

AFGHANISTAN

Key statistics

GDP per capita (US\$) ^a	466
Population (million) ^a	29
Funding	\$m
2009–10 actual	0.44
2010–11 budget allocation	0.07
2011–12 budget estimate	1.25

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

Afghan boys with harvested wheat crop. Photographer: ICARDA

MEDIUM-TERM STRATEGY

Two decades of war coupled with recent severe drought have devastated Afghanistan's food production capabilities and depleted critical seed stocks, leaving the nation heavily dependent on food aid from international donors. Increased agricultural productivity is critical for the Afghanistan Government and is supported by AusAID and ACIAR. ACIAR's collaboration with Afghanistan started in 2002 and focuses support on wheat and maize production. Wheat is sown on approximately 2.5 million hectares annually and dominates arable agriculture. Maize, with about 300,000 hectares sown annually, is among an important second tier of crops. Activities have aimed principally to import seed of suitable cultivars, establish on-farm participatory testing of imported germplasm for the identification of better adapted improved cultivars, and undertake local multiplication and distribution of selected cultivars. Particular attention has been paid to capacity building; improving rust resistance in wheat, with specific attention to the new stem race variant designated Ug99; and promoting improved crop management, along with provision of improved cultivars of both wheat and maize.

Activity in Afghanistan will continue through collaboration with the International Maize and Wheat Improvement Center (CIMMYT) (Mexico) and ICRISAT. The operating environment is complex as a result of poor security and political

uncertainty, which limits access by Australian scientists and hinders donor capacity for long-term planning.

Priorities are developed through visits by ACIAR research program managers and other senior staff meeting with leading agricultural R&D institutions and government bodies. Efforts are also made to collaborate and coordinate with other implementing partners, including government, NGOs, grower and industry groups, and donor organisations. Community-based watershed development provides an entry point for transfer of many improved agricultural technologies and for cropping diversification. This watershed focus for dryland areas will also strengthen on-farm engagement through the current project (CIM/2007/065) for cereals, as well as further legume research linked to cereal-based systems, conservation agriculture, weed control, water-use efficiency of cropping systems, and higher value crops for sale to enhance farmers' livelihoods. Consideration is also being given to livestock production as an entry point for the improvement of livelihoods in dryland agriculture. ACIAR's project partners will work with in-country organisations that have established programs in agricultural extension and community development.

2011–12 RESEARCH PRIORITIES AND PROJECTS

CIM/2004/004 (*multilateral, ICARDA*) Plant genetic resource conservation, documentation and utilisation in central Asia and the Caucasus

The International Center for Agricultural Research in the Dry Areas (ICARDA) (Syria) has conducted emergency collection of threatened genetic resources as well as training and coordination among the countries involved, and is systematically processing samples for enhanced access by the international community.

CIM/2007/065 (*multilateral, CIMMYT*) Sustainable wheat and maize production in Afghanistan

Seed of robust and productive disease-resistant varieties of wheat and maize will be deployed by Afghani farmers. Wheat breeding programs are being improved and wheat crop husbandry practices made more efficient.

CIM/2008/047 (*proposed, multilateral, ICRISAT*) Cropping system diversification, capacity building and rural livelihoods in Afghanistan

Community interventions will be aimed at diversifying cropping systems, increasing water-use efficiency and building the long-term sustainability of agricultural systems through improved agronomic practice.

Principal regional coordinator

Dr John Dixon

Key program managers

Dr Paul Fox, Crop Improvement and Management

Country manager

Dr Kuhu Chatterjee

KEY PERFORMANCE INDICATORS (2011–12)

- Key researchable issues for improving watershed management identified
- Robust, disease-resistant maize and wheat varieties released
- Capacity of national scientists in crop management increased