Evaluation Summary

Northwest irrigation sector project

Country: **Cambodia** | Sector: **Agricultural water resources**

Evaluator: **Advancing Engineering Consultants Ltd**
Date of the evaluation: **September 2014**

Key data on AFD's support

Projet numbers: CKH 3003
Amount: €4 million in grant
Disbursement rate: 100%
Signature of financing agreement: October 2004
Completion date: December 2011
Total duration: 7 years

Context

The Northwest region of Cambodia includes a wide rural area where the population mainly depends on agriculture for their income. **The agricultural diversity is very low and the main crop, which serves as a staple food, is rice.**

The region faces a **recurrent water shortage** during the annual dry season and has suffered from many years of war, leaving **agricultural infrastructures damaged and without proper maintenance**.

The project was co-financed by ADB (Asian development bank, 19M$ loan).

Actors and operating method

The project ownership was:

- at national level: Ministry of Water Resources And Meteorology (MOWRAM)
- at regional level: Provincial Departments of Water Resources and Meteorology (PDWRAM)

The project management was undertaken by a unit in the MOWRAM with support by a technical assistance.

Objectives

1. **To rehabilitate** small- and medium-sized irrigated perimeters, ensuring sustainable exploitation.
2. **To set up other hydraulic infrastructures** within the studied watershed.

Expected outputs

- Rehabilitation of **12 perimeters**
- Increased irrigated areas to **30,000 ha**
- **Increased production**
- **Agricultural diversification**
- Regulatory **framework**
- **12 Farmer Water User Communities** (FWUC)

Performance assessment

Relevance

The project has had good relevance for AFD, the government, and beneficiaries, although the project's design formulation would have benefited from **better risk analysis and a more precise and measurable definition of objectives**. In addition, **better coordination of all infrastructure projects** in the area is needed, including road construction and irrigation projects financed by other donors.

Effectiveness

The effectiveness of the project was **partial**. The project increased the irrigated area by 10,761 ha. This represents 36% of the initial target (set at 30,000 ha) and 67% of the target reduced to 16,000 ha during the project.

The increase in production has been below target, agricultural diversification has been weak, and institutional capacity gains limited.

No legal framework has been put in place to transfer the management of irrigation schemes, contrary to what was planned.

Efficiency

Reasonable cost efficiency was attained, considering construction cost inflation. However, efficiency was overall reduced due to **lower than anticipated service provider capacity**, a **dysfunctional procurement process**, and a **prolonged** site selection process. Although the project lasted one year longer than planned, the initial budget was not exceeded.

Impact

The primary impact has been **increased rice production** with associated economic impacts bolstered by a three-fold rise in the market value of rice, along with increased capacity of communities and service providers, and to a lesser extent of the Government of Cambodia. No negative impacts have been noted.

Sustainability

Sustainability remains the biggest doubt, due to:

- struggling FWUCs,
- growing maintenance deficits,
- increasing climate change risks,
- and low capacity in Government of Cambodia for fulfilling its responsibilities.

Added value of AFD's contribution

The added value of AFD's contribution to the project was significant, owing to its demonstrated long-term commitment in the sector, and particularly its focus on and experience in **Integrated Water Resources Management and community-centered participatory methods.**

Conclusions and lessons learnt

With less significant agricultural, economic and social impacts than expected, this project was **partially successful**. Its realization has been hampered by external factors on the one hand and by implementation deficiencies on the other. In addition, sustainability is jeopardized without strengthening of farmer groups and maintenance of infrastructure.

- To remedy this, the **implementation of projects should extend 3-5 years beyond the construction** of the perimeters to support the FWUC, which would also allow the realization of a **thorough impact study**.
- Project monitoring and evaluation should be based on a **logical framework** that accurately identifies distinct, quantifiable and realistic objectives.
- **More support should be given to farmers** for the construction of tertiary and quaternary canals.
- The design of construction works should be based on an **economic analysis that takes into account the risks associated with climate change**.

It should be recognized that targeting the poorest communities for such intervention requires additional support, given the community's diminished capacity to preserve the irrigated perimeter.