

Validation Report
July 2021

Viet Nam: Phuoc Hoa Water Resources Project

Reference Number: PVR- 798
Project Numbers: 29296-013 and 29296-023
Loan Numbers: 2025 and 2747



Raising development impact through evaluation

ABBREVIATIONS

ADB	– Asian Development Bank
AFD	– Agence Française de Développement
CPO	– Central Project Office
DARD	– Department of Agriculture and Rural Development
DMF	– design and monitoring framework
DMI	– domestic, municipal and industrial
EIRR	– economic internal rate of return
EMP	– environmental management plan
GAP	– gender action plan
HCMC	– Ho Chin Minh City
ICMB9	– Hydraulic Project Investment Construction Management Board 9
IMC	– irrigation management company
LAR	– land acquisition and resettlement
MARD	– Ministry of Agriculture and Rural Development
PCR	– project completion report
RBL	– result-based lending
VCD	– Vam Co Dong

NOTE

In this report, “\$” refers to United States dollars.

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PROJECT BASIC DATA

Project numbers	29296-013 and 29296-023	PCR circulation date	12 Jan 2021	
Loan numbers	2025 and 2747	PCR validation date	Jul 2021	
Project name	Phuoc Hoa Water Resources Project			
Sector and subsector	Agriculture, natural resources and rural development	Rural water policy, institutional and capacity development Water-based natural resources management		
Strategic agenda	Environmentally sustainable growth; Inclusive economic growth			
Safeguard categories	Environment	A		
	Involuntary resettlement	A		
	Indigenous peoples	B		
Country	Viet Nam	Approved (\$ million)	Actual (\$ million)	
ADB financing (\$ million)	ADF: 0.00	Total project costs^a	296.17	337.64
	OCR: 150.00	Loan	150.00	145.04
		2025	90.00	96.50
		2747	60.00	48.54
		Borrower	87.17	132.21
		2025	40.62	69.48
2747	46.55	62.73		
		Beneficiaries	0.00	0.00
		Others	0.00	0.00
Cofinanciers	Agence Française de Développement	Total cofinancing	59.00	60.39
		2025	34.00	40.83
		2747	25.00	19.56
Approval date	2025 2747	Effectiveness date	2025	23 Aug 2004
			2747	30 Sep 2011
Signing date	2025 2747	Loan closing date	2025	30 Sep 2014
			2747	30 Jun 2015
		Financial closing date	–	–
		2025	–	30 Nov 2015
		2747	–	16 Mar 2016
Project officers	Y. Kobayashi	Location	From	To
	I. Fox	VRM	2004	2006
	H. Le Phong	VRM	2006	2007
	D. Ellingson	VRM	2007	2007
	N. Ikemoto	VRM	2007	2013
	K. Thhi Huong	VRM	2013	2014
		VRM	2014	2016
IED review				
Director	N. Subramaniam, IESP			
Team leader	S. Takahashi, Evaluation Specialist, IESP ^b			

ADB = Asian Development Bank, ADF = Asian Development Fund, IED = Independent Evaluation Department, IESP = Sector and Project Division, OCR = ordinary capital resources, PCR = project completion report, VRM = Viet Nam Resident Mission.

^a Includes interest, taxes and duties, and inflation cost incurred during construction and implementation.

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I. PROJECT DESCRIPTION

A. Rationale

1. Viet Nam is one of the fastest growing economies in Asia and the Pacific region with a growth rate of more than 6.1% per annum (valued in terms of 2010 constant price, US\$) since 2000. Ho Chi Minh City (HCMC), the southern economic hub, is the country's largest urban and industrial development complex. The Dong Nai basin in Southern Viet Nam is the third largest river basin in the country. It comprises Dong Nai, Be, Saigon, and Vam Co Dong (VCD) rivers with a catchment area of 47,300 square kilometers (km). Demand for water resources in this region was expanding rapidly due to (i) the increase irrigation needs of neighboring agricultural areas, (ii) the sprawling urbanization requiring water supplies for domestic, municipal and industrial (DMI) use, and (iii) the need to control salinity and poor water quality in the lower reaches of the rivers during dry seasons. The need for a continued economic expansion of the region, as well as of Viet Nam, underpinned the rationale for the construction of water resources infrastructure and ensuring its improved management. The project was on the country's development agenda since the 1980s. Its scope covered irrigation expansion, agricultural diversification, construction of water works, managing DMI in the urban areas, and river basin management.

2. The Phuoc Water Resources Project (the project)¹ sought to develop comprehensive water resources infrastructure to serve 48,130 hectares. A technical assistance loan² from the Asian Development Bank (ADB) prepared the project's detailed engineering design.³ The project comprised the construction of a barrage at a location called Phuoc Hoa and building a transfer canal from the barrage to convey water from the Be River to the existing Dau Tieng Reservoir on the Saigon River. Utilizing the existing Dau Tieng irrigation system, the diverted water was to be used in multiple ways. First, it was to be used for agricultural irrigation as the project was envisaged to develop irrigation in three areas: (i) Binh Long in the provinces of Binh Phuoc and Binh Duong, (ii) Tan Bien in Tay Ninh province, and (iii) Duc Hoa. Second, it was to augment urban and industrial water supplies for DMI use. Finally, the enhanced water flows were to be used for controlling salinity in the Saigon and VCD river basins during the dry season.

B. Expected Impact, Outcome, and Outputs

3. The project's expected impact was sustainable economic growth in rural, urban, and industrial areas in HCMC and surrounding provinces, in accordance with the regional master plan. The envisaged outcome was additional water supplies in the Saigon and VCD river basins for irrigation and DMI use. It was also expected to help in salinity control in the lower reaches of the Saigon and VCD rivers during the dry season. The project completion report (PCR) emphasized that salinity control was to be efficiently provided and sustainably ensured.⁴

4. The project outputs included were (i) strengthening the capacity of water-related organizations in the Phuoc Hoa project area; (ii) developing on-farm irrigation systems for adopting intensified agricultural practices; (iii) fully compensating project affected households

¹ ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Socialist Republic of Viet Nam for the Phuoc Hoa Water Resources Project*. Manila.

² ADB. 1997. *Technical Assistance for Phuoc Hoa Multipurpose Water Resources Engineering Project*. Approved on 18 December 1997 for \$2.6 million. See also footnote 3 in the PCR for reference to other studies; ADB. 2020. *Completion Report: Phuoc Hoa Water Resources Project in Socialist Republic of Viet Nam*. Manila.

³ ADB. 2020. *Completion Report: Phuoc Hoa Water Resources Project in Socialist Republic of Viet Nam*. Manila.

⁴ Footnote 3 (para. 5).

and resettlement; (iv) implementing environmental management plan; (v) operating basin transfer facilities enabling irrigation and supplying water for DMI use; and (vi) constructing and operating irrigation facilities.

C. Provision of Inputs

5. The project was approved in November 2003 and was expected to close in March 2011. After the midterm review in 2008, a major change in scope was approved and the project required supplementary financing. The original loan (loan 2025) and the supplementary loan (loan 2747) were both extended once, as the implementation was slow. The original loan was closed in September 2014, and the supplementary financing in June 2015. The PCR was prepared late in December 2020.⁵

6. At appraisal, the project cost was estimated at \$164.6 million. ADB approved a loan for \$90 million (54.6%) in 2003. In addition, some project components, specifically on irrigation and agricultural diversification, were cofinanced by Agence Française de Développement (AFD) through parallel financing. During implementation, the project cost was found to be underestimated and required supplementary financing. In 2011, ADB provided a supplementary financing in the amount of \$60 million along with a major change in scope.⁶ Project activities related to on-farm irrigation system development, agriculture diversification, and civil works continued to be cofinanced by AFD until April 2018.

7. The total cost (loan 2025) increased from \$164.6 million to \$206.8 million, an increase of 25.6% from appraisal. The major reason was the increase in local cost components by 52.6%, mainly related to the resettlement costs that increased by 139%, and the increase of about 40% of the cost of Tan Bien irrigation system from the combined appraisal estimates of the two loans (2025 and 2747). The total cost of the project increased from \$164.6 million to \$337.6 million, equivalent to an increase of 105%.

8. For safeguards, the project was classified as category A due to its expected environmental impact. The Environmental Management Plan (EMP) for the project was prepared and implemented. ADB, the Ministry of Agriculture and Rural Development (MARD), and the Ministry of Natural Resources and Environment approved the environmental impact assessment and EMP in March 2008.

9. The project was classified category A for involuntary resettlement. The required resettlement plans were prepared and implemented. The land acquisition and resettlement (LAR) plans were supervised and implemented by (i) the MARD's Project Management Board, which was subsequently renamed the Hydraulic Project Investment Construction Management Board 9 (ICMB9), (ii) the provincial departments of agriculture and rural development (DARDs), (iii) provincial project management boards, and (iv) the provincial and district resettlement and compensation boards. At appraisal, 2,225 households were estimated to be affected and 3,151 hectares of land was to be acquired. However, the number of households affected was increased to 4,683 in 2011 when there was a major change in scope. At project completion, the number of compensated affected households increased further to 9,833. The appraisal cost estimates of LAR increased from \$18.14 million to \$117.18 million at

⁵ Presumably, this delay was related to the pending grievance court cases in Binh Phuoc province, which were not resolved until April 2019 and April 2020 (PCR, para 30).

⁶ ADB. 2011. *Report and Recommendation of the President to the Board of Directors on a Proposed Supplementary Loan in Socialist Republic of Viet Nam*. Manila.

completion. Most of this was funded by the government's own budget, and the remaining (\$19.79 million or 16.9%) was funded by the ADB loan proceeds. The PCR noted that the increased number of affected households was largely due to the lack of a comprehensive inventory during the project design stage.

10. The project was category B for indigenous peoples. The impact on ethnic minorities was related to land acquisition at the individual household level. The 9,833 affected households included 384 ethnic minority households. There was no impact on the ancestral and cultural lands and livelihoods of the communities. Mitigation measures targeting ethnic minorities were included in the project's ethnic minority development plan.

11. The project was categorized as having an effective gender mainstreaming (EGM) initiative, and a Gender Action Plan (GAP) was prepared. The PCR pointed out that the GAP did not provide clear quantitative indicators, and that the GAP targets were not reflected in the design and monitoring framework (DMF).

12. Consultant services were procured under the project, following ADB's Guidelines on the Use of Consultants.⁷ The project envisaged 961 person-months of consulting services (214 international and 747 national). However, during implementation, it increased to 1,408 person-months. The main reason was the need for additional construction supervision and safeguards support during the extended implementation period. The AFD-financed procurement and consulting services followed AFD guidelines. The PCR noted that the performance of consultants was generally satisfactory.

D. Implementation Arrangements

13. The MARD was designated as the executing agency. The Central Project Office (CPO) in Hanoi was responsible for overseeing the overall project implementation. It coordinated and guided the five implementing agencies, which included four provincial project management boards under the respective DARDs in the provinces of Binh Duong, Binh Phuoc, Long An, and Tay Ninh, as well as the MARD Project Management Board 416 (later renamed ICMB9). In November 2006, the project management was transferred from the CPO in Hanoi to ICMB9 in HCMC. It led to an increased ownership of the project activities by the provincial DARDs.

14. The PCR reported that there were 30 loan covenants under the original loan (2025), and another 28 covenants under the supplementary financing (2747).⁸ There was an inconsistency between the PCR text and its corresponding appendix. The PCR Appendix 10 showed 57 covenants, comprising 34 covenants under the original loan and 23 covenants under the supplementary loan. In total, five covenants were partly complied with, three of which pertain to financial audit reports. The remaining two pertained to the minimum environmental flow of water, which was not always maintained.⁹

⁷ ADB. 2013. *Guidelines on the Use of Consultants by Asian Development Bank and Its Borrowers*. Manila.

⁸ Footnote 3 (para. 33).

⁹ Footnote 3 (paras. 27 and 47).

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

15. The PCR rated the project relevant. The project was implemented for a number of years, since the government and development partners identified integrated interventions from multiple points of view: managing the river flow, irrigation for agriculture, urban water services, and controlling salinity in the dry season. It was technically a complex project. The project design was prepared through a technical assistance loan in the late 1990s. At appraisal, the project design was consistent with ADB's Country Strategy and Program for Viet Nam 2002–2004,¹⁰ on improving water and other natural resources management in the country. It remained relevant to ADB's Strategy 2030 with its emphasis on urban development, water management and environmental protection. The project was well coordinated with development partners and enjoyed their support, especially from AFD in the form of parallel cofinancing.

16. The project design had initial limitations on its cost estimate, especially related to the cost of Duc Hoa canal and the number of households affected by involuntary resettlement. The capacity of the implementing agency was not fully assessed. It had no earlier experience in implementing an ADB project. The project faced start-up difficulties and progressed extremely slowly in the initial 2–3 years due to lack of preparedness. The slippage compounded the implementation problems by further increasing the project cost. As a result, the project had to undergo a major change in scope in 2011 requiring supplementary financing from ADB. During project implementation, the DMF was updated upon the approval of the supplementary loan in 2011. The revised DMF included appropriate quantifiable outcome targets for DMI water supply and indicators to measure irrigation coverage and agricultural practices.

17. Beginning in 2008, the planned agricultural irrigation component was considered out of date as the situation on the ground had changed since the project was designed. The cropping pattern had changed from predominantly rice cultivation to rubber and cassava plantations in Tan Bien. The pace of urbanization in Duc Hoa was rapidly encroaching upon the agricultural land. Farmers were no longer keen on pursuing diversified irrigated agriculture envisaged at appraisal. The PCR noted that there was a steady decline in irrigable area planned and completed under the project. This component became less relevant over time. Consequently, the midterm review lessened the emphasis on agriculture and shifted the project's strategic focus more on domestic, municipal and industrial water services.

18. As noted earlier, the project's implementation arrangements were changed in November 2006 to improve its performance. Project management was transferred from the CPO in Hanoi to the MARD's Project Management Board in HCMC, later renamed as ICMB9. Provincial ownership of the project was increased with more involvement of the provincial DARDs. However, this subsequently revealed the problem of counterpart funding, as the ICMB9 was not able to directly monitor provincial funds flow under the project. It also revealed that some provinces (e.g., Long An) were tasked to undertake activities that were not in their mandate. The slow pace of implementation, revisions in implementation arrangements, and mobilization of supplementary financial resources altogether had an adverse effect on the provision of consultant services. Initially, only 961 person-months of consultant inputs were envisaged. By project completion, the project had required 1,408 person-months of consulting services—an increase of 46.5%.

¹⁰ ADB. 2001. *Viet Nam: Country Strategy and Program, 2002–2004*. Manila.

19. Given the significance of the project for the southern region of Viet Nam, and the fact that it was situated in one of the most rapidly changing economies of the region, the project design needed a more flexible modality, such as a multi-tranche financing facility (MFF) or a result-based lending (RBL). These options in project design were not available at project appraisal. However, it is noted that mid-course corrections in the form of a major change of scope (para. 16) rescued the project. The project remains relevant as seen in the continued AFD's support even after the closing of the project. This validation assesses the project relevant.

B. Effectiveness in Achieving Project Outcome and Outputs

20. The PCR rated the project effective. The project achieved the DMF outcome indicator related to water diversion from the Be River into a reservoir for irrigation, DMI use, and salinity control. The project achieved 6 of the 8 output targets in the DMF. The two indicators related to diversified irrigated agriculture were not achieved. The performance of the individual outputs is summarized below.

21. Under output 1, two performance targets were achieved. The first target pertained to the functioning of Dau Tieng irrigation management company (IMC) operating the basin transfer facilities by 2014. The second target was the adequate capability of the provincial IMCs to operate the canals to deliver water to farmers by 2014. However, the PCR focused on the broad observation of institutional operation, rather than describing how the capacity of these organizations was strengthened.

22. The output 2 had two indicators. The first target concerned the establishment of water users' associations for 90% of the irrigated land that was achieved. The second indicator related to the number of farmers adopting crop diversification and producing high value crops was not achieved. This was largely because the changing emphasis in agricultural practices over time (e.g., from rice to the rubber and cassava plantations) and the growing urbanization in the agricultural areas.

23. Output 3 pertained to resettlement. At appraisal, only 2,225 affected households were estimated to be resettled by 2012. It had to be increased to 4,683 affected households during the major change in scope. The actual number of affected households that were compensated and resettled was 9,833 by July 2019. The affected households at appraisal were far underestimated. This caused a substantial increase in the total project cost and delayed the implementation. The validation notes that this type of safeguards metric is not an appropriate output target since a project commonly should strive to minimize disturbance and involuntary resettlements to the extent possible.

24. The performance target under output 4 was to establish a fully operational water quality monitoring system for the project area by 2014. The system monitored surface water quality in 21 sites in the three rivers (Be, Saigon, and VCD rivers). It also monitored ground water quality in 14 sites in the project area and salinity levels in the three rivers that cross the Binh Duong, Dong Nai, and Long An provinces. These targets were achieved.

25. Output 5 concerned the capacity of basin transfer facilities. The target indicator was to divert up to 55 cubic meters per second from the Be River to the Dau Tieng Reservoir on the Saigon River. This target was achieved with a 5-month delay. Nonetheless, achieving this target contributed directly to the project outcome achievement.

26. Output 6 was on irrigation facilities constructed to target an additional 20,545 hectares of agricultural land receiving reliable irrigation by 2016. The target was partly achieved at 79%. The planned canal system to support on-farm irrigation was cancelled in the Tan Bien and Duc Hoa irrigation areas. The farmers were not convinced about the potential benefits of agricultural diversification. New crops like rubber plantation were less dependent on irrigation than rice, and many rural areas were undergoing rapid urbanization.

27. An EMP was prepared for this category A project for environment, which was approved by ADB, MARD, and the Ministry of Natural Resources and Environment in March 2008. Of the 14 EMP outputs, 11 were fully delivered and one was partly implemented because water supply treatment plants in Binh Duong and Long An were removed from the project financing due to other funding resources identified. Consequently, the remaining two became not applicable. The project produced substantial environmental benefits by controlling salinity in the Saigon and VCD rivers.

28. The project's LAR and ethnic minority development plan were updated in compliance with ADB's Safeguard Policy Statement 2009 and updated government policy, and were implemented by ICMB9, DARDs, provincial project management boards, and relevant boards (para. 9). Another LAR issue arose when the local governments started to make payments for resettlement compensation and assistance related to the Phuoc Hoa barrage construction in 2005 before ADB approved the updated resettlement plans. As a result, ADB suspended disbursement for the payments in March 2008. The payments were reinstated in November 2008 after corrective actions were made. As such, the LAR implementation, including compensation, was significantly delayed. A social support program was implemented for income and livelihood restoration for the affected households. The program received broad support from local communities.

29. The PCR reported that 13 out of 15 GAP actions were successfully completed at loan closing. Two GAP actions were partially implemented: (i) requiring the presence of women during compensation payments, and (ii) prioritizing severely affected women for project-related works. The PCR reported that women constituted 41% of the 11,402 total project beneficiaries. The Women's Unions were actively engaged in GAP implementation and played an important role in promoting women's participation in activities such as vocational training, domestic violence prevention, and agricultural extension.

30. The project achieved its outputs and outcome substantively. The safeguards and GAP measures were well implemented. This validation assesses the project effective.

C. Efficiency of Resource Use

31. The PCR rated the project less than efficient. Its economic evaluation yielded an economic internal rate of return (EIRR) of 7.7%, lower than ADB's institutional threshold and the appraisal estimate of 12.3%. The major reasons for the lower EIRR included reduced area of irrigation and agricultural diversification, increased cost of resettlement of affected households from \$18.14 million to \$117.18 million, and delayed accrual of project benefits due to delayed project completion. On completion, the water flow in the transfer canal was not only lower than the initially planned at 65 cubic meter per second, but there was no flow in the canal in 2017 (Appendix 11, paras. 4–5). The EIRR estimation followed the methodology used at the time of supplementary financing and were based on reasonable assumptions. Although low, the resulting EIRR estimates were satisfactory.

32. In term of process efficiency, the project had start-up delays. The appointment of the counterpart staff was delayed. It took more than two years for the consultants to be mobilized. They were onboard only in May 2006. Government counterpart funds for LAR were made available, albeit belatedly. Given the need to deliver the project within the limited resources, the training and equipment costs were reduced to a minimum. This could not have improved the process efficiency, given the lack of experience on the part of the executing and implementing agencies. Overall, the lead joint venture contractor did not have the requisite experience and demonstrated poor contract management capabilities (PCR, para. 23). Project financial reports did not provide adequate details about the auditor's opinion on the appropriate use of project funds. This validation assesses the project less than efficient.

D. Preliminary Assessment of Sustainability

33. The PCR rated the project likely sustainable. It indicated that the project is financially, institutionally, and environmentally sustainable. However, in terms of diversifying agricultural activities, the PCR assessed it less than sustainable due to the growing urbanization in the agricultural land. The PCR noted that the project facilities were likely to have adequate operations and maintenance provided by the IMCs.¹¹ The experience that Viet Nam gained under the project built the country's capacity to replicate this project to other areas, such as inter-reservoir operational procedures for the Dong Nai River basin. Plans for further developing water resource infrastructure in the region were being prepared for implementation. Going forward, the monitoring of water quality system established under the project was an important component to be tracked. Steady and regular water levels, enabling the passage of fishes, needed extra attention to make the flow stable. Based on the aforementioned, the validation assesses the project likely sustainable.

III. OTHER PERFORMANCE ASSESSMENTS

A. Preliminary Assessment of Development Impact

34. The PCR assessed the project's development impact satisfactory. The project's development impact target, an increase in the average real economic growth rate in the project area, was too broad. Preliminary evidence cited in the PCR suggested that the project area maintained a rapid growth, as was the case for the country's economy over the project period. Within the project area, growth was 9.6% for the first six months in 2019 for Long An and 8.04% for the same period in the case of Tay Ninh. However, such growth rates could hardly be attributed solely to the project interventions. Nonetheless, the availability of safe and regular supply of water augurs well for economic growth and welfare of the southern Viet Nam's population. It facilitated a sustained economic development in the area. Despite the shifting emphasis of the project activities away from irrigation and agriculture diversification, it was expected that the agriculture sector would benefit from the project investments over time, given increasing demand for high value-added produce from urban centers. Export demand for agriculture products is likely to grow. These trends were in step with the trends for the agriculture sector nationwide. The validation assesses the project's development impact satisfactory.

¹¹ Over the period, 2012 to 2019, the government allocated an average of D14.03 billion per year to meet the annual operations and maintenance needs (PCR, para. 39).

B. Performance of the Borrower and Executing Agency

35. The PCR assessed the borrower's and executing agency's performance less than satisfactory. It noted that the MARD did not have the requisite experience in implementing externally funded project, and it particularly lacked familiarity with ADB's procedures and practices. This limitation manifested in a number of project dimensions and resulted in start-up delay of about 3 years. Consultant engagement was delayed by nearly two years. Allocations for LARs were initially delayed, and when the funds became available, the disbursement began without ADB's approval. Procurement was delayed due to protracted internal review and approval processes. Project implementation arrangements had to be modified and shifted to ICMB9, which was chaired by a MARD vice minister. This resulted in improved project performance. The reports on monitoring social safeguards were not regular and complete. The project's financial closing was also delayed due to administrative procedures, and the financial report did not include auditor's opinion that the loan proceeds were used appropriately. In brief, the executing agency did not have the capacity and was inadequately prepared for undertaking such a complex project. This resulted in slow implementation and increased the cost of the project; thus requiring supplementary financing. The validation assesses the borrower and executing agency's performance less than satisfactory.

C. Performance of the Asian Development Bank and Cofinanciers

36. The PCR assessed ADB's performance less than satisfactory. It argued that the project suffered from start-up delays and had initial design limitations, which needed some modifications. ADB demonstrated flexibility as it worked with the government and helped make necessary changes. The midterm review realigned the project's focus more on DMI water use and revised the DMF. These mid-course corrections rescued the project (paras. 16–17). ADB appropriately helped the government address safeguards issues and conducted biannual project administration along with AFD and the government. ADB's close and sustained supervision helped resolve a number of implementation issues. ADB should have reviewed the annual project audit reports more rigorously and insisted upon compliance with audit-related covenants. ADB needed to put in place a stronger team to supervise gender and safeguards activities.

37. The PCR assessed AFD's performance satisfactory. AFD and ADB conducted joint biannual project review missions and shared project information to address slippages, activity changes during implementation, and project financing. AFD continued to monitor the project until April 2019 after ADB's loan closed in 2015.

38. The validation notes that ADB responded to the implementation issues proactively and in a timely manner, such as in providing supplementary financing. These efforts contributed substantively to the completion of this vital water resource infrastructure in Viet Nam. The validation assesses ADB's and the cofinancier's performance satisfactory.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

39. The PCR rated the project successful with ratings of relevant, effective, less than efficient, and likely sustainable. The validation underscores that the Phuoc Hoa Water Resources project was vital for the continued economic growth, especially in the areas surrounding HCMC. The project's initial design including its cost estimates became out of date,

because of the start-up delay of about three years. During that time, the conditions on the ground in the project area especially related to irrigation needs and the number of households to be resettled changed significantly. These necessitated adjustments in the project components and their cost estimates. The executing agency and its protracted internal approval procedures contributed further to the slow project progress until ADB carried out a major change in scope and provided supplementary financing. The project nonetheless substantially achieved its envisaged outputs and outcome. The validation assesses the project successful, with ratings of relevant, effective, less than efficient and likely sustainable.

Overall Ratings

Validation Criteria	PCR	IED Review	Reason for Disagreement and/or Comments
Relevance	Relevant	Relevant	
Effectiveness	Effective	Effective	
Efficiency	Less than efficient	Less than efficient	
Sustainability	Likely sustainable	Likely sustainable	
Overall Assessment	Successful	Successful	
Preliminary assessment of impact	Satisfactory	Satisfactory	
Borrower and executing agency	Less than satisfactory	Less than satisfactory	
Performance of ADB	Less than satisfactory	Satisfactory	Notwithstanding major design issues at appraisal, ADB responded to the implementation issues flexibly and proactively and made necessary and substantial adjustments including the provision of a supplementary financing. It coordinated well with the cofinancier.
Quality of PCR		Satisfactory	Para. 45

ADB = Asian Development Bank, IED = Independent Evaluation Department, PCR = project completion report. Source: ADB (IED).

B. Lessons

40. The PCR identified a number of lessons although these were mostly presented as issues. These included the need for an early deployment of technical personnel in the project cycle; more accurate assessment of LAR estimates and comprehensive discussions with stakeholders; adequacy of implementing agency capabilities and its internal approval procedures; and better monitoring of affected households. Also, the lessons emphasized the need for a stronger gender analysis and a closer examination of the audit reports. These lessons are well identified and the validation supports these observations.

41. The validation offers additional project-level lessons. First, strengthening the capacity of executing agencies with limited experience in implementing ADB-financed projects is imperative to support the delivery of project activities. Extending necessary training and capacity building support (e.g., ADB projects administration, procurement procedures, and financial management), through the provision of a technical assistance, can help fill the skills gap in selected executing and implementing agencies. This project showed that numerous start-up delays and administrative issues were directly linked to the lack of familiarity of the MARD, the CPO, and the ICMB9 in executing the planned project activities.

42. Second, appropriate monitoring of project activities promotes timely project implementation and accuracy of project cost variations. It provides an assessment of the range of factors contributing to or potentially constraining the achievement of project results. A robust DMF, with appropriate performance indicators, helps in strengthening the quality of project outputs and outcome. During the midterm review and project restructuring due to scope changes, further improvements to the DMF permits necessary adjustment to project components while keeping the project on track. Aside from the DMF targets, monitoring of safeguards indicators is crucial, especially for implementing agencies that are unfamiliar with its importance.

C. Recommendations for Follow-Up

43. Given the significance of the project in the context of continued economic growth in southern Viet Nam, and the fact that new water infrastructure projects are being planned in the area, the project needs a regular post-completion monitoring and dialogue especially in the following areas: (i) water flows and quality of water for DMI use; (ii) progress in irrigation infrastructure improvement in the adjoining farming areas; (iii) salinity level control in the lower reaches of the rivers, and (iv) stability and regularity of water flows through the canal. Although having been implemented under the project, these monitoring activities have not been fully integrated into the government work programs, and a few agencies seem reluctant to operate and maintain them (PCR, para. 27).

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Reporting

44. The PCR assessed that the monitoring and reporting for the project as less than satisfactory. Given the generally good track record of Viet Nam in monitoring ADB funded projects, this largely reflected the lack of familiarity and prior experience on the part of the project executing and implementing agencies. The deficiency was particularly notable in the case of the LAR for affected households. The reports were late and did not provide the full account of the benefits received by the affected households because the reports were prepared by a number of provinces. Likewise, financial audit reports did not include the auditor's opinions on whether the loan proceeds were used appropriately or not. ADB should have monitored the submission of these reports more closely in the early years. The compliance with the loan covenants was satisfactory.

B. Comments on Project Completion Report Quality

45. The PCR was well prepared and its presentation was candid. Narrating the project design and implementation objectively, it utilized data effectively and drew appropriate lessons from the project experience. However, it did not describe process efficiency issues, which would have provided important lessons. Overall, the validation assesses the quality of PCR satisfactory.

C. Data Sources for Validation

46. The validation utilizes the following documents: the PCR, report and recommendation of the President, ADB's internal project documents, and the World Bank's economic development indicators for Viet Nam.

D. Recommendation for Independent Evaluation Department Follow-Up

47. A project performance evaluation report could be considered any time, especially before the design process is initiated for any new water infrastructure projects in Viet Nam.