Water and Climate

Australian Government

Australian Centre for
International Agricultural Research

Institutions to support intensification, integrated decision-making and inclusiveness in agriculture the East Gangetic Plain



The future prosperity of the Eastern Gangetic Plain's (EGP) massive population is at a crossroads. Rural poverty is endemic across the region and food insecurity widespread. But resources for agriculture are relatively abundant.

The Governments of India, Nepal and Bangladesh have prioritised the expansion of Conservation Agriculture System Intensification (CASI) in the region.

The EGP has benefited from significant research on agricultural intensification at field scale, including low tillage grain systems, improved seed, labour-saving mechanical seeding and water efficient irrigation options.

Despite its promise, the uptake of CASI falls short of expectations, and up-scaling and out-scaling have not always happened. Some of this underperformance is because intensification does not automatically equate to adequate household incomes due to tiny landholdings. The political economy of the region is also not always conducive to reform. But the poor uptake of CASI can also be traced to weak institutions and coordination. A critical question is how institutions, in their various forms and scales, can simultaneously and successfully promote the '3 I's' of intensification, integration and inclusiveness in the EGP.





KEY FACTS

ACIAR Project No. LWR/2018/104

Duration: November 2018 to June 2020 (2 years) **Target areas:** Bangladesh, India and Nepal

Budget: A\$1,382,097

Project Leader

Lin Crase, University of South Australia

Key partners

- IFPRI, Delhi
- Bangladesh Agricultural University
- Institute for Integrated Development Studies, Nepal
- University of Western Australia
- Food and Agriculture Organization of the United Nations

ACIAR Research Program Manager

Dr Robyn Johnston

Objective

The project's overall aim is to develop capacity within district, state and national agencies in the EGP to identify and consistently promote institutions that foster the '3 I's'.

The project's specific objectives are to:

- Create an understanding within agencies of the existing institutions that influence farm-level choices across local and district scales against specific national objectives.
- Empirically evaluate the performance of different institutional designs across three domains, using economic efficiency, equity and environmental sustainability as yardsticks.
- Foster collaboration with and within state, district and national authorities by developing an agreed evidence-based framework for shaping institutions that promotes the '3 I's'.
- Create institutional 'field sites' where the benefits of institutional change can be showcased and monitored beyond the life of this project.

Expected scientific results

- The opportunity to publish metrics around three domains with a common institutional theme expected to have a significant impact on economics research into institutions and their relative performance.
- The kaleidoscope model of policy change developed by IFPRI to be extended and refined by this research, helping to guide future analyses of the complex and contextually-driven aspects of policy change in south Asia.
- Scientists to benefit from studies that draw on expertise across multiple jurisdictions and the nuances required to operationalise this method in this context.

Expected outcomes

- Strengthened capacity within district, state and national agencies for designing institutions that go beyond encouraging intensification of agriculture at a particular location.
- By having agencies select better performing institutions: (a) farmers expected to receive clearer signals about profitable and sustainable agriculture; (b) water resources to be used in ways that account for their value and sustainable use across the region; and (c) farmers to employ strategies that reduce vulnerability to market and climate risks.
- Attention to inclusiveness as part of all four objectives to specifically benefit marginalised groups, such as women and girls in agriculture; the use of knowledge transfer approaches that are sensitive to the needs of marginalised groups; improved understanding of how water institutions can be changed to make them more amenable to the needs of women; and risk management approaches taking into account the distinctive requirements of women and girls.





