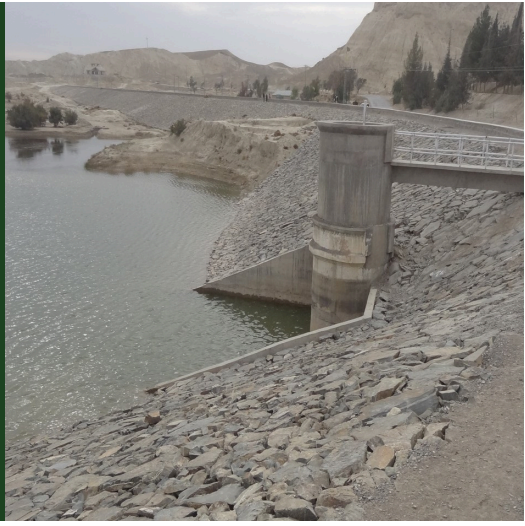
Australian Government
Australian Centre for International Agricultural Research

Supporting inter-provincial water allocation decision making in Pakistan



Key details

Location
Pakistan

Duration
Start Apr 2021 **End** Jun 2023

Budget AUD 199,280

Commissioned organisation
CSIRO

Partners
CSIRO, Land and Water; Indus River System Authority (IRSA); Punjab Irrigation Department (PID); Sindh Irrigation Department (SID); Water and Power Development Authority (WAPDA)

Project Leader
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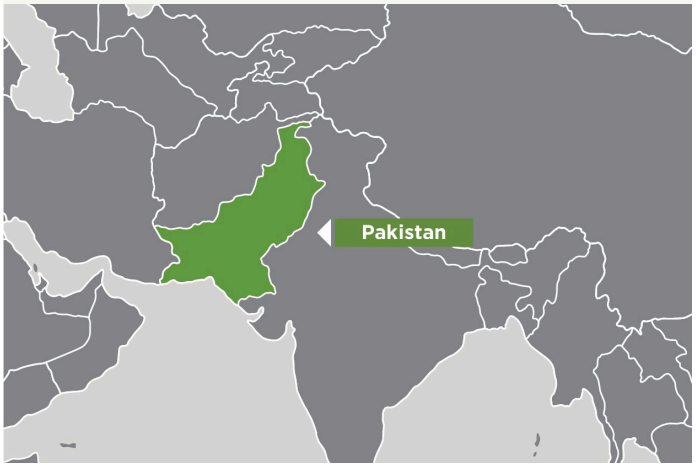
Program Water

Project code WAC/2021/103



Overview

This project aimed to sustain and enhance basin scale agricultural production and food security by better water management in the Indus basin.

Pakistan manages the world's largest continuous irrigation system, the Indus Basin Irrigation System (IBIS). This system, which is under increasing pressure from population growth and climate change, provides water, energy and food security for the nation. Indus River System Authority (IRSA), Water and Power Development Authority (WAPDA) and provincial irrigation departments share the surface water resources of the IBIS between provinces. They distribute this resource for irrigation, urban, stock and domestic and industrial use as well as generating electricity as it travels through the system. How the water resource is allocated is a detailed, complex process that is understood by only a few people, leading to confusion and contestation. With an aim to capture this knowledge and in so doing provide a transparent and consistent process, CSIRO, through a DFAT-funded project in close collaboration with IRSA, WAPDA, Punjab Irrigation Department (PID) and Sindh Irrigation Department (SID), has developed the Water Apportionment Accord(WAA) Tool.

Project outcomes

- Consolidated improvements in the seasonal planning process (through the use of the Water Apportionment Accord (WAA) Tool) by the relevant water agencies by supporting them through the next two rounds of seasonal water allocation planning.
- Reduced the risk of losing expertise (through retirement) by increasing the number of water professionals who understand how the allocation process works by using the WAA Tool as a training tool.
- Improved the allocation planning process through evaluation of the performance of other seasonal forecasting methodologies in comparison to existing methods and observations.