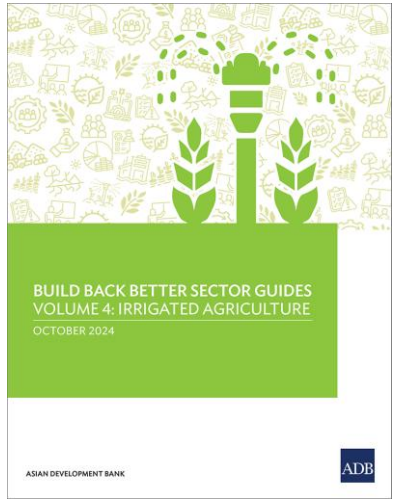
ADB

BUILD **BACK BETTER**

Sector Dialogues

VIE: Water Efficiency Improvement in Drought Affected Provinces Project

Monday 10 February 2025, 1.00pm-2.00pm Manila



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Rationale

The 2014-2016 El Nino-included drought.

Inadequate maintenance, low water productivity and competing resource demand among sectors.

Climate change demanded adaptation strategies to sustain farmers' economic activity including crop diversification to higher valued crops.

Existing irrigation system design has been dominated by rice based systems that did not provide a level of service required for crop diversification.

Government policy demands sustainable irrigation modernization for diversification into high valued crops.

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Government Response

- Short-, medium- and long-term response strategy
- Promoting crop diversification – shift to high value crops
- Adopting high efficiency irrigation techniques
- Investing in modernizing irrigation systems
- Initiating long term investments with Development Partners (ADB)

ADB Response

Asia Pacific Disaster Response Fund - Emergency Grant ($3 mil, June 2016)

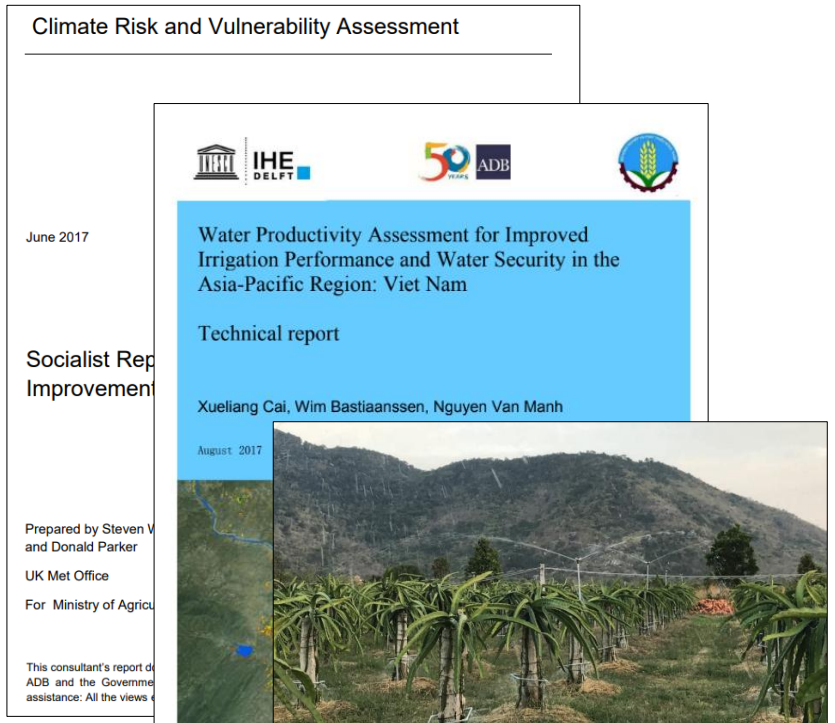
Water Efficiency Improvement in Drought Affected Provinces (**WEIDAP**) Project – $100 mil Loan and $1.05 mil Grants (2018)

Technical support: (i) Preliminary drought analysis and (ii) Irrigation modernization knowledge transfer

Awareness and knowledge sharing

Development of adaptation options


Presenting the project concept to MARD Minister


Climate Risk and Vulnerability Assessment

June 2017

Socialist Rep
Improvement

Prepared by Steven W
and Donald Parker

UK Met Office

For Ministry of Agricu

This consultant's report d
ADB and the Governme
assistance: All the views

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ADB

Water Productivity Assessment for Improved Irrigation Performance and Water Security in the Asia-Pacific Region: Viet Nam

Technical report

Xueliang Cai, Wim Bastiaanssen, Nguyen Van Manh

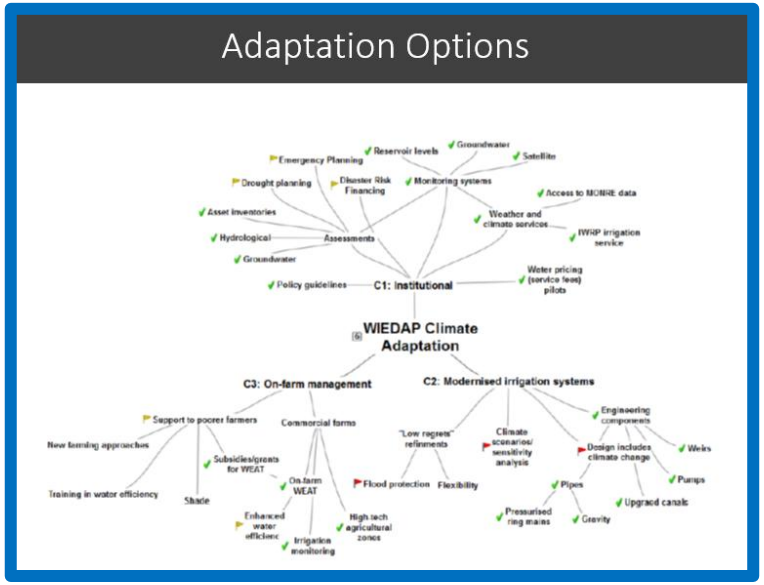
August 2017


QUANTIFYING WATER AND ENERGY LINKAGES IN IRRIGATION

EXPERIENCES FROM VIET NAM

ASIAN DEVELOPMENT BANK

ADB



WEIDAP - Modernizing Irrigation for Climate Resilience

Impact: Improved climate resilience and water productivity in agriculture

Outcome: Climate-resilient and modernized irrigation systems established across five provinces

Key interventions:

- Strengthening irrigation management services
- Modernizing eight irrigation infrastructure systems,
- Enhancing on-farm irrigation management practices.

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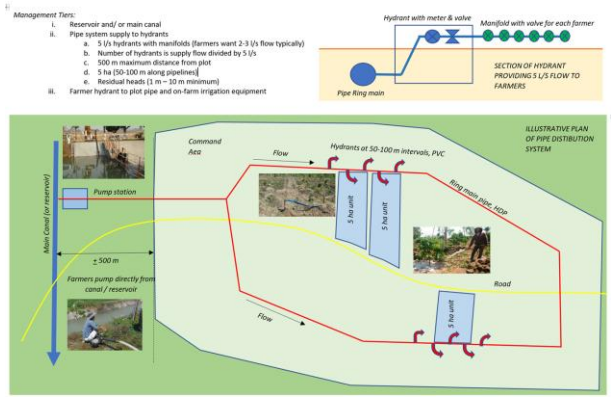
Technical innovations - Rethink how water is delivered to farmers

- Replacing open canals with pressurized pipelines to minimize losses
- Hydrants within 500 meters of farms – ensuring efficient, on-demand water access for high-value crops
- SCADA systems enabling remote monitoring of flows and pressures; and automated pump operations linked to water levels
- Designed pipeline networks to introduce
    - Ring (loop) systems – Balancing pressure and improving reliability;
    - Flexible water distribution models – Allowing multiple farmers to irrigate simultaneously



These interventions aim to reduce water loss, optimize usage, and enhance climate resilience for the irrigation systems.

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Lessons Learned

- Disasters present an opportunity to drive transformative changes.
- Conducting timely Climate Risk and Vulnerability Assessment is critical for integrating effective adaptation interventions.
- Modernization begins with an understanding of on-the-ground realities, including the knowledge and capacity of government counterparts.
- Modernizing irrigation systems requires meeting the desired level of service expected by farmers.
- Strong internal and external partnerships greatly enhance the quality and impact of project designs.

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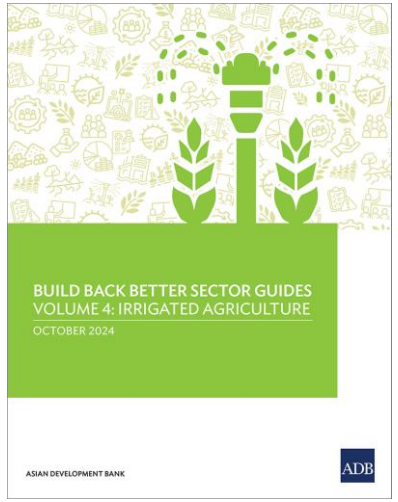

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