



Key statistics	
GDP per capita (US\$) <sup>a</sup>	494
Population (million) <sup>a</sup>	164
<b>Funding</b>	<b>\$m</b>
2009–10 actual	1.27
2010–11 budget allocation	0.93
2011–12 budget estimate	1.45

<sup>a</sup> data from 2009 & 2010 <<http://unstats.un.org/unsd/demographic/products/socind/>>

*Spice sellers in the Noakhali district, south-eastern Bangladesh*

## MEDIUM-TERM STRATEGY

ACIAR's focus in Bangladesh has been on food grain crops and thus MDG 1, which fits well with the draft Australia–Bangladesh country strategy. One of the two overarching components of the strategy is to 'reduce vulnerabilities caused by natural disasters, climate change and lack of social protection'. The ACIAR strategy addresses one of Bangladesh's key development challenges—food availability within the context of increasing climate-change vulnerability—through research activities relating to agricultural food production. In addition to this challenge, Bangladesh faces the problem of inadequate nutrition, which is not just limited to food availability. It is derived from multiple factors, for example gendered consumption practices, international market variations and effectiveness of government structures. The ACIAR strategy also fits very well with the Bangladesh Government's priorities. The government's vision for the agriculture sector in its National Strategy for Accelerated Poverty Reduction (NSAPR) is 'to enhance growth through development and dissemination of sustainable technologies which are ecologically adaptable, economically profitable, and capable of generating productive employment; diversification of both crop and non-crop; development of agri-business services; and human resource development and ensuring "food for all"'.

As the past emphasis on 'Rabi' (winter season) crops such as pulses, wheat and maize is shifting towards a farming systems approach supporting broader food security issues, the components on rice-based farming systems will expand and include research on adaptation to climate change.

Bangladesh has been a partner country since the mid 1990s. ACIAR's program in Bangladesh is quite small, with projects focusing on constraints to field crop production (especially the rice–wheat system) and the potential for increasing legume production in cropping systems. This past focus will broaden with the emergence of rice–maize as an increasingly important cropping system. Increased pulse productivity and availability will lessen nutritional problems associated with the dominance of rice in diets.

With re-emerging concerns about Bangladesh's ability to maintain food security in the light of its high vulnerability to the impacts of climate change, the emphasis will shift to increasing the productivity of rice as the main staple. Low-lying areas and rainfed cropping systems in Bangladesh are particularly negatively impacted by the effects of seasonal climate variability and change. Consequently, Bangladesh is one of four partner countries involved in ACIAR's climate-change adaptation initiative.

Priorities for collaboration are developed through consultations between research program managers and other senior staff at ACIAR, and managers and scientists at agricultural R&D institutions and government bodies in Bangladesh. In recent years ACIAR has had a focus on agronomic and biotic constraints to food grain production, while current collaboration remains centred on research for better production and management of grain crops. Both intensification of cereal crops and diversification of rice-based systems are important research thrusts, and consideration is also given to adaptation to climate change and alleviation of policy constraints.



Women threshing wheat in Barisal, Bangladesh

## 2011–12 RESEARCH PRIORITIES AND PROJECTS

### ASEM/2011/055 (*proposed*) Policy constraints for rice-based farming systems in Bangladesh

Outputs will be recommendations for improved delivery of the technical projects, based on a greater understanding of the policy environment in which they will operate.

### CIM/2007/122 (*multilateral, IRRI/CIMMYT*) Sustainable intensification of rice–maize production systems in Bangladesh

This project will identify, test and promote key interventions in four districts that will lead to sustainable cropping intensification, resulting in double- and/or triple-cropping rice–maize systems.

### CIM/2009/038 Introduction of short-duration pulses into rice-based cropping systems in western Bangladesh

This project will fit new short-duration pulses (lentil, mung bean and field pea) into new cropping niches (via a relay cropping system) in western Bangladesh.

### LWR/2005/001 Addressing constraints to pulses in cereals-based cropping systems in north-western Bangladesh

The project is targeting chickpea and lentil production in poverty-prone areas of Bangladesh.

### LWR/2008/019 Building capacity of farming communities in Cambodia, Lao PDR, Bangladesh and India to adapt to climate change

This project is building capacity of farming households to enable them to adapt their rice-based cropping systems to accommodate climate variability and change. It will also develop strategies that enable policymakers to deliver more-effective climate adaptation programs relevant to farmers' livelihoods and food security.

### LWR/2010/033 Developing capacity in cropping systems modelling to promote food security and the sustainable use of water resources in South Asia

The overarching objective of this project is to improve water productivity in rainfed and irrigated smallholder rice-based farming systems. It will establish a network of agricultural scientists in South Asian Association for Regional Cooperation (SAARC) member states, identify a suite of improved crop and water management practices that increase water productivity, and strengthen institutional support for systems analysis and farming systems modelling.

### LWR/2010/080 (*proposed*) Overcoming agronomic, biotic and socioeconomic constraints to adoption of conservation agriculture in diversified rice-based cropping in Bangladesh

This project will complement other ACIAR projects in Bangladesh by focusing on aspects of conservation agriculture.

#### *Principal regional coordinator*

Dr John Dixon

#### *Key program managers*

Dr Paul Fox, Crop Improvement and Management  
Dr Andrew Noble, Land and Water Resources  
Dr Caroline Lemerle, Agricultural systems

#### *Country manager*

Dr Kuhu Chatterjee

## KEY PERFORMANCE INDICATORS (2011–12)

- Traditional rice-based systems provided with viable options for diversification using maize and legumes
- Capacity of national agronomists to manage legumes between cereal crops improved