

Supporting collaborations to take agricultural innovations to scale in Indonesia

The Applied Research and Innovation System in Agriculture program (ARISA) has been a flagship program for Australia-Indonesia relations. Funded by the Department of Foreign Affairs and Trade, ARISA involved a partnership with the Government of Indonesia, private sector and research institutions, and was implemented by CSIRO. ARISA has built institutional and individual capacity to achieve systemic and sustainable agricultural productivity improvements and income increases.

The challenge

With over 60 per cent of Indonesia's poor living in rural areas, and agriculture employing nearly 40 per cent of Indonesia's labour force, stimulating agricultural productivity and market access for farmers remains an important pathway out of poverty.

The response

ARISA was designed to address a key challenge in agricultural research for development: how to ensure that proven research outputs are available and accessible for use in farming communities. A key objective of ARISA was to improve the productivity agricultural commodities and increase the incomes of 10,000 farming households by 30 per cent.

Using a partnership-based approach, ARISA established eight interventions in East Java, Lombok and Flores to stimulate innovation and support the livelihoods of poor farming households in the region. Partnerships were designed to bring together researchers who had worked on approaches to improving agricultural production with private sector partners, to support farmers, while addressing broader systemic barriers and constraints to sustainable change.

Throughout the life of the project, ARISA facilitated partnerships across a number of agricultural commodities including maize, cassava, beef, sugar, dairy, pigs and shallots.

ARISA has enabled new approaches to transforming research to practice, thereby catalysing adoption of research. It provided new platforms and networks to promote research institute and private sector partnerships, new incentives for engagement between private sector, research institutes and smallholder farms, and a realignment of research outputs with market needs.

The impact

The interventions facilitated through ARISA led to an increase in income for over 11,000 rural households. ARISA also made headway in empowering women in the agricultural sector – 46 per cent of farmers engaged in ARISA were women. Most notably, in one intervention, 32 per cent of loans initiated were issued to women, though historically banks have only loaned to men.

ARISA developed of a replicable model for fostering research institute-private sector partnerships and enabled systemic change to support the commercialisation of science. In addition, through participatory engagement and capability strengthening the project influenced the Indonesian Ministry of Research, Technology and Higher Education's Regulation on Innovation Management in Higher Education, creating incentives for universities to interact and partner with the private sector. The Ministry also began directly engaging with research institutes to implement and support the regulation changes in practice.

Moreover, the learnings from ARISA are being applied in other innovation system challenges in other countries (e.g. Vietnam).