

# Pakistan

**A\$3.4** million  
investment in agricultural  
research for development

## 11 projects



9

Bilateral and regional  
research projects



2

Small projects and research  
activities



8

Projects specific to  
Pakistan



3

Regional projects

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



**Agriculture is a significant contributor to the Pakistan economy. It is the largest economic sector in the country, employing more than 42% of the workforce and contributing to about 24% of GDP.**

Livestock production is particularly important in Pakistan, contributing approximately 61.9% of agricultural GDP and 14.0% of national GDP. Animal husbandry is the most significant economic activity of the rural dwellers of Pakistan. More than 8 million rural families derive around 35–40% of their income from livestock production.

Pakistan's agricultural exports have grown in recent years, and with more productive and profitable enterprise options, comes the promise of a better future for the country's farmers and exporters. Currently about 70% of the country's exports are directly or indirectly derived from agriculture where cotton, rice, fruit and vegetables are the main commodities. There is huge potential for the Pakistan agriculture sector to gain a prominent role in the global food market and lead the country towards economic growth and stability.

#### **Rural communities**

Pakistan is an agrarian economy, with more than 60% of its 119 million people living in rural areas where arable land is scarce, and the productive potential of agriculture potential is low. Rural areas are frequently subjected to drought and natural disasters, and combined with population pressure and resource development, these areas are becoming environmentally degraded. Extreme variations in weather makes for a challenging farming environment, creating uncertainty for farmers, depleting groundwater levels, degrading soil quality and organic matter content, reducing food availability, leading to poor public health conditions and increased poverty rates.

#### **Political and economic environment**

Pakistan is likely to avoid an acute economic crisis in 2024, as the economy has stabilised recently, foreign exchange reserves have grown and inflation has slowed, mainly due to International Monetary Fund assistance. The Pakistan Government is also trying to rationalise imports and restrict capital flows. The announcement of termination of support price mechanisms and market-led pricing schemes has caused panic among grain growers. In response to widespread flooding in 2022, wheat grain was imported to overcome food shortages. However, wheat stores are now in surplus and there are indications that domestic wheat production will decrease in 2024–25. For many people, economic conditions will remain difficult, potentially leading to protests and social unrest. The continuing cost-of-living crisis is likely to sustain pressure on the economy and on the government.

#### **Climate change**

Climate change significantly affects Pakistan's diverse landscapes of coastal regions, deserts, plains and mountains. Over recent years there have been more extreme weather events, triggering floods from rapid glacier melt and frequent droughts, which in turn are devastating for agriculture, rural communities and rural land. In the past 20 years, Pakistan has faced 152 extreme weather incidents, resulting in 9,989 deaths and US\$3.8 billion in economic losses. The government and communities are attempting to mitigate and adapt to climate change, including the introduction of modified agricultural practices. Understanding and incorporating the experiences and recommendations of these communities is crucial for policymakers to develop an inclusive and holistic climate-resilience framework for the future.

#### **Food insecurity**

According to the World Food Program, approximately 37% of the population faces food insecurity. Primarily, the poorest and most vulnerable groups of the population, and particularly women, have limited access to an adequate and diverse diet. Chronic poverty, recurring disasters and political and economic volatility are the key drivers of undernutrition and food insecurity throughout Pakistan. In parts of Balochistan, Sindh and Khyber Pakhtunkhwa, significant portions of the population face high levels of acute food insecurity, however there is seasonal alleviation after the summer cropping season.

### **Partnering with Australia**

Australia has a longstanding diplomatic association with Pakistan, and for 40 years, ACIAR has supported research and programs to extend Australia's significant expertise in agriculture, livestock production and water management to support Pakistan's long-term economic growth, stability and resilience.

ACIAR is an important international partner in Pakistan, and its work has influenced policymakers at both national and provincial levels. Collaborative research efforts in Pakistan have enhanced livelihood opportunities for impoverished men and women by boosting agricultural productivity and increasing income sources for farmers, through improved water management techniques, value-adding to raw agricultural products and better market access. ACIAR programs leverage Australia's global expertise in areas that are critical for Pakistan – water and food security, which are vital for the country's long-term stability. Enhancing the inclusion of women and girls at all stages and levels of agricultural research is a primary focus.



## Country priorities

To boost the agriculture sector, the Pakistan Government has launched the Green Pakistan Initiative, broadly to support modern corporate farming as well as small farmers, who constitute 95% of Pakistan's agriculture sector. The main objectives are:

- » end malnutrition in Pakistan
- » reduce imports of food grains
- » increase exports.

This will be achieved through:

- » preparing farming communities for climate change challenges
- » improving crop yields to transition from being a net food importer to a food exporter
- » developing a legal and regulatory regime for seed production to encourage private sector investment
- » scaling up local production of hybrid seed
- » development of fruits and vegetables for export, significant investment across the value chains like development of cold chain infrastructure, branding and traceability
- » promotion of agribusiness with backward and forward integration.

ACIAR recognises the strong research capabilities of Pakistan. Researchers from both countries have been working together since 1984 and this collaboration is highly valued.

Working across the value chain has been prime focus for collaboration. ACIAR is supporting work on:

- » value chain development for horticultural industries
- » improving water efficiency and developing innovative plant breeding techniques to advance crop production
- » trialling irrigation options for enhancing water use efficiency and crop production
- » understanding the effectiveness of water infrastructure investments and improved water allocation and management systems, to inform policy development
- » understanding climate resilient communities and future trends of climate change
- » estimation and mitigation of food losses across horticultural value chains.

ACIAR is an important capacity development partner the national agricultural research system in Pakistan, particularly in the areas of:

- » policy development and analysis for understanding climate change, its future scenarios, impacts and mitigation
- » gender inclusion and the creation of opportunities for women and girls across value chains
- » building linkages between value chain actors to help the private sector in value-adding, product development, branding and traceability systems
- » training researchers to build research for development systems that can support smallholder farmers.

## 2024–25 research program

In 2024–25, ACIAR supports 11 agricultural research-for-development projects in Pakistan, 8 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, Pakistan

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### Research Program Managers

Visit [aciar.gov.au](https://aciar.gov.au) for contact details

## Current and proposed projects in Pakistan, 2024–25

| Program   | Project title & code  | Country                        | Start    | End      | Total investment |
|---|---|--------------------------------|----------|----------|------------------|
|    | <b>Agribusiness</b>   |                                |          |          |                  |
|   | Improved productivity, efficiency and sustainability of the culture-based fishery for finfish and giant freshwater prawn in Sri Lankan reservoirs <b>FIS/2018/157</b> | Sri Lanka                      | 01/06/20 | 30/06/25 | A\$2,250,000     |
|   | Developing competitive and inclusive value chains of pulses in Pakistan <b>ADP/2017/004</b>   | Pakistan                       | 01/09/18 | 30/06/25 | A\$1,507,570     |
|   | Developing food loss reduction pathways through smart business practices in mango and tomato value chains in Pakistan and Sri Lanka <b>CS/2020/193</b>                | Pakistan, Sri Lanka            | 01/08/22 | 31/07/25 | A\$1,100,000     |
|    | <b>Crops</b>  |                                |          |          |                  |
|   | Accelerating genetic gain in wheat through hybrid breeding in Bangladesh, Ethiopia and Pakistan <b>CROP/2020/167</b>  | Bangladesh, Ethiopia, Pakistan | 01/12/21 | 30/06/26 | A\$2,311,970     |
|   | Resilient and profitable pulses production in Pakistan <b>CROP/2021/132</b>   | Pakistan                       | 24/03/25 | 24/12/25 | A\$298,403       |
|    | <b>Horticulture</b>   |                                |          |          |                  |
|   | Improving smallholder wellbeing through participation in modern value chains: sustaining future growth in the Pakistan citrus industry <b>HORT/2020/129</b>           | Pakistan                       | 01/01/22 | 31/12/25 | A\$1,500,000     |
|   | <b>Livestock Systems</b>  |                                |          |          |                  |
|   | Moving further towards formalised sheep and goat value chains in Pakistan and Ethiopia through business-oriented breeder and producer groups <b>LS/2023/132</b>       | Ethiopia, Pakistan             | 01/09/24 | 31/12/28 | A\$2,400,000     |
|  | <b>Water</b>  |                                |          |          |                  |
|   | Groundwater management in Pakistan <b>WAC/2021/134</b>  | Pakistan                       | 01/12/24 | 31/05/29 | A\$3,400,000     |
|   | Transformation through adoption of trees and shrubs for salinity management in the Southern Indus Basin, Pakistan <b>WAC/2021/136</b>                                 | Pakistan                       | 01/03/24 | 31/08/25 | A\$250,197       |
|   | Climate resilient and adaptive water allocation in Pakistan <b>WAC/2022/152</b>   | Pakistan                       | 04/11/24 | 08/06/29 | A\$3,000,001     |

**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.

[www.aciar.gov.au](http://www.aciar.gov.au)