



Validation Report

Reference Number: PVR-456
Project Number: 30286-013
Loan Number: 2272
October 2016

Viet Nam: Central Region Small and Medium Towns Development Project

Independent Evaluation Department
Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
CSP	–	country strategy and program
DMF	–	design and monitoring framework
EIRR	–	economic internal rate of return
FIRR	–	financial internal rate of return
NSEDP	–	National Socioeconomic Development Plan
O&M	–	operations and maintenance
PCR	–	project completion report
PCU	–	project coordination unit
POE	–	public operating entity
PPC	–	Provincial People's Committee
PPMU	–	provincial project management unit
RRP	–	report and recommendation of the President
SWM	–	solid waste management
WSS	–	water supply and sanitation

NOTE

In this report, "\$" refers to US dollars.

Key Words

adb, asian development bank, independent evaluation department, operations and maintenance, solid waste management, water supply and sanitation, water treatment plant, validation, viet nam

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PROJECT BASIC DATA

Project Number	30286-013	PCR Circulation Date	31 Jul 2015	
Loan Number	2272	PCR Validation Date	Oct 2016	
Project Name	Central Region Small and Medium Towns Development Project			
Sector and subsector	Water and Other Urban Infrastructure and Services		Urban policy, institutional and capacity development	
Theme and subtheme	Environmental sustainability		Urban environmental improvement	
Safeguard categories	Environment		B	
	Involuntary Resettlement		A	
	Indigenous Peoples		B	
Country	Viet Nam		Approved (\$ million)	Actual (\$ million)
ADB Financing (\$ million)	ADF:53.22	Total Project Costs	66.72	68.91
	OCR:0.0	Loan (SDR equivalent, million)	53.22 (36.03)	51.89 (34.06)
		Borrower	13.50	17.02
		Beneficiaries	0.00	0.00
		Others	0.00	0.00
Cofinancier		Total Cofinancing	0.00	0.00
Approval Date	17 Nov 2006	Effectiveness Date	22 Aug 2007	27 Aug 2007
Signing Date	24 May 2007	Closing Date	30 Jun 2012	30 Jun 2014
Project Officers	J. Hakim H. Nhat Do	Location ADB headquarters Viet Nam Resident Mission	From Dec 2006 Dec 2007	To Nov 2007 Jun 2014
IED Review Director	W. Kolkma, Director, IED1			
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ADB = Asian Development Bank; ADF = Asian Development Fund; IED1 = Independent Evaluation Department, Division 1; IEOD = Office of the Director General, Independent Evaluation Department; OCR = ordinary capital resources; PCR = project completion report; SDR = special drawing right.

I. PROJECT DESCRIPTION

A. Rationale

1. Viet Nam's economic growth in the 1990s and its transformation from a predominantly agricultural to an industrial economy has led to rapid urbanization of the population; higher urban population density; environmental deterioration; and an increased demand for infrastructure services, including water supply and sanitation (WSS), drainage, and solid waste management. Regional disparities in economic development have also resulted in the northern and southern regions of the country being more developed than the central region. At the formulation of this project, the central region—with a poverty rate of over 38% compared with the national average of 24%—was one of the poorest in the country.

2. The key constraints identified during project formulation for WSS were (i) weak institutional framework and sector regulation; (ii) insufficient coverage by the water distribution network to meet demand, inadequate sewerage systems and insufficient water treatment plants; (iii) low capacity of community and the public operating entities (POEs) tasked to manage WSS; and (iv) low public awareness and civil participation in WSS service provision. On drainage and wastewater management, the drainage systems were usually limited to the highways and the main roads, which were poorly maintained, and the sanitary quality of approximately 80% of the dumpsites and landfills were inadequate.

3. The problems that needed to be addressed in the short to medium term were inadequate investment and deteriorating urban infrastructure, low cost recovery for capital expenditure and O&M, lack of managerial autonomy and inefficient WSS service, absence of a transparent regulatory and monitoring framework in WSS, and lack of public awareness and civic participation in WSS service.

4. The project aimed to contribute to sustainable economic growth and improve the urban quality of life in eight project towns in five provinces of the central region by providing accessible, equitable, and sustained WSS services. Improved WSS would make these towns more productive and competitive with others in the region. Before this loan, the Asian Development Bank (ADB) had already extended several loans of similar integrated nature, covering various towns across the north and south of the country.

5. The project was designed to include water supply, drainage and wastewater, and solid waste management.¹ Public education and awareness campaigns would supplement infrastructure activities. The project would help reform POEs and improve their financial sustainability and operational efficiency through cost-recovery mechanisms, adequate tariffs, and capacity building, as well as give suggestions to improve the regulatory environment. The project investment cost was estimated at \$66.72 million (including contingencies and service charge), of which ADB would provide up to \$53.22 million equivalent. The borrower would provide the remaining amount, including duties and taxes.

6. The project would contribute to the implementation of ADB's Country Strategy and Program (CSP), 2007–2010,² which was fully aligned with the government's National Socioeconomic Development Plan (NSED) 2006–2010.³ While focusing operations on pro-poor economic growth, including balanced regional development, the new CSP aimed to help the government reduce poverty incidence to 10–11% of households by 2010, achieve the Millennium Development Goals and the Viet Nam Development Goals, and exit from low-income country status.

B. Expected Impacts, Outcomes and Outputs

7. The intended project impacts were improved quality of life, sustained economic growth, and reduced poverty in project towns. The associated impact level performance indicators and targets by 2015 would be 100% coverage for improved WSS, reduced waterborne and

¹ ADB. 2006. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Socialist Republic of Viet Nam for the Central Region Small and Medium Towns Development Project*. Manila.

² ADB. 2006. *Viet Nam Country Strategy and Program, 2007–2010*. Manila.

³ Government of Viet Nam. *Socioeconomic Development Plan 2006–2010*. Ha Noi; and the Government of Viet Nam. 2004. *Directive No. 33/2004/CT-TTg of the Prime Minister on the Preparation of the 5-Year Socioeconomic Development Plan, 2006–2010*. Ha Noi.

water-related diseases, and poverty reduced to less than 10% in all project towns. No economic growth targets were specified in the project design even though the stated project impact included contribution to sustainable economic growth.

8. The intended project outcomes were (i) improved access to safe and sustainable water supply; (ii) improved drainage and less flooding; (iii) improved solid waste management systems; (iv) changed attitudes toward environmental hygiene and sanitation; and (v) sustainable management and delivery capacities of WSS providers.

9. The project had five interrelated components or outputs: (i) water supply development and expansion involving (a) construction and rehabilitation of existing headworks; (b) construction of water treatment plants and pumping stations; (c) construction, rehabilitation and improvement of water distribution networks; and (d) installation of new piped connections and rehabilitation of existing connections; (ii) drainage and wastewater management, including (a) construction of drainage networks, (b) construction of interceptor sewers, and (c) construction of wastewater stabilization ponds; (iii) solid waste management, involving the (a) construction and rehabilitation of landfill sites, (b) procurement of solid waste disposal equipment, and the (c) establishment of solid waste management (SWM) systems; (iv) community environmental sanitation and awareness, with public awareness covering (a) improved public awareness on the importance of good environmental hygiene and sanitation, (b) improved access to sanitation services for the poor, and (c) improved environmental conditions in poor communities; and (v) project management and institutional strengthening.

10. The outcome in the design and monitoring framework (DMF) was presented as a series of discrete subsector outcomes reflecting each of the five project components. The DMF did not indicate the overarching project objective to which these components contribute, thus making the project appear to be a cluster of five individual subprojects rather than an integrated initiative. It would have been useful if the five discrete subsector outcomes described under the outcome heading were integrated into a single project outcome statement. No baselines were also provided and many of the targets were not specific (for example, “reduced flooding and ponding”), which reduced the value of the DMF as a project completion report (PCR)⁴ monitoring tool.⁵

C. Provision of Inputs

11. The total project cost was estimated at \$66.72 million at appraisal, which was to be financed by a \$53.22 million concessional loan from ADB. The government was to contribute \$13.50 million to cover taxes and duties and the full cost of resettlement and land acquisition. Delays in project implementation rendered the project vulnerable to price escalation particularly for civil works, resettlement, and land acquisition (PCR, para. 20). At completion, the total project cost increased to \$68.91 million. Government contribution went up to \$17.02 million but actual financing from ADB was below appraisal at \$51.89 million. The appreciation of the special drawing rights against the United States dollar increased ADB’s original financing of \$53.22 million equivalent to about \$55.5 million. By the time this appreciation materialized,

⁴ ADB. 2015. *Completion Report: Central Region Small and Medium Towns Development Project in Viet Nam*. Manila.

⁵ The DMFs of the RRP and the PCR are identical with the exception of the performance indicators and targets of part C regarding the establishment of SWM systems—in the PCR Cam Ranh replaces Thap Cham as a SWM system location.

initiating a new bidding process to use the uncommitted loan proceeds was too late. Thus, loan proceeds equivalent to SDR1.3 million were canceled.

12. The actual base cost of implementing the components was \$68.33 million against an appraisal estimate of \$57.22 million.⁶ Civil works expenditure on drainage was significantly reduced from \$34.73 million at appraisal to \$29.24 million actual. The equipment costs for component B significantly increased from \$1.32 million at appraisal to \$11.73 million actual. The PCR did not give an explanation for these changes. Increased costs were met from unallocated funds and contingencies, resulting in little impact on ADB's overall amount of \$53.22 million allocated at appraisal and \$51.89 actual.

13. The project was classified Category B for environmental risks. The PCR reported that environmental mitigation measures were adequately implemented and that the project had no significant adverse impact on the environment. Land acquisition was also required and the people in the eight project towns needed to be resettled. Other than increased resettlement costs, no major resettlement issues arose during implementation.

D. Implementation Arrangements

14. The implementation arrangement for the project remained largely the same from inception to completion. A provincial people's committee (PPC) was the executing agency for each of the five provinces, and the relevant town people's committee, women's unions, and other stakeholders were involved in carrying out the project. Each PPC assigned the responsibility for project implementation to the project steering committee, which established at least one Provincial Project Management Unit (PPMU) to help operate the project on a day-to-day basis. However, the activities relating to community environmental sanitation and awareness were delegated to the women's union in each town. The project set relevant loan covenants, which were generally complied with as set out in the loan agreement.⁷

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

15. Relevance relates to whether (i) the overall project objectives (impacts and outcomes) are strategically aligned with the strategies and policies of the government and ADB, and (ii) the project design addresses the development challenges and sector constraints identified in the project rationale.

16. The PCR rated the project *relevant*. The project's intended impact and outcomes were largely consistent with the government's NSEDP (2006–2010).⁸ These were also aligned with

⁶ Figures in this paragraph are based on a review of project-based costs presented in Appendix 3 of the PCR.

⁷ The loan agreement had 17 covenants, subdivided into 9 categories. There was no covenant concerning the establishment of a project monitoring and evaluation system. At the loan closing date, the borrower had fully complied with all loan covenants except those relating to tariff increase for wastewater and solid waste management reforms. The PCU and the five PMUs submitted audited project financial statements for six accounting periods.

⁸ Government of Viet Nam. 2004. *Directive No. 33/2004/CT-TTg of the Prime Minister on the Preparation of the 5-Year Socioeconomic Development Plan, 2006–2010*. Ha Noi. The government's Comprehensive Poverty Reduction and Growth Strategy for 2001–2010, which underpinned national development planning, included policy objectives highly relevant to the urban sector, notably to (i) develop urban areas to create employment and improve living standards; (ii) strengthen environmental protection to ensure a healthy living environment; (iii) promote gender equity and enhance the participation of women at all levels of leadership; and (iv) strengthen accountability

the priorities in ADB's CSP (2007–2010) for Viet Nam.⁹ ADB's assessment, strategy, and road map for the urban sector (2010), also proposed the development of secondary cities and towns as regional economic hubs to foster balanced regional development and strengthen rural-urban linkages. The possible areas for support included the upgrade and expansion of priority urban infrastructure, such as water supply, sanitation, wastewater treatment, and solid waste management, backed by clearly defined institutional arrangements and the building of necessary local capacity. At completion, the project remained relevant as the government's NSEDP for 2011–2015 and ADB's CSP for 2012–2015 placed high priority on sustainable urban development and balanced regional development.

17. The project's DMF had some weaknesses. First, the DMF did not have baseline targets, significantly reducing its usefulness as a monitoring tool and diminishing its ability to assess the contribution of project activities to the achievement of outcomes; the baseline targets were not added later either. Second, some of the foreseen project risks that were highlighted during ADB's earlier engagement in the sector—such as the very slow start-up and the unwillingness of local authorities to implement institutional and policy reforms, including tariff adjustments—were not addressed. Although some of the projects being undertaken by other donors were innovative, i.e., the World Bank's upgrading program, this project followed the design of earlier ADB-supported projects and lacked innovation (for example, the Central Highlands could have had distinct community consultation practices or awareness-raising programs), or should have had at least some special measures to deal with the higher risk of lagging provinces. Finally, the project was ambitious in scope, covering multiple infrastructure subsectors and five provinces.

18. The project is very much aligned with the strategic imperatives of the government and ADB. Notwithstanding some weaknesses in design, project activities, intended outputs, outcomes and impacts, and associated targets were logically stated. Following the project extension, the scope of the project remained largely intact, except for the reduced provision of Cam Ranh tertiary drains and associated household connections.¹⁰ Given these factors, this validation assesses the project *relevant*.

B. Effectiveness in Achieving Project Outcomes and Outputs

19. Effectiveness is the measure of having achieved the intended outcomes and outputs at the end of the project. Where outcome targets are not achieved but output targets are substantially delivered, the likely achievement of intended outcomes is assessed.

20. The PCR rated the project *effective*. The project largely delivered on its outcome targets. The PCR recorded that four of five sector outcomes were achieved, and the fifth—sustainable management and delivery capacities of WSS service providers—was partially achieved. At project completion, corporatization of five out of six POEs was achieved, with water tariff increases and cost-recovery mechanisms largely implemented. In some cases, the targets

at all levels, especially at the local government level, by improving the transparency and accessibility of local budgets. The government also aimed to encourage balanced and sustainable economic growth across the country as a means of counteracting the high rate of and rising migration from the center of Viet Nam to the megacities of Ha Noi and Ho Chi Minh City.

⁹ ADB. 2006. *Country Strategy and Program: Viet Nam, 2007–2010*. Manila. This highlighted the need to (i) develop physical infrastructure, (ii) improve the business-enabling environment through regulatory reforms, and (iii) develop human resources.

¹⁰ The project management unit and project management assistance consultants in Cam Ranh reduced the scope of tertiary drains to keep the estimated costs below the level approved in the feasibility study to avoid additional approval procedures at the PPC.

mentioned the number of households to which benefits would accrue and these were greater than envisaged in two out of three outcomes.

21. Achievement of project outputs was mixed and took longer than originally planned in some sectors particularly for water supply and drainage and wastewater. In the water sector, fewer raw water pipelines than expected were provided. However, the project overachieved in providing water treatment plant capacity and the water supply network. The project fell short of providing new pipe connections, although the shortfall is being met by the water supply company. No targets were fully achieved in the drainage and wastewater management sector, although this was partially attributable to changes in the detailed design. Similarly, achievements in the solid waste management sector against targets are mixed, with satisfactory provision of sanitary landfills; but it is not clear how well the SWM systems are functioning. Community environmental sanitation and awareness appear to have improved, with the increased use of septic tanks, for example.

22. Results for gender and safeguards were positive. Implementation of the project gender action plan was satisfactory, with 21 of the 24 targets (87.5%) achieved. On safeguards, a total of 507 affected households were resettled and land acquisition amounted to 495,529 square meters.¹¹ The affected people were satisfied with the market rate-based compensation, which included timely provision of serviced residential plots. Resettlement sites had basic infrastructure, including roads, water supply connections, drainage systems, and electricity. According to the impacts assessment, the living standards of affected people in resettlement sites were equal to or exceeded pre-project standards. The PCR gave limited information concerning benefits to ethnic minority and poor households other than stating in Appendix 11 that 2,000 poor households in Ninh Hoa town received free or subsidized connections to the public water pipes.

23. A poverty impact ratio analysis prepared by the project preparation consultants calculated the project's net economic benefits accruing to the poor at 29.9%, which indicates the project's pro-poor thrust as it exceeds 12.6%, the estimated average share of the poor in Viet Nam's gross domestic product at the time of project preparation. A similar detailed assessment of economic analysis or distribution analysis should have been conducted as part of the PCR to gauge the project's effectiveness and the likely achievement of project impact at completion. This validation assesses the project *effective* since most of the key outputs and outcome targets were met and the envisaged outcomes achieved.

C. Efficiency of Resource Use in Achieving Outcomes and Outputs

24. Efficiency is a measure of the project's relative costs and benefits. The economic internal rate of return (EIRR) that compares the discount rate for the net present value of future net benefits against a benchmark opportunity cost of capital is the standard measure of efficiency. The benchmark for ADB projects is currently 12%. Where EIRR calculations cannot be undertaken, a more limited perspective of process efficiency is considered.

25. The PCR rated the project *less efficient*. Implementation delays and cost overruns made an impact on the EIRR at completion. The project was carried out according to the government's decentralization policy and was decentralized to the PPCs and provincial agencies, while still retaining a project coordination unit (PCU) at the central level to

¹¹ InvestConsult Group. 2014. Final Resettlement Monitoring Report. Ha Noi.

(i) undertake coordination; (ii) consolidate project accounting, auditing and monitoring; (iii) report to ADB and the government; and, (iv) recruit and manage consultants on behalf of the PMUs. The PCU's recruitment of a consulting firm to support project management and provide institutional strengthening was delayed by about 18 months. This had a knock-on effect, such as escalated project costs and a 2-year delay to project completion, which reduced the project's efficiency.

26. Each PPC was the executing agency responsible for all implementation issues in the province, with the water companies and the PMUs playing significant roles. In resource use efficiency, with a minor reduction in scope, the project base cost for all components increased from \$57.25 million to \$68.33 million with full benefits deferred following the 2-year delay.

27. At appraisal, EIRRs for water supply and drainage and wastewater subprojects ranged from 12.1% to 26.8% (no EIRRs were estimated for solid waste management). For the water supply component at completion, two recalculated EIRRs ranged from 12.9% to 14.9% (efficient), while one recalculated EIRR stands at 7.0% (less than efficient). For the drainage and wastewater component, four recalculated EIRRs ranged from 13.7% to 26% (efficient), while two recalculated EIRRs ranged from 9.1% to 9.2% (less than efficient). The lower EIRRs were a result of actual costs being mostly higher than expected (i.e., project delays had an impact on EIRR) and, in the case of drainage and wastewater management, the number of project beneficiaries was lower, with benefits accruing to about 64,000 households against the appraisal estimate of about 105,400 households.

28. Despite some success in achieving project outputs and outcomes, the three *less than efficient* EIRR ratings and the process inefficiency reflected in the delayed recruitment of project implementation consultants confirm a project efficiency rating of *less than efficient*.

D. Preliminary Assessment of Sustainability

29. The sustainability criterion assesses the probability that achieved project outcomes can be maintained over the economic life of the project (for investment-type operations). The assessment refers to the sustainability of outcomes that were fully or partially achieved at the time of evaluation, and the intended outcomes that might be achieved in the future.

30. The PCR rated the project *likely sustainable*. The government remains committed to implementing the reform agenda and regulatory reforms for the water supply and wastewater sectors. The corporatized POEs were functioning adequately by the end of the project. All major project-financed assets are operated and maintained by POEs with experience in water supply, drainage, and solid waste O&M. POEs have benefited from on-the-job training and are being equipped with relevant drawings and O&M manuals. All O&M equipment have been delivered to the sites and are operational. The strengthened institutional capacity is important to note as it justifies the view that, in the short term, a suitable level of subsidies will be negotiated and, in the longer term, tariff reform will be manageable.

31. However, the financial internal rates of return (FIRRs) calculated at the end of the project, which indicate the financial sustainability of project-financed assets, point to challenges ahead. For all three water supply subprojects, the FIRRs at completion were substantially lower than anticipated because of (i) tariffs that were lower than expected (expressed in real terms); and (ii) O&M costs that were higher than expected. As a consequence, the O&M costs were not fully covered by the tariffs. At completion, all drainage and wastewater management subprojects remained below the weighted average cost of capital and, consequently, all subprojects had

negative FIRR. Similarly for SWM, FIRRs were substantially lower than anticipated at appraisal.

32. At loan closing, actual water tariffs were set at (or close to) full cost-recovery levels in Ca Na, Gia Nghia, and Ninh Hoa, and ranged from D5,000 per cubic meter to D15,000 per cubic meter. In real terms, these tariffs were higher than the tariffs recommended for August 2008, except for the lowest tariff in Ca Na.¹² The preparation consultant had recommended setting wastewater surcharges at 10% of the water tariff after the loan effectiveness date.¹³ The project implementation assistance consultant estimated full O&M cost-recovery tariffs, which were adopted in Cam Ranh, Gia Nghia, and Phan Thiet, but not in Tuy Hoa. The wastewater surcharges that were adopted or proposed were lower than full O&M cost-recovery tariffs.

33. During appraisal, the project had estimated tariffs for solid waste collection, which a project-operating entity would need to collect to cover the full O&M costs of project-financed assets. In June 2014, the actual tariff was about two-thirds of the recommended tariff for August 2008 in Cam Ranh and Gia Nghia (a similar tariff was approved for Song Cau shortly after the loan closing date). This indicates that the two towns were unable to recover the full O&M cost of solid waste management from collection fees at the loan closing date.¹⁴ The PCR could have given post-completion analysis on how this challenge, which is common across the country, can be overcome in the future from the sequence of similar ADB investments.

34. Looking ahead, further connections to water supply and wastewater systems could lead to higher revenues, which would enhance O&M capacity. In the meantime, sustainability largely relies on continued subsidies to POEs, which need to be negotiated at high levels to cover the full cost of O&M. The outcome that some towns were able to introduce wastewater tariff and solid waste collection tariffs (though at only about 40% of O&M costs) is commendable given the lagging economy. Water tariff was not increased in all the towns, but three of them did achieve the full cost-recovery basis. More time would be needed to achieve the same status for the wastewater and solid waste services. Although the project paved the way for the participating towns to steadily increase the tariff with continued improvements for the sewer and waste services, results were not achieved as originally designed. This validation assesses the project *less than likely sustainable*.

E. Impact

35. The development impact criterion assesses long-term, higher-level effects (i.e., beyond outputs and outcomes) along the project's results chain, and any significant broader impacts produced by a development intervention outside the project target population or area, or outside

¹² It is important to note that tariffs were set to cover the full cost of the entire system, including but not limited to the system's project-financed part. The full cost was estimated using a methodology described in Inter-Ministerial Circular 75/2012/TTLT-BTC-BXDBNN. Because the circular does not require water utilities to include loan interest into the cost estimate during the grace period on project-financed subloans, the estimated full cost does not fully reflect the total capital cost of system.

¹³ It is suggested in the PCR that this estimate was driven by regulatory constraints, (which did not permit an increase of the surcharge beyond the 10% threshold) rather than an estimate of the minimum required surcharge that would be needed to cover the full O&M cost of project-financed investments in drainage and wastewater management. At the time of project design, in the RRP, the financial analysis stated that the actual tariff for the wastewater will be revisited during implementation to cover O&M cost. This did not happen.

¹⁴ This observation is also supported by calculations from the project PMU support team, which estimated full O&M cost-recovery domestic waste collection fee levels at D17,100/month in Gia Nghia, and D36,000/month in Cam Ranh. The full O&M cost-recovery fee level for Song Cau was estimated at about D20,000/month.

the direct results chain definition. The evaluation considers positive and negative development impacts of the project, whether intended or not.

36. The PCR did not give an explicit rating for project impact. No supporting information for impact achievements was listed in the PCR DMF. With the intended impacts of improved quality of life, sustained economic growth, and reduced poverty in project towns, the PCR noted the achievement of the following: (i) coverage for improved WSS at least 75% in all project towns except Cam Ranh and Gia Nghia (less than targeted); (ii) substantial reduction in major water-related diseases in all project towns from 2007–2013 (no quantification provided or sources of information provided); and (iii) poverty reduced to less than 10% in all project towns except Song Cau (27%) (less than targeted overall). The PCR did not discuss the project's contribution to poverty reduction relative to other events in the project area and no data sources were cited. There was sufficient data and material to conduct a more thorough impact and post-project economic analysis.

37. Improved access to urban environmental infrastructure for people in the project areas will probably lead to substantial reduction in major water-related diseases in all project towns. However, there is no evidence of baseline health data¹⁵ and, as no source¹⁶ was cited to support the claim of reduction in water-related diseases, this impact has yet to be justified. This validation considers an impact rating of *less than satisfactory*.¹⁷

III. OTHER PERFORMANCE ASSESSMENTS

A. Performance of the Borrower and Executing Agency

38. The PCR rated the performance of the borrower and the executing agency *satisfactory*. The government PCR was weak on safeguards and provided little analysis on the beneficiaries. Nevertheless, the major project covenants were fulfilled in a timely manner. Although at the beginning of the project, the PCU was the main bottleneck delaying start-up in recruiting the consultant, its performance improved with project implementation. The PCU provided clear guidance to the PPCs and their PPMUs on project management and loan disbursement, thus helping to expedite project implementation. It also took the initiative to request a loan extension when it became clear that the project could not achieve its outputs and outcome within the original project schedule.¹⁸ This validation assesses the performance of the borrower and the executing agency *satisfactory*.

B. Performance of the Asian Development Bank

39. The PCR rated ADB performance *satisfactory*. The project was originally administered and supervised from ADB headquarters but from 1 February 2008, it was delegated to the Viet Nam Resident Mission to allow closer supervision. ADB conducted regular loan review missions, a midterm review, several special administration missions and a project completion review mission together with the PCU and PPMUs. No notable delays were reported regarding

¹⁵ The aide memoire of the midterm review (August 2012) confirmed that consultants would be mobilized for baseline surveys.

¹⁶ The Independent Evaluation Department's 2009 Sector Assistance Program Evaluation (Appendix 7) reported that health data are collected for provinces only and not for disaggregated towns. Thus, if the Project Performance Management System was not established at the design stage, it would be difficult to trace this in Viet Nam.

¹⁷ Beginning May 2016, the Independent Evaluation Department adopted the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations on development impacts. In this terminology, a *less than satisfactory* rating coincides with the *moderate* rating that was used before.

¹⁸ Mission Report. 6 May 2010.

ADB's approval of withdrawal applications or issuance of no-objection-to-work plans although closer supervision and support at the outset may have reduced the PCU delays in recruiting the implementation consultants. The resident mission staff spent adequate time training PCU staff on project implementation procedures and provided all relevant guidelines in a satisfactory and timely manner. This validation considers ADB performance *satisfactory*.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

40. The project was *relevant* in addressing the policy objectives of the government and ADB at the time of appraisal and remained relevant at project completion. It was *effective* and demonstrated that the intended outcomes are likely to have been achieved, though a detailed distribution analysis was not conducted as part of PCR economic analysis. The project is rated *less than efficient* with unsatisfactory EIRR results for some components and weak process efficiency at the outset of the project, which had significant knock-on effects on overall project performance. Sustainability is rated *less than likely*, as it still needs substantial subsidy to recover full O&M cost. Thus, this validation rates the project *less than successful*.

Overall Ratings

Criteria	PCR	IED Review	Reason for Disagreement and/or Comments
Relevance	Relevant	Relevant	
Effectiveness in achieving outcome	Effective	Effective	
Efficiency in achieving outcome and outputs	Less efficient	Less than efficient	
Preliminary assessment of sustainability	Likely sustainable	Less than likely sustainable	Negative FIRR owing to tariffs not being able to recover O&M costs (see paras. 29–34).
Overall Assessment	Successful	Less than successful	
Impact	Not rated	Less than satisfactory	
Borrower and executing agency	Satisfactory	Satisfactory	
Performance of ADB	Satisfactory	Satisfactory	
Quality of PCR		Less than satisfactory	Refer to para. 45.

ADB = Asian Development Bank, FIRR = financial internal rate of return, IED = Independent Evaluation Department, O&M = operation and maintenance, PCR = project completion report.

Note: This report uses the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations.

Source: ADB Independent Evaluation Department.

B. Lessons

41. This validation agrees with the lessons indicated in the PCR. As noted, the delays in recruiting consultants resulted in delays of subsequent activities (detailed design, resettlement planning, environmental management planning, and preparing bidding documents). Despite the start-up delays, the project achieved the targeted outputs, demonstrating that the executing agencies at the provincial level have the capacity for project implementation and the

decentralized approach to project preparation and implementation is appropriate. In addition, to appropriately assess the progress and outcome of the project, project design must incorporate the measurable benefits to beneficiaries at the outcome level, and in general, baselines must be established for all targets.

C. Recommendations for Follow-Up

42. This validation agrees with the recommendations indicated in the PCR, which promote the inclusion of advance actions in the project design and the application of project readiness filters to minimize start-up delays. In cases where an executing agency has no prior experience in implementing ADB-financed projects, bridging consultants (described as start-up consultants in the PCR) should be built into the initial project implementation phase immediately after project approval. For projects to be implemented at the provincial level, capacity-building programs and annual training should be designed to improve the executing agencies' implementation capacity.

43. To help project sustainability over the medium term, PPCs should have a thorough business plan, laying out the path to achieving full O&M cost recovery for drainage and wastewater infrastructure within a pre-agreed period (e.g., 10 years) instead of upon commissioning of project assets. The executing agencies should endorse a road map for tariff increases as a condition for loan effectiveness. In addition to those included in the PCR, this validation recommends a thorough assessment of the policy and regulatory framework for WSS and SWM to ensure that the reform momentum for full cost recovery, sound asset management, and decentralized management, is maintained.

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Evaluation Design, Implementation, and Utilization

44. The establishment and operation of a project performance monitoring and evaluation system was not followed up once the project started. Comparing DMFs in the PCR and the report and recommendation of the President (RRP), the statements of impact, outcome, output, and the target indicators, are almost identical.¹⁹ An updated DMF was made available in the aide memoire of the midterm review but was not used by the PCR team. The changes in the impact and outcome levels in the revised DMF reflect the extended period of the loan. However, at the output level, changes to the DMF were made, reflecting the project's revised scheduling and revised performance indicators and targets. The PCR did not explain why this updated DMF was not used or why some of the output achievements stated in the PCR are not consistent with the revised performance targets. Further, although the midterm review included a commitment to undertake baseline surveys, no further revision to the DMF was made, particularly on the baselines, and neither were they mentioned in the PCR. The DMF used by the PCR was inadequate as a monitoring tool.²⁰

B. Comments on Project Completion Report Quality

45. The PCR is consistent in logic but had substantial omissions. For example, it gave no information on impact level performance measurement. It made no reference to what was apparently a significant reallocation of base costs (a major increase in equipment costs in

¹⁹ In component C, establishment of SWM systems, the performance indicators and targets include Cam Ranh in the PCR rather than Thap Cham as indicated in the RRP.

²⁰ The DMFs of the RRP and PCR are identical except for the performance indicators and targets of part C regarding the establishment of SWM systems—in the PCR, Cam Ranh replaces Thap Cham as an SWM system location.

component B). The discussion on safeguard issues lacked depth and was not comprehensive, which could be the result of inadequate information—very little reference is made to background documents. In addition, although the RRP listed the range of relevant interventions by other donors, the PCR is silent on the project's complementarity with other donors. The RRP mentioned that the project would collaborate with UN-HABITAT to enable poor households to access low-cost technology improvements in sanitation such as installation of septic tanks. The urban sector and especially provincial towns and small and medium-sized towns were increasingly targeted for investment and there was much to learn from experience with urban infrastructure investment in such urban areas.²¹ Because of these deficiencies, this validation rates the PCR quality *less than satisfactory*.

C. Data Sources for Validation

46. This validation has used the following data sources: the PCR, the RRP, and the CPS for Viet Nam, 16 loan review mission reports from January 2009 to May 2014, including loan review mission reports associated with the midterm review, mission reports of special administration missions, the midterm review aide memoire, the government PCR, appendixes, and background papers for the economic and financial reevaluations.

D. Recommendation for Independent Evaluation Department Follow-Up

47. Independent Evaluation Department follow-up on tariff reforms and beneficiary analysis through a project performance evaluation report or thematic analysis would allow for a long-term assessment on the sustainability of water supply/sanitation utilities in the region.

²¹ The RRP listed in Appendix 3 the range of interventions by ADB and other donors. Several donors were implementing urban projects at the time of project implementation such as the European Commission; the World Bank (which was sponsoring the innovative National Urban Upgrading Program); the Swiss Agency for Development and Cooperation, which was undertaking the Nam Dinh Urban Development Project; the German Federal Ministry for Economic and Development Cooperation, supporting wastewater and solid waste management in Can Tho, Bac Ninh, and Ha Noi; the Canadian International Development Agency-funded project for developing a geographic information system in Ho Chi Minh City to improve urban planning and management (ongoing); and the Swedish International Development Cooperation Agency development projects in environmental management and urban development.