Evaluation Summary

Infrastructure development of space oceanography (INDESO) project

Country: **Republic of Indonesia**

Sector: **Natural resources and environment**

Evaluator: **Poseidon Aquatic Resource Management Ltd**
Date of the evaluation: **December 2018**

Key data on AFD's support

Projet number: CID 1025
Amount: US $30 million loan
Disbursement rate: 100%
Signature of financing agreement: June 2012
Completion date: June 2017
Total duration: 60 months

Context

The project was developed following the realization that the data and technological solutions available to provide oceanographic information are insufficient.
This information is necessary to ensure sustainable management of Indonesia's marine resources.

Actors and operating method

The contracting authority (borrower) was the Ministry of Finance.
The management contractor (implementing agency) was the Ministry of marine affairs and fisheries (MMAF / KKP).
The project management unit was the Marine and fisheries research and development agency up until 2014. From 2015 onwards, it was the Human resources agency for Marine and fisheries research.

Objectives

- **To use a multidisciplinary approach based on satellite data acquisition in order to understand, analyze, model and predict the evolution of oceanic conditions.**
- **To support KKP's decision-making and institutional mission.**

Expected outputs

- **An operational centre (and mirror centre) functioning with all equipment and software to acquire data.**
- **To enhance the technical capacity to deliver data from satellite technology to users.**
- **To encourage the use of the applications and models by downstream users.**

Performance assessment

Relevance

The project was **highly relevant to the country's needs** before and during implementation, and **consistent with formal government policies and strategies**. **Technological solutions** fostered by the project remain relevant, and **the need for scientific research development** was relevant.

However, the **informal government focus on Illegal unreported and unregulated fishing** (IUU fishing) meant that only 2 of the 7 applications were well used by government. Design was robust but the log frame **was poorly specified** and the project risks **insufficiently considered**.

Effectiveness

Project outputs (applications) were **delivered as planned** and were of **good quality.** However, these outputs did not translate well into the intended outcomes of the specific objective. The project was nonetheless effective in **helping combat IUU fishing and building human capacity**.

Efficiency

The project funding from AFD and the government was provided in a **timely manner**. Administrative efficiency resulted from:

1. payment mechanism being handled by AFD,
2. having a single international contractor,
3. and minimum disbursements.

Technological solutions provided by radar are **cost-efficient** compared to alternative costs of sea/aerial surveillance for visual location of vessels and oil spills. Costs of developing and running fish stock model and coastal applications should be **efficient compared with the value of the resources they could serve to protect**.

However, the **lack of uptake of the technological developments** supported by the project ultimately undermined the efficiency of project expenditure.

Impact

As the project outcomes and specific objective were **only partially achieved**, INDESO's impact was limited although it had the potential to be significant. **Development of human capacity was a particular strength** of the project, and some positive impacts on fish stocks may have been supported by the use of radar data for fisheries enforcement purposes. However, **the project's impact was overall limited** considering the intended impacts envisaged in the project design.

Sustainability

Sustainability was poor, with none of the 7 applications being used at the time of the evaluation (although the government plans to recommence buying radar data and to reactivate the IUU application). **Insufficient focus on planning for sustainability** was provided during the project.

Added value of AFD's contribution

AFD's added value was **considerable** in terms of

1. funding and technical inputs to project design, project supervision, and project evaluation,
2. handling payments.

Conclusions and lessons learnt

AFD and the government should:

1. Ensure the dissemination products and exit strategies are **incorporated into project designs**,
2. include training of trainers if **staff changes** are a risk,
3. ensure **high quality log frames** in designs, with SMART indicators and targets, and their use during implementation,
4. complete **baseline assessments** as the basis for **enhancing the quality of evaluations**, and
5. ensure sufficient technical assistance to support project implementation.

The government should:

1. develop a **business plan** for commercialisation of data/products,
2. establish **mirror centre** as matter of urgency and,
3. better use INDESO outputs/applications for **sustainable management.**

AFD should improve the scope of supervision missions and the structure of supervision mission reports.