

TA COMPLETION REPORT

Division: IWEN

TA No. and Name TA No. 3222-VIE: Preparing the Se San 3 Hydropower Project	TA Amount Approved \$998,000	
	Revised Amount \$998,000	
Executing Agency Electricity of Viet Nam (EVN)	TA Amount Undisbursed \$367	TA Amount Utilized \$997,633
Date	Closing Date	
Approval: Signing Field	Original	Actual
14 July 1999 05 October 1999 15 November 1999	31 August 2000	(estimated: December 2001)
<p>TA Description: Se San 3 Hydropower Project was to be the first Asian Development Bank (ADB) investment in hydropower generation in Viet Nam. The Project was to construct a 260 megawatt (MW) hydropower station on the Se San River. Se San 3 is located 50 kilometers (km) upstream of Cambodia and approximately 20 km downstream of the 720 MW Ya Li hydropower plant, which should be fully commissioned by end of 2001.</p> <p>TA Objective and Scope</p> <p>A. Objective The objective of the TA was to verify that Se San 3 was the least-cost development alternative and to prepare the Project as a model hydropower project managed commercially and adopting internationally recommended operational, financial, environmental, and social practices. Building on lessons learned from past hydropower development in Viet Nam and the region, best practices were to be incorporated into all aspects of project design, to serve as a precedent for future hydropower development in Viet Nam.</p> <p>B. Scope This TA had been designed in two phases. Phase I was to analyze and make recommendations on the most appropriate ownership/institutional arrangements for developing the Project. Phase II was to complete the technical, environmental, and social analysis of Se San 3. Special emphasis was given to public participation and dissemination of project information, locally and internationally.</p> <p>TA Inputs Evaluation</p> <p>Phase I : The terms of reference (TORs) for Phase I were detailed, furthermore, consultants were provided with a comprehensive "Project Library".¹ The consultant's performance, on average, was satisfactory. The technical, legal and economic analysis was completed to a satisfactory level. An extraordinary amount of guidance by ADB staff, however, was required with respect to financial analysis and corporate structuring and analysis of ownership options.</p> <p>Phase II: As with Phase I, the consultants were provided with detailed TORs and the "project library". Phase II was also supported by an Advisory Panel comprised of an Environmental Specialist and Resettlement/Indigenous People's specialist. Extensive guidance was provided by the Mission and Panel members. Advisory Panel members joined the inception Mission and a public meeting was held at which approximately 30 percent of the project affected persons attended. The TORs for Phase II had been prepared under the assumption that the findings of preliminary social and environmental studies (for both Ya Li and Se San 3) with respect to downstream impact were valid. However it was determined that the impacts of hydropower development on the Se San River in Viet Nam were reaching well across the border with Cambodia. In fact, the project impact area and populations affected by the project were much larger than originally envisaged. There was neither provision within the TORs, nor available TA budget available to adequately assess the larger impact area. Consultants performance on this Phase was marginal. On the one hand a great deal of time was expended, however, the social analysis did not completely comply with the TORs and the environmental analysis required significant re-work prior to completion of the final reports. Extensive guidance was provided by the Advisory Panel and IWEN and ENVD staff. Given the exacerbating circumstances, and the degree of additional analysis required, funds from Phase I were reallocated to Phase II.</p>		

¹ The Project Library was compiled by the SS3 Project Team. It included copies of ADB policy papers and guidelines relevant to the Project, methodology notes, sample RRP formats, financial and economic analysis models, and ADB country reports.

TA Outputs Evaluation

Phase I

Under Phase I various ownership and financial structures for the proposed hydropower project were analyzed: pure public sector, corporatized stand alone, corporatized Se San 3 plus Ya Li; public-private joint venture BOT; and private international BOT. Each option was scored on its ability to address the following factors: (i) technical and environmental, (ii) institutional, (iii) financial, (iv) economic, and (v) legal/regulatory. Based on the analysis, the most appropriate structure was to form a wholly owned subsidiary of EVN, to own and operate both Ya Li and Se San 3. The structure would be most efficient and given the environmental and cross border implications, public ownership was the most appropriate given the Project's risk profile.² The economic analysis confirmed the requirement for additional capacity on the national grid and concluded that early commissioning of Se San 3 would be justified (with an EIRR under all options of 22.5 per cent). Partial compliance was achieved with respect to the TORs.

Due to the changing circumstances during TA implementation, the outputs differed from those envisaged at the time of approval. It was not possible to complete an Environmental Impact Assessment (EIA) or a Minority People's Development Plan. Rather, the final reports included working drafts, which indicate additional work required to assess the long-term environmental and social impacts of hydropower development in the Se San River basin on both sides of the border. The draft final reports were reviewed by ADB staff and the Advisory Panel and were finalized approximately eight months following the completion of fieldwork. There was only partial compliance with respect to the original TORs due primarily to the rapidly changing environment in which the consultants were operating necessitating a revision of TORs and scope of work during implementation.

Summary

As a result of the findings of Phase II, ADB deferred processing of the Se San 3 project at the fact-finding stage. It was determined that further environmental and social analysis was required in order to assess the readiness of the Project for ADB financing. A further TA, which would involve fieldwork in Viet Nam and Cambodia, was proposed. In August 2000, the Government of Viet Nam decided to complete the additional environmental and social analysis internally and not to proceed with Se San 3 as an ADB funded project.

TA Overall Assessment and Rating

The TA, although not resulting in an investment project, is evaluated as generally successful. Significant social and environmental issues and risks were identified during the TA and forward action plans prepared to provide guidance to the Government for further hydropower development in the Se San River basin. A major area of a TA is to establish the suitability or otherwise of a project for ADB financing.

Major Lessons Learned

The TA was implemented following a variation of the new business processes, with extensive staff involvement throughout the TA implementation period. Several review missions were conducted, and the final review mission was timed to coincide with the loan fact-finding mission. While this approach is preferable from the perspective of project quality, it requires a high level of involvement and commitment of human and financial capital resources of ADB. It also requires significant commitment on the part of the borrower (which this TA had). The TA was also designed under the assumption that previous EIA work had been to ADB standards.

Follow-Up Action and Recommendations

No further follow up action is required. The TA confirmed the validity of ADB's environment and social analysis policies which suggest that hydropower development be analyzed from a broader river basin perspective, rather than a simple, stand alone project perspective.

Prepared by Kathleen M. Moktan Designation Sr. Project Management Specialist

² The initial findings of Phase II indicated that the technical and environmental issues associated with the Project were substantially more complex than had originally be envisaged. The issues identified related primarily to basic management and cross border issues associated with hydropower development on an international waterway. It was felt that these issues raised the potential risks associated with the Project. They would be difficult to allocate contractually in a traditional BOT or JV arrangement and hence would drive up the private sector cost significantly. Furthermore, due to the close proximity of and technical interdependence between Ya Li and Se San 3, economies of scale, environment mitigation, financial viability, and economic sustainability would be enhanced by combining Ya Li and Se San 3 as a single operating entity.