

Developing and translating soil health information in Bangladesh with farmers and for farmers to build resilient agricultural systems

End May 2029



Key details

Location Bangladesh Duration Start Jun 2024 Budget AUD 1,200,097 Commissioned organisation

Griffith University

Partners Griffith University; Soil Resource Development Institute

Project Leader Professor Chengrong Chen

ACIAR Research Program Manager

Dr Steven Crimp

Program Soil and Land Management

Project code SLAM/2021/107



Overview

This project aims to develop a farmeroriented soil health and resilience knowledge framework and evaluation system with farmers and for farmers to improve resilience through improved soil management of agricultural systems in Bangladesh.

It will involve farmers, extension agents, researchers, government agencies, and private sector partners to work collaboratively through an iterative learning cycle to address soil health risks related to climate change.

Bangladesh is a highly vulnerable country to climate change due to its unique geography, high population density, and vulnerability of natural resources. Climate change-related risks result in increased soil salinity, drought, and inundation, which can severely impact agricultural productivity and soil health. Farming practices, such as intensive tillage and inefficient input use, also contribute to soil degradation. To increase and sustain agricultural productivity in Bangladesh, it is necessary to increase the resilience of farming systems to environmental disturbances.

Soil health is crucial for local agriculture, the environment, and economic situations, especially in societies reliant on agriculture. However, farmers in Bangladesh have a limited understanding of the soil health concept. The project aims to bridge the knowledge and language gap between researchers and end-users by translating soil health knowledge and measures into practical, accessible, and effective information and practices for smallholder farmers.

Activities

- Co-design and co-develop a soil health knowledge framework with farmers, extension agents, and other stakeholders, facilitating the assessment and adoption of soil health and resilience knowledge, tools, and practices.
- Demonstrate a model of transdisciplinary research and collaboration that delivers valuable, accessible, and equitable knowledge, information, and technologies to farmers.
- Ensure that the knowledge, information, technology, and associated capacity-building and support services developed and delivered by the project are accessible and appropriate for female farmers, supporting them in improving the resilience of their farming systems.

