantan peat forest remnants FST/2021/145	Indonesia	13/06/22	31/05/25	A\$250,000
	Scoping new co-governance research in Indonesian peatlands CLIM/2022/138	Indonesia	01/07/23	31/03/25	A\$294,283
	Horticulture				
	Development of area-wide management approaches for fruit flies in mango for Indonesia, Philippines, Australia and the Asia-Pacific region HORT/2015/042	Indonesia, Philippines	01/11/18	30/11/24	A\$2,908,088
	An integrated management response to the spread of Fusarium wilt of banana in Southeast Asia HORT/2018/192	Indonesia, Laos, Philippines	01/01/20	31/12/25	A\$3,037,493
	Preparedness and management of huánglóngbīng (citrus greening disease) to safeguard the future of citrus industry in Australia, China and Indonesia (Phase 2) HORT/2019/164	China, Indonesia	01/01/21	30/06/26	A\$1,789,999
	Smarter use of pesticides in tree crop systems in the Philippines and Indonesia for reduced fruit loss and improved safety HORT/2022/125	Indonesia, Philippines	01/07/24	31/12/28	A\$3,150,000
	An integrated management response to the spread of Fusarium wilt of banana in Southeast Asia (Indonesia phase) HORT/2022/178	Indonesia	01/01/23	31/12/25	A\$252,944
	Pan genome analysis to support innovative utilisation of coconut germplasm resources in the Pacific and Southeast Asia HORT/2023/158	China, Fiji, Indonesia, Kiribati, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu	01/01/25	30/06/29	A\$3,700,000
	MeloRisk Australasia: reducing the risk of exotic root-knot nematodes in Australasia HORT/2023/167	Indonesia, Laos, Philippines, Vietnam	12/06/23	31/03/25	A\$87,500

Program	Project title & code	Country	Start	End	Total investment
	Livestock Systems				
	Evaluating zoonotic malaria transmission and agricultural and forestry land use in Indonesia LS/2019/116	Indonesia	01/01/20	30/06/26	A\$4,620,467
	Livestock enhancement through Ecohealth/One Health assessment in Southeast Asia LS/2022/163	Indonesia, Laos, Philippines	12/12/22	31/12/25	A\$997,838
	Detection and characterisation of foot-and-mouth disease in Indonesia LS/2022/166	Indonesia	01/02/24	31/05/25	A\$155,855
	Social Systems				
	Developing co-management options for sustainable peatland livelihoods in Indonesia SSS/2022/155	Indonesia	01/07/24	30/06/29	A\$2,790,999
	Pathways to build a gender inclusive and climate resilient food sector: country focus Cambodia, Indonesia and the Philippines SSS/2023/191	Cambodia, Indonesia, Philippines	01/01/24	30/06/26	A\$320,000
	Soil & Land Management				
	Crop health and nutrient management of shallot-chilli-rice cropping systems in coastal Indonesia SLAM/2018/145	Indonesia	01/08/20	31/12/26	A\$2,000,000
	Meeting the biophysical information needs of peatland restoration and management stakeholders to support improved and integrated decision-making SLAM/2022/104	Indonesia	23/07/24	30/06/29	A\$2,500,000
	Exploring soil hydrological function in degraded and intact tropical peat swamp forest SLAM/2023/197	Indonesia	09/02/24	30/09/25	A\$150,000
	Carbon flux pathways: from ecosystem to the global carbon market SLAM/2024/116	Indonesia	15/07/24	31/01/26	A\$500,000

Note: Additional projects may be commissioned during 2024–25.



More information about our projects is available on the ACIAR website. Search for the project title or project code.

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