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South Asia region program

South Asia is an immensely diverse and densely populated region. It is home to about 2 billion people – one quarter of the world's population. The region has the highest concentration of poor people in the world, with more than 500 million people living in extreme poverty in the region.

Compared with other regions in the world, South Asia has the highest regional Global Hunger Index and a very low Human Development Index. Half of the population depends on agriculture for its livelihood. Although the share of agriculture in rural employment remains high, growth of the rural non-farm sector is accelerating and now provides a sizeable share of rural income and employment, primarily in services.

Malnutrition rates are high across South Asia, and poor diet quality is a major contributor to this problem throughout the region. High levels of undernutrition (stunting and wasting) and micronutrient deficiencies persist even as the prevalence of overweight, obesity and related noncommunicable diseases rises.

While the countries of South Asia face common opportunities and challenges in agriculture, there are also fundamental differences between and within these countries in terms of the broad characteristics that influence the nature and success of agriculture. India has 15 distinct agroecological zones. Nepal has 3 distinct topographical zones. Bangladesh has 30 agroecological zones. These zones range from hill regions to coastal regions. Bangladesh, India, Nepal and Pakistan all have alluvial and fertile floodplains associated with major rivers flowing from the Himalayas. Sri Lanka's landscape is clearly defined by its dry and wet zones.

The region is prone to natural disasters. Bangladesh, parts of India and Sri Lanka are threatened frequently by storms, coastal floods and cyclones. Nepal is subject to flooding from glacial lake outbursts. Recurring drought is a common feature in the arid and semi-arid parts of India and Pakistan. The impact of natural calamities is most severe on food-insecure households, and it is anticipated that climate change threatens to compound and exacerbate the challenges to food production systems and rural livelihoods in South Asia.

2024–25 program

Partner countries

Bangladesh
India
Nepal
Pakistan
Sri Lanka

27
projects

A\$9.77 million

**Investment in agricultural
research for development**

6
small research
activities

21
research
projects

Drivers of regional collaboration

Countries in South Asia share many opportunities and threats that drive the need for regional cooperation through bilateral and multilateral research and development programs, especially in the Indo-Gangetic Plains.

Rice and wheat are the region's major staple crops, accounting for about two-thirds of total dietary energy. However, food consumption patterns have changed in the region over the past few decades, and the changes are most apparent in rural areas. The consumption of cereals is declining while that of animal-sourced foods, fruits, vegetables and processed foods is increasing.

Pressure to expand food production to meet growing demand is putting stress on natural resources and potentially jeopardising the region's capacity to meet future food demand. The resulting expansion and intensification of agriculture is leading to serious land degradation and deterioration of soil quality. Contributing factors include the removal or burning of crop residue throughout the region, deforestation in Nepal and Sri Lanka, intensive tillage and salinity in Bangladesh, and monoculture and intensive farming practices in Pakistan. Agriculture is also contributing to loss of biodiversity in the region.

Agricultural growth poses risks for water resources. Facing the world's lowest per capita renewable freshwater resources, millions of rural people in South Asia have benefited from the increasing use of groundwater. However, aquifers are being depleted and, across the region, water tables are falling. Water quality is also deteriorating throughout the region due to nutrient overloads and industrial pollution, raising concerns about food safety and drinking water quality.

Climate variability, competing and increasing demands from agriculture and industry (including energy production), and population growth are creating severe demands on water resources. Regional cooperation is essential to manage these shared resources and common issues.

There are significant opportunities for regional cooperation to improve the productivity and diversification of agricultural crops, especially beyond cereals, and to improve the sustainability of farming systems through technical, institutional, value-chain and policy research and development.

Regional ACIAR program

Australian agricultural and resource management expertise is highly regarded in the South Asia region. ACIAR has a long history of research collaboration in improving crop productivity, forestry, water use efficiency and policy reforms. The South Asia regional program of the Australian Government seeks to underpin Australia's economic engagement in the region by addressing some of the key region-wide barriers to sustainable economic growth and connectivity. Gender equality is a focus in all the investments under the regional program.

The ACIAR strategy in South Asia focuses on communities, production systems and resource management in the 3 main ecosystems of the region – highlands, plains and coastal areas – that are common to Pakistan, India, Bangladesh, Nepal and Sri Lanka.








Research in these areas looks to improve productivity and livelihoods in marginalised communities, sustainably improve the productivity and resilience of crop, livestock, fisheries and forestry systems, identify appropriate policy reform and increase adoption of technology (including post-harvest management).


The major pathways of development in the region include modernisation of agrifood systems, technology support, strengthening service providers, developing rural non-farm sector, and governance. Overproduction in some areas and unequal distribution networks due to poorly developed supply-chain management are the major issues in the region. Addressing these could play a major role in achieving food and nutrition security and stability in the region.

The medium to long-term strategy in the region focuses on creating regional collaborations that:

- » sustainably intensify and diversify cropping systems using conservation agriculture, farm mechanisation, saline land management and adaptation to climate change
- » eradicate extreme poverty through improved productivity of food-grain crops (especially wheat and pulses)
- » better manage agricultural water, including rainfed areas in the Indo-Gangetic Plains and coastal zone
- » influence policy related to agricultural livelihoods and climate change
- » increase the emphasis on meaningful gender inclusion and empowerment.

Current and proposed projects in the South Asia region, 2024–25

Program	Project title & code	Country	Start	End	Total investment
	Agribusiness				
	Developing competitive and inclusive value chains of pulses in Pakistan ADP/2017/004	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 CS/2020/193	Pakistan, Sri Lanka	01/08/22	31/07/25	A\$1,100,000
	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
	Managing wheat blast in Bangladesh: identification and introgression of wheat blast resistance for rapid varietal development and dissemination CROP/2020/165	Bangladesh	01/11/21	30/06/26	A\$1,500,000
	Accelerating genetic gain in wheat through hybrid breeding in Bangladesh, Ethiopia and Pakistan CROP/2020/167	Bangladesh, Ethiopia, Pakistan	01/12/21	30/06/26	A\$2,311,970
	Resilient and profitable pulses production in Pakistan CROP/2024/159	Pakistan	24/03/25	24/12/25	A\$298,403
	Additive intercropping in wide row crops for resilient crop production in Bangladesh, Bhutan and India CROP/2022/111	Bangladesh, India	01/06/23	30/06/28	A\$2,842,648
	Nitrogen fertiliser use in Bangladesh: scoping research opportunities for higher efficiency CROP/2024/103	Bangladesh	15/03/24	15/09/25	A\$349,758
	Fisheries				
	Improved productivity, efficiency and sustainability of the culture-based fishery for finfish and giant freshwater prawn in Sri Lankan reservoirs FIS/2018/157	Sri Lanka	01/06/20	30/06/25	A\$2,250,000
	Forestry				
	Bangladesh Sundarban ecosystem management project FST/2022/123	Bangladesh	15/12/24	14/12/29	A\$2,933,018
	Resource dependency in the Sundarban Ecologically Critical Area FST/2023/177	Bangladesh	26/06/23	14/06/25	A\$226,982
	Horticulture				
	Improving smallholder wellbeing through participation in modern value chains: sustaining future growth in the Pakistan citrus industry HORT/2020/129	Pakistan	01/01/22	31/12/25	A\$1,500,000
	Livestock Systems				
	Indo-Pacific Initiative for Sustainable Animal Health Cooperation LS/2022/143	Bangladesh, Kenya, Philippines, Vietnam	01/01/24	30/06/27	A\$1,400,000
	Moving further towards formalised sheep and goat value chains in Pakistan and Ethiopia through business-oriented breeder and producer groups LS/2023/132	Ethiopia, Pakistan	01/09/24	31/12/28	A\$2,400,000
	Soil & Land Management				
	Developing and translating soil health information in Bangladesh with farmers and for farmers to build resilient agricultural systems SLAM/2021/107	Bangladesh	10/06/24	31/05/29	A\$1,200,097
	Change in soil and water dynamics and supporting adoption of conservation agriculture in Bangladesh SLAM/2022/101	Bangladesh	26/09/24	30/04/29	A\$3,312,252
	Assessment of the adoption and adaptation of conservation agriculture and direct seeded rice in South and Southeast Asia SLAM/2022/172	Bangladesh, Cambodia, India, Laos, Philippines, Vietnam	19/12/22	31/03/25	A\$357,424

Program	Project title & code	Country	Start	End	Total investment
	Water				
	Cropping system intensification in the salt-affected coastal zones of Bangladesh and West Bengal, India LWR/2014/073	Bangladesh, India	01/11/15	30/06/26	A\$5,556,589
	Transforming smallholder food systems in the Eastern Gangetic Plain WAC/2020/148	Bangladesh, India, Nepal	01/10/21	30/09/26	A\$4,693,755
	Groundwater management in Pakistan WAC/2021/134	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 WAC/2021/136	Pakistan	01/03/24	31/08/25	A\$250,197
	Current and projected hydrological trends in the Sundarbans mangrove forest and their impacts on ecology and ecosystem services: a scoping study WAC/2022/129	Bangladesh	01/01/24	30/06/25	A\$250,000
	Spring water management, agriculture and resilient livelihoods in the mid hills of Nepal WAC/2022/151	Nepal	01/10/24	30/09/28	A\$2,800,000
	Climate resilient and adaptive water allocation in Pakistan WAC/2022/152	Pakistan	04/11/24	08/06/29	A\$3,000,001
	Transitioning to climate resilient water allocation planning in Pakistan WAC/2023/182	Pakistan	01/10/23	11/11/24	A\$60,000
	Paribartan: participatory action research on locally led iterative learning and inclusive business models for adaptive transformation in Bangladesh polders CLIM/2021/137	Bangladesh	21/08/23	31/12/27	A\$3,115,808
	Preparing Pakistan for a water scarcity tipping point CLIM/2022/136	Pakistan	01/07/24	31/01/29	A\$3,200,000

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.
www.aciar.gov.au