

Program Profile



Photo: TIRTA

TIRTA:
Improving access
to irrigation for
smallholder farmers in
eastern Indonesia

WHO WE ARE

Tertiary Irrigation Technical Assistance (TIRTA) is one of the suite of programs of AIP-Rural working in eastern Indonesia. TIRTA aims to improve access to water resources for smallholder farmers. The program's goal is to increase the net income of 10,000 smallholder farming households by 60% through the improvement of the efficiency and technical and economic viability of at least 35 tertiary irrigation projects.

There are three irrigation management levels in Indonesia: the national and provincial level which handles large schemes and primary canal systems (from 1,000 to 3,000 ha), the district level that manages smaller schemes (<1,000 ha), and the "tertiary" irrigation level (smaller than 1,000 ha) managed by Water User Associations or private service providers. TIRTA focusses exclusively at the tertiary irrigation level.

BACKGROUND

The rationale for supporting improvements in tertiary irrigation in eastern Indonesia is compelling. Land and water resources are coming under competing pressure not only from agriculture but also from industry, growing urban and rural populations, and the impacts of climate variability.

Water resources management and irrigation play a very important role in Indonesia's socio economic development in terms of food security. Irrigated agricultural land produces 85% of national rice production and 95% of Indonesian people consume rice as a staple. Irrigation also has a significant impact on farmer incomes.

When compared with other inputs like fertilizers and seeds, the typical net income from water resources can be up to three times the income from rainfed irrigation and can therefore allow many farmers to move from subsistence to small-scale commercial production.



Photo: TIRTA

HOW DO WE WORK

Many tertiary irrigation schemes in Indonesia are not operating effectively and suffer from accumulating maintenance deficits as a result of poor management as well as a lack of investment finance that is needed to break this cycle. TIRTA supports the creation of tertiary irrigation schemes managed by water user associations (HIPPA) and local investors (lead farmers and local entrepreneurs). TIRTA encourages HIPPA to enter into agreements with local private investors who invest in diesel engines, pumps and canal infrastructure which then permits them to supply water to farmers in return for a portion of their crops.

WHAT WE OFFER

- Innovative and sustainable business solutions and co-investment in tertiary irrigation schemes.
- Mediation between market players in the irrigation system and smallholder farmers and water user association to foster more profitable and effective working relationships.
- Targeted capacity building training in pump installation and maintenance working through local service providers.
- Developing demonstration sites along the Bengawan Solo River to act as learning centers and displaying 'cost effective' and 'real life' pump/engine configuration options to interested parties.

TIRTA Tertiary Irrigation
Technical Assistance

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