Evaluation Summary

Development of the Ninh Thuan irrigation system

Country: **Vietnam** | Sector: **Irrigation**

Evaluator: **SCP and Centre for Development Assistance**
Date of the evaluation: **July 2018**

Key data on AFD's support

Projet numbers: CVN 1073 and CVN 1128

Amount: €22.5 million in loan (phase I: €10.5 million phase II: €12 million) and 275 K€ in grant for TA

Disbursement rate: 100%

Signature of financing agreement: 2005 and 2010

Completion date: 2013 and 2018

Total duration: 14 years and 2 months

Context

Ninh Thuan is a province with an extremely dry climate which negatively impacts the province's agricultural economy.

The province has been implementing a master plan that aims to develop water resources and extend the irrigation area to 25,000 ha by building 25 water reservoirs between 2000 and 2015. This investment strategy was to **improve the living conditions of the population living in the mountainous regions, and create the foundations for economic development.**

Actors and operating method

Ninh Thuan Provincial People's Committee, the investor of the project, was also its coordinator. It offered specific procedures to ensure optimal coherence between the Project Management Unit (PMU) in the Department of Agriculture (DARD) and Department of Transport (DOT). It gave out authorizations to the Irrigation Management Company (IMC) to operate, manage and maintain the infrastructures after the project was completed, notably to manage the Participatory Irrigation Management (PIM) component.

Objectives

To raise the income of the people living in rural areas of the Ninh Thuan province by increasing both the quality and the quantity of their production potential and by allowing them to overcome financial challenges.

Expected outputs

The project aimed at building 5 reservoirs, irrigation structures and rural roads in order to:

- ensure the irrigation of 2.500 ha of agricultural land,
- increase cultivated land,
- enhance cultivation from 1 crop to 2-3 crops per year
- develop crops with high economic value,
- facilitate transport, both for the agricultural production and for the inhabitants.

Performance assessment

Relevance

The project was overall **relevant** and **consistent**.

It was implemented within the framework of the Ninh Thuan irrigation development strategy and in accordance with AFD's strategy in Vietnam, which favours support for the provinces.

The decision to extent the investment to secondary and tertiary canals as well as PIM during phase II was **in keeping with the needs of the Ninh Thuan province.**

The two phases, together with accompanied measures, formed a comprehensive project which made the delivery of the outputs feasible.

Effectiveness

The project was **effective** despite the fact that the region had recently suffered a serious drought. The PIM component was **highly effective**.

In the irrigation areas of the five reservoirs, interviews with agricultural households that are members of Water Users Association (WUA) revealed that they were **effectively trained** and can therefore **self-manage**.

There were **no signs of conflicts**.

The influence of the project on the management skills of the local partner was however **limited**. The influence of the project on capacity strengthening of the PMU was **not clear.**

Efficiency

On the one hand, the **infrastructure component was not very efficient**. Late in repairing the broken dam, it had to face **increased costs** for this **reparation** as well as for the **upgrade required on other dams**.

On the other hand, **the technical assistance achieved high efficiency** thanks to the **PIM's effectiveness** in this project.

Impact

The impact of the project is **moderate**.

- After the completion of the second phase in 2014, the water volume stored in 3 out of 5 reservoirs was **not sufficient to meet the needs of the cultivated areas**. At the time of this evaluation, the reservoirs' water supplies could fulfil the domestic water needs, but not the irrigation water needs. The fields were arid and uncultivated. Normally, the reservoirs respond satisfactorily to the demand in water during the wet season. But during the dry season, the reservoirs **cannot supply the amount of water needed**. Irrigated areas are consequently greatly reduced, sometimes immediately and sometimes cumulatively over a year, as in 2015.
- The impact of the project on participatory irrigation management has nonetheless been recognized in most areas. The **good practices** implemented by the PIM component were institutionalized by the People's Committee of Ninh Thuan for their use to be extended to the whole province.

Sustainability

The sustainability of the project is moderate for two reasons:

- Despite being upgraded, the irrigation infrastructure and transportation had a **minimal impact because of the drought**. There is no evidence that the agricultural support activities were effectively carried out through the extension Centre in order to achieve sustainability.
- However, the capacity of established WUAs was made **more sustainable** through the PIM approach which has been widely carried out in Ninh Thuan, although this approach is dependent on water supplies.

Added value of AFD's contribution

AFD **responded quickly** to Vietnam's requests. Notably, its approval procedure is considered much faster than that of other donors.

AFD funding is **flexible** in order to meet the needs of the Provinces. That is true even with funding for infrastructure building, which is accompanied by nonrefundable technical aid.

The technical assistance that completes AFD loans is considered **highly effective** by the Vietnamese part and contributes to the sustainability of the project.

The coupling of the Centre for Participatory Irrigation Management (CPIM) project with the Ninh Thuan project was **very helpful**.

Conclusions and lessons learnt

Future projects should

- **think up water-saving models,**
- **identify and adjust technologies** to fit the market-oriented productions and the extreme climate.

Other remarks:

- PIM allowed for **strong ownership and leadership**.
- The technical designs of infrastructure developed by local consultants was of **limited quality**, which can affect the effectiveness and sustainability of the project in the future. The local PMU had not been familiarized with result-oriented management or result-oriented Monitoring and Evaluation (M&E) systems. **Building an M&E system is essential to set agreed upon indicators from the start**. It should be developed during the appraisal phase and included in the approved feasibility study.

Technical assistance should have a stronger influence on project management skills and provide more training opportunities for women.