

Opportunities to improve the sustainable utilisation and management of water and soil resources for profitable farming in south central coastal Vietnam



Key details

Location

Vietnam

Duration

Start Nov 2012

End Apr 2013

Budget

AUD 125,000

Commissioned organisation

NSW Department of Primary Industries

Partners

Agricultural Science Institute for Southern Central Coast of Vietnam; International Water Management Institute; Murdoch University

Project Leader

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Program

Soil and Land Management

Project code

SMCN/2012/017

from both projects highlighted a need to evaluate the sustainability of groundwater utilisation for agriculture in the region. ACIAR commissioned this SRA with the purpose of scoping opportunities for new water, soil and crop management projects in SCC VN.

The objectives for this scoping study were to:

- Identify and review available information on catchment scale water resources relevant to SCC VN, including information being generated by existing and proposed projects.
- Identify priority catchment scale and farm scale water and soil management issues in consultation with regional stakeholders in SCC VN.
- Identify appropriate partners, capacity building needs, achievable project objectives, suitable methodologies and design research and development activities for a large ACIAR project which integrates catchment and farm scale soil and water management strategies, to improve profitability of farmers and improve the sustainability of resource use in SCC VN

Outcomes

This SRA project has facilitated a clearer understanding of water resource information status, governance arrangements and current management in Vietnam and identified water resource research and implementation priorities for water, soil and cropping systems in SCC VN. Vietnam's water resources policy, law and institutional arrangements have a history of complexity and fragmentation with surface and groundwater resources divided between two ministries. Progress is being made with recent changes to the Law on Water Resources which aim to consolidate

Overview

This SRA follows two previous ACIAR projects in south central coastal Vietnam (SCC VN); SMCN 2003/035 and SMCN 2007/109. Recommendations emerging

management of water resources under MONRE. However, as in the past the focus remains on national level policy and institutional arrangements with human capacity and resource allocation concentrated in national planning institutes. Resource allocation and human capacity diminishes at and below provincial implementation levels. At the end of the line are smallholder farmers.

When the project team planned this SRA, expectations were that information, maps and plans for sustainable groundwater utilisation in SCC VN would be few. The amount of information from hydrogeological investigations discovered has far exceeded expectations. However, language, remoteness and logistical constraints meant that not all of this information could be accessed and evaluated during the term of this SRA. As such there will be a need to extend information review activities into new ACIAR water resources related projects in SCC VN. In particular, cartographic resources and groundwater exploitation plans held by Division 7 should be interrogated in greater detail.

Much of the information discovered during the SRA is in province-bounded planning documents which describe the hydrogeological context of the various aquifers, outline plans for capital works and provide guidelines for dynamic groundwater reserves and sustainable yield. However, knowledge on water use appears to be a significant gap in understanding the regional water balance. Without monitoring or regulation of agricultural and aquaculture groundwater users the sustainability of current levels of groundwater abstraction cannot be evaluated accurately. The existence of this gap indicates an opportunity for new water resource-related ACIAR projects in SCC VN to model this component to complete water balance knowledge at a regional scale.

