



# Validation Report

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Reference Number: PCV:VIE 2007-35  
Project Number: 30076  
Loan Number: 1653(SF)  
December 2007

## Viet Nam: Third Road Improvement Project

Operations Evaluation Department

**Asian Development Bank**

## ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
EA	–	executing agency
EIRR	–	economic internal rate of return
NH	–	national highway
OECF	–	Overseas Economic Cooperation Fund
OED	–	Operations Evaluation Department
PCR	–	project completion report
PDOT	–	provincial department of transport
PMU	–	project management unit
PR	–	provincial road
PRISP	–	Provincial Road Improvement Sector Project
RIMS	–	road information management system
RRP	–	report and recommendation of the President
SDP	–	sector development policy
TRIP	–	Third Road Improvement Project
VOC	–	vehicle operating cost
VRA	–	Viet Nam Road Administration

### Key Words

adb, asian development bank, roads, lessons, operations evaluation department, performance evaluation, viet nam

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## OED PCR VALIDATION REPORT

1. Basic Project Data		PCR Review Date Posted:		
<b>Project Number:</b>	30076		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b>	Loan 1653-VIE(SF): Third Road Improvement Project (Segment 1)	<b>Total Project Costs</b> (\$ million):	238.72	231.03
<b>Country:</b>	Viet Nam	<b>Loan/Credit</b> (\$ million):	130.02	111.35
<b>Sector(s):</b>	Transport and Communication/Roads and Highways	<b>Cofinancing</b> (\$ million):	75.00	88.50
<b>Financing</b> (\$ million):	<b>Asian Development Fund:</b> 111.35	<b>Borrower Contribution</b> (\$ million):	33.70	31.18
	<b>Ordinary Capital Resources:</b> 0.00	<b>Board Approval Date:</b>	10 Dec 1998	
<b>Cofinanciers:</b>	Overseas Economic Cooperation Fund	<b>Closing Date:</b>	31 Dec 2003	27 Apr 2006
<b>Project Officers:</b>	<b>Name:</b> T.F. Jones III Y. Ishikawa Thang Le Dinh	<b>Designation:</b> Senior Project Economist Project Engineer Project Imp/Program Officer	<b>From</b>	<b>To</b>
			Dec 1998 Jun 2001	Nov 1998 May 2001 Sep 2007
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### 2. Project Description as Stated in the Report and Recommendation of the President (RRP)

#### a. Rationale and Expected Impacts

Viet Nam's transport infrastructure has deteriorated badly, constraining economic recovery and investment from an emerging private sector. In response to a request from the Government, the Asian Development Bank (ADB) has been funding the rehabilitation of the national highway (NH) network and other components of the road network, including provincial and/or rural roads. The rehabilitation of NH1, the most important and only continuous north-south link, is the highest priority. In addition, NH links connecting key transport interfaces have been improved, and subregional transport projects have been undertaken as well. To complement the NH improvements, the provincial and/or rural road network also is being improved in stages. This aims to enhance transport reliability and connectivity between all road type thereby increasing access and economic links of the rural population (influenced by the NH). The Government also has prioritized the development of modern and efficient institutions to plan and implement road and road transport programs and related policies. The Third Road Improvement Project (TRIP) was a logical continuation of previous sector assistance from the ADB, World Bank, and Overseas Economic Cooperation Fund (OECF) to ensure improvement of the entire length of NH1. The expected project impacts are (i) economic integration and development of the northern, central, and southern regions of the country by reducing transport costs and travel time; (ii) improved transport reliability and access of the rural population to social and economic opportunities; and (iii) enhanced institutional management.

#### b. Objectives or Expected Outcomes

The objectives of the TRIP are to (i) improve road transport efficiency and competitiveness, as reflected in reduced travel time and cost; and (ii) develop the Viet Nam Road Administration (VRA) into a modern, efficient road administrator.

#### c. Components or Expected Outputs

The TRIP had five major components to improve road transport facilities:

- (i) The NH component entailed the rehabilitation of 400 kilometers (km) of NH1, almost entirely on its existing alignment between Quang Ngai and Nha Trang, to a standard appropriate for the existing conditions, as well as the level and type of traffic using and expected to use the road.
- (ii) The provincial road (PR) component involved the improvement of about 1,000 km of selected provincial roads within the TRIP's area of influence, which extends to five provinces. These include spot improvements to drainage, gravel pavement surfaces, and existing bitumen seals; and provision of limited lengths of bitumen seals through villages on steep grades and on sections with significant traffic volumes.
- (iii) The OECF-financed bridge component involved the replacement or new construction (where realignment is involved) of multi-span bridges longer than 20 meters under parallel projects financed by OECF.
- (iv) The consulting services component comprised, with respect to the NH and PR components, construction supervision, environmental impact and resettlement monitoring, and a substantial training for Government officials and national personnel involved with the TRIP.
- (v) The implementation of the sector development policy (SDP) component comprised specific subprojects identified by VRA for implementation. The action plan was to include road maintenance and investment planning and funding, road user charges, human resource development, design standards, organizational adjustments, road safety, licensing, vehicle weights and dimensions, accounting information technology, etc.

### 3. Evaluation of Design and Implementation (Evaluator Assessment of Actual vs. Envisioned)

#### a. Relevance of Design and Formulation

As envisaged, the TRIP contributed to the economic integration of the northern, central, and southern regions of Viet Nam. It complemented previous ADB investments in NH1, the sole highway connecting the three primary linkage nodes or growth areas of Hanoi, Da Nang, and Ho Chi Minh (In addition to promoting economic growth, the TRIP was to reduce poverty through a trickle-down effect.) A major part of the project road serves one of the poorest parts of Viet Nam with an estimated 80% of the population in the project area living at or below the poverty line. The secondary component of provincial roads within the NH1 influence area enhanced access of the rural population to social and economic opportunities.

During implementation of the NH component, additions to the design were made in part to address an outdated detailed design after 4 years elapsed from original design to substantive completion. The additions included redesign of seriously weakened pavement structure on NH1 due to heavy rains in 1999–2000, and reconstruction of more than 30 bridges originally scheduled for rehabilitation. The PR component enhanced the social design of the TRIP, as well as provided an opportunity to look into social issues as part of future road designs in the country. However, planning deficiencies in the PR component resulted in mismatches in the standard of improvement implemented and traffic requirements. While many provincial roads completed under TRIP have significant traffic loads, these were constructed for light traffic with road design guided then by budget limitations (about \$20,000 per km for civil works) rather than actual traffic requirements. In hindsight, the scope of the PR component proved ambitious and could have been modified to ensure adequate pavement treatment.

#### b. Outputs and Costs as Envisioned During Appraisal as Compared to Actual Costs and Achievement of Outputs; Reasons for Any Deviation

**Table 1: Project Outputs: Estimated and Actual**

Component	Appraisal Target	Quantity Completed	Achievements
1. National Highway 1	400 km	400 km	<b>Met appraisal target or indicator.</b> Works ranged from overlay to reconstruction. Minimum standard 7 m carriageway with about 2 m shoulders. PCR concludes that road is an enhanced facility compared with design at appraisal. It includes additional bypasses and a wider road over long distances. There are four sections of four-lane standard road in urban areas (19 km) as well as four bypasses (13.9 km) on new alignments around urban areas (against one at appraisal). Bridge works involved reconstruction and improvement of short bridges.

2. Provincial Roads	1,000 km	1,037 km	<b>Met appraisal target or indicator.</b> Works entailed improvement of provincial and district roads to all-year standard. This includes restoration of 107 km of roadway and 297 m of bridges damaged during 1999 floods.
3. OECF-Financed Bridge	Not stated	Replaced major bridges	<b>Completed.</b> The Japan Bank for International Cooperation (former OECF) considered this successful and was satisfied with cooperation from ADB-financed NH component. The PCR did not provide data outside the ADB-financed component.
4. Implementation of SDP	To be determined	<ul style="list-style-type: none"> <li>• Action plan</li> <li>• RIMS</li> </ul>	<b>Ongoing.</b> Preparation of road maintenance plans are ongoing, while full implementation of RIMS awaits completion of networks data collection for full implementation of SDP RIMS. The TRIP set in place a comprehensive, unified RIMS, and procured and distributed a range of computer equipment and software needed for its implementation.

ADB = Asian Development Bank, km = kilometer, m = meter, NH = national highway, OECF = Overseas Economic Cooperation Fund, PCR = project completion report, RIMS = road information management system, SDP = sector development policy, TRIP = Third Road Improvement Project.

Source: ADB. 2007. *Project Completion Report: Third Road Improvement Project*. Manila (Loan 1653-VIE[SF], for \$130 million, approved on 10 December).

### c. Project Cost, Disbursements, Borrower Contribution, and Conformance to Schedule (as Relevant to Project Performance)

Project targets (including additions and design changes) were completed within the appraisal cost estimate. The design changes incorporated in the NH component (additional bypasses, and widening and redesign of the pavement), and the addition of the 1999 flood rehabilitation works to the PR component, did not directly prolong the TRIP. Meanwhile, the proportion of the project cost financed by the Executing Agency (13.5%) was slightly lower than envisaged at appraisal (14.1%).

**Table 2: Financing Plan: Estimated and Actual**  
(\$ million)

Description	Appraisal	Actual	Ratio <sup>a</sup>	Comments
ADB (\$ million)	130.00	111.35	85.65	Reasons for reduced loan amount were not explained in the PCR (e.g., SDR rate fluctuation, reallocation to segment 2, and redeployment for flood rehabilitation works in 1999).
(SDR million)	92.31	81.07	87.82	
OECF	75.00	88.50	118.0	The PCR does not explain the reasons for OECF's higher share (e.g., lower ADB loan amount).
Government	33.70	31.18		No comment.
<b>Total Project Cost</b>	<b>238.72</b>	<b>231.03</b>	<b>96.78</b>	
o/w: Land	15.00	10.17	67.80	Actual cost is within appraisal estimate.
Civil Works	109.00	112.01	102.76	Targets (including additional bypasses and 1999 flood rehabilitation works) were met at close to appraisal cost estimate. However, the PCR does not indicate whether fewer bridge works were done under the part of the Project financed by ADB.
NH1	89.00			The PCR presentation does not show subcomponents.
Provincial Roads	20.00			The PCR presentation does not show subcomponents.
Supervision	7.66	10.49	136.95	Additional inputs from international supervision contract were required. Implementation of SDP was completed in 2005.
PMU1 and PDOT	0.80	0.97	121.25	Capacity strengthening cost share between PMU1 and less experienced PDOTs was 72:28 at completion against 62:37 at appraisal.
Implementation of SDP	2.00	2.03	101.5	No comment.
Total Base Cost	134.46	135.66	100.89	No comment.

ADB = Asian Development Bank, NH = national highway, OECF = Overseas Economic Cooperation Fund, PCR = project completion report, PDOT = provincial department of transport, PMU = project management unit, SDP = sector development policy, SDR = special drawing rights.

Source: ADB. 2007. *Project Completion Report: Third Road Improvement Project*. Manila (Loan 1653-VIE[SF], for \$130 million, approved on 10 December).

#### **d. Implementation Arrangements, Conditions, and Covenants, and Related Technical Assistance**

Implementation arrangements were as envisaged at appraisal. Project management unit (PMU) 1 was responsible for preconstruction activities and construction management after civil works began. The provincial department of transport (PDOT), through provincial PMUs, was the implementing agency of the PR component and responsible to PMU1 for its daily implementation. At completion, the Government and Executing Agency complied with 19 of 22 loan covenants. A sector covenant on maintenance was not complied with at completion. The PCR found the project roads to be only partly maintained due to insufficient funds. As such, they do not fully comply with the covenant. Two standard covenants that were partly complied with pertain to contractor performance and the operation of project outputs: (i) the performance of several contractors was below the expected standard, and (ii) the full benefits for VRA of the road information management system (RIMS) await completion of network data. No related technical assistance was associated with the TRIP. The loan finance some capacity strengthening of PMU1 and PDOTs, but this was minor (0.7% of civil works cost). This was recognized in the next ADB Provincial Roads Improvement Sector Project, where institutional strengthening activities were about 7% of civil works cost.<sup>1</sup> Stronger emphasis also was given to PDOTs, which accounted for 82% of costs.

#### **e. Performance of the Borrower and Executing Agency**

PMU1 had a useful and satisfactory experience in the first and second road improvement projects on NH1. Its capacity to plan and implement helped manage the TRIP, including problem areas that required design changes. PMU1 managed well the major addition to NH component—three new bypasses and widening of urban roads. Government ownership or commitment to enhancing institutional management through VRA also was evident through the recent devolution from the Ministry of Transport of additional responsibilities for capital investment planning on the road network. On the other hand, a strong buy-in on the link roads component was not evident, as the response by ADB and the Government to address the design issue proved wanting. The PCR focused on assessing the performance of the Borrower and Executing Agency, which generally was consistent with the simple, straightforward nature of the TRIP. It did not evaluate the capacity and achievements of the PDOTs, which implemented the attached link roads under PMU1. As such, it is not clear how the TRIP contributed to capacity strengthening within the PDOTs, which could have had a key role and responsibility for road maintenance and sustaining benefits. Since this is the second rural road intervention by ADB in the country's road sector, and the first focusing on a provincial road component (the future direction of ADB interventions), an assessment of capacity needs and institutional strengthening at the provincial level would have been useful. Overall, the self-evaluation assessment of generally satisfactory is confirmed.

#### **f. Performance of the Asian Development Bank**

A notable implementation feature is the frequency of supervision missions and the strong continuity in ADB appreciation and approach. From 1999 to 2004, 15 missions (about 2.5 per year) were fielded for 129 person-days, while two staff supervised its implementation. In February 2001, the TRIP was delegated to the Viet Nam Resident Mission, where one staff handled the Project from turnover (May 2001) to completion of the PCR (September 2007). Project performance rating for development objectives and implementation progress were mostly satisfactory from April 1999 to July 2006, except for brief periods when the implementation progress was highly satisfactory (January–April 2001) and partly satisfactory (January–February 2002). Despite the satisfactory performance, the PCR noted that at the earlier stages of the Project, particularly inception, ADB could have been assertive in pressing concerns over the unsuitability of contractors recommended by Government for the NH component. This would have improved the NH component. Overall, the self-evaluation assessment of satisfactory is confirmed.

<sup>1</sup> ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a proposed Loan to Viet Nam for the Provincial Roads Improvement Sector Project*. Manila (Loan 1888-VIE[SF], for \$70 million, approved on 18 December).

#### 4. Evaluation of Performance (Evaluator Assessment)

##### a. Relevance

At the strategic level, the TRIP was highly congruent with the Government's long-term goal of improving geographical links and road sector management. It was also in line with ADB's country strategy to encourage increased use of transport links, including developing efficient and sustainable institutions. The TRIP focused on improving the entire length of NH1, the backbone of the country's road sector. The Government has accorded the highest priority to NH1, whose conclusion was assured with the completion of the sections covered by the Project. Changes made during implementation of the NH component also helped to ensure that the TRIP remains relevant as the additions to its design benefited road users.

While the link roads enhanced social design, two points detract from its relevance. First, less attention seemed to be paid to the smaller PR component, which was reflected in (i) design limitations caused by budget constraints (second paragraph, section 3.a), (ii) inattention to quantifying socioeconomic impacts, and (iii) institutional and capacity strengthening activities mostly aimed at central- or national-level issues on transport efficiency. The PCR noted that the PR concept and design had similar weaknesses to the rural road component of ADB's Second Road Improvement Project. Given the expenditure targets, the selection procedure should have ensured selection of low-trafficked roads, or treated fewer roads to higher standards. As seen in the rural road component, the PCR noted that ADB and the Government could have interacted more in responding to a clear mismatch between intent and requirements of the PR component, as there was in formulating modifications to the NH component. Meanwhile, the PCR mentioned that ADB would take into consideration technical design standards to be applied on the ongoing central region transport network project.<sup>2</sup> This evaluator was informed by the PCR mission leader that Government agencies requested the inclusion of several TRIP roads for upgrading under Loan 2195, but these were declined.

Second, as this was the third loan for NH1, the design could have featured a broad range of initiatives on strengthening transport efficiency at national and provincial levels, including capacity strengthening, sustainable maintenance funding, axle loading, road safety, private sector participation, transport services. In general, the move into provincial link roads was welcome, but the TRIP was clearly a simple rehabilitation of NH1 (which accounted for nearly 90% of estimated civil works cost at appraisal).

##### b. Effectiveness in Achieving Outcome

Most indicators/targets in achieving outcomes envisaged at appraisal were realized. Road conditions in TRIP sections are of good quality compared with the variable conditions of the original pavement (now 30 years old), with more than a third in very poor condition (for a major highway). The PCR also found civil works on the PR component of generally high quality and the extent of rehabilitation impressive given the limited funds available. Nevertheless, due to the use of expenditure targets (second paragraph, section 4.a), an important part of the PR component was under-designed after completion.

<sup>2</sup> ADB. 2005. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Viet Nam for the Central Region Transport Networks Improvement Sector Project*. Manila (Loan 2195-VIE[SF], for \$94.5 million, approved on 11 November).

**Table 3: Summary of Project Outcomes**

<b>DMF Outcome</b>	<b>National Highway 1 Component</b>	<b>Provincial Roads Component</b>
Improved road transport efficiency and competitiveness	Reduced international roughness index of about three, enabling increased vehicle speeds and reducing travel time from 14 hours to 6.5 hours over the 400 kilometers of the NH component. VOC costs were reduced by 15%–40% depending on vehicle class. The project road is well used as PCR indicated traffic has grown faster than anticipated at appraisal.	Assured year-round access. Shorter travel time and lower road user cost by reducing international roughness index from about 12 to between 3 and 5 depending on road surface type. Additional traffic has been generated since roadwork completion with annual increases of as much as 50% over the past 3–4 years in some roads.
Development of the VRA	Implementation of SDP achieved major targets and the system of procedures and management it developed for VRA implementation, which is seen to help it in its expanded role and responsibility of (i) planning, programming, and budgeting capital works; and (ii) planning for road maintenance.	

DMF = design and monitoring framework, NH = national highway, PCR = project completion report, SDP = sector development policy, VOC = vehicle operating cost, VRA = Viet Nam Road Administration.

Source: ADB. 2007. *Project Completion Report: Third Road Improvement Project*. Manila (Loan 1653-VIE[SF], for \$130 million, approved on 10 December).

### c. Efficiency in Achieving Outcome and Outputs

The PCR pointed to considerable delays, and a lack of coordination to avoid these. In the end, however, civil works contracts were completed close to schedule, or about 3 months behind the appraisal target. The substantive deviation from the appraisal schedule was mainly due to the implementation of SDP component, which started in April 2004. The NH and PR components, comprising the main civil works cost (about 83% of total cost), were highly efficient based on recalculated economic rates of return of 20% to 21%. The PCR reevaluation updated the benefit, monitoring, and evaluation results, which used a different methodology than appraisal. For the NH component, passenger time was considered a key benefit, while VOC savings accounted for all quantified benefits at appraisal. If no person time value benefit is included, the economic rate of return falls from a base case of 21.2% to 13.9%. At the same time, the reevaluation of the PR component does not explain how any under-design will affect the economic life of the sample roads. The analysis carried out is described as approximate. Anecdotal evidence indicates that, irrespective of road roughness, users consider themselves well served for as long as improvements provide for all-weather access or roads subject to brief closure.

**Table 4: Comparison of Estimated EIRRs (%)**

<b>Item</b>	<b>Appraisal</b>	<b>BME</b>	<b>Project Completion</b>
NH component	23.9	22.3	21.2
NH component 4 contract sections	15.8–27.7		16.6–26.5
PR component		18.3	20.3
Sample of Provincial roads			3–35

BME = benefit monitoring and evaluation, EIRR = economic internal rate of return, NH = national highway, PR = provincial road.

Source: Asian Development Bank loan documents.

### d. Preliminary Assessment of Sustainability

The PCR noted that NH1 is in good condition and no major maintenance is required. Minor patching has been carried out diligently. Likewise, road sections under the PR component are in fair to good condition, but sealed pavements have incurred significant damage. Routine maintenance has not been carried out on a few provincial roads, but attention is evident and adequate on most. The PCR concluded that the project roads are only partly maintained by and large due to insufficient funds. The work under the implementation of SDP component likely will be sustained not only in technical features of VRA's planning procedures and network management in the future, but also as formative influence in the wider view of the expanded role of VRA.

The PCR points out two areas of concern in sustaining benefits from the NH and PR components. The first is the long-standing concern of sustainable and adequate funding for road maintenance. This involves establishing a concrete and sustainable policy, especially in the area of budget allocation for maintenance. VRA estimates that the allocation for maintenance of the national road network meets only 50%–60% of requirements, and the allocation of funds was even lower for some PDOTs. The PCR noted that funds made available to VRA and PDOTs over the past several years were hardly sufficient to cover 50% of routine maintenance requirements. The second concern involves overloading. Heavy truck traffic on NH1 increased at rate considerably faster than other vehicle classes, and there is evidence of overloading. This will damage road quality along NH1 in medium term if left unchecked and VRA does not restrain offending vehicle owners. Along the PR component, overloaded trucks caused most of the damage to the sealed pavement. As low budget allocations for the preservation of the country's national and provincial networks is likely to continue, the evaluator confirms the PCR assessment that sustainability is less likely.

#### e. Impact (Intended and Unintended)

The PCR reported that environmental and social measures implemented under the NH component were satisfactory. No indigenous people issues were encountered during implementation. Resettlement impacts were as expected. Unintended negative impacts on beneficiaries include (i) short-term environmental issue because the NH component contractor disregarded standards in waste disposal and dust control; and (ii) concerns about obstruction, lane closures, and inadequate signage on NH1, particularly during rainy season. However, the PCR also pointed out that the improved roads have resulted in increased speed, especially in populated areas. Together with increased traffic, this has been reflected in an increase in reported accidents from 575 in 1998 to an average of 667 per year after completion of the NH1 civil works. The increased severity of some accidents is seen in more fatalities per accident—from 0.41 in 1998 to 0.47 during 2004–2006. Overall, data on injuries suggest a reduction relative to increased traffic over the period.

**Table 5: Accident Data on Project Sections of NH1**  
(annual average)

Year	Accidents	Deaths	Injuries	Deaths per Accident	Injuries per Accident
1998	575	235	744	0.41	1.29
2000–2003	642	314	721	0.49	1.12
2004–2006	667	315	768	0.47	1.15

NH = national highway.

Source: Asian Development Bank. 2007. *Project Completion Report: Third Road Improvement Project*. Manila (Loan 1653-VIE[SF], for \$130 million, approved on 10 December).

## 5. Overall Assessment, Lessons, and Recommendations (Evaluator Assessment)

### a. Overall assessment

The TRIP is rated successful based on the four-category evaluation criteria—relevance, effectiveness, efficiency, and sustainability—of the Operations Evaluation Department (OED).

The strategic importance of NH1 is high. The move into province-level link roads, which was novel at the time, was appropriate. However, the TRIP design was straightforward and focused more on rehabilitating NH1 and supporting further development of VRA. The design of the smaller link road component was perhaps partly relevant and marked by several deficiencies. Addressing capacity constraints and institutional weaknesses at the provincial level (e.g., road maintenance) could have received more attention. At the same time, the key achievement of the implementation of SDP component was mainly in establishing a planning and maintenance management system for VRA. Some of the provincial roads rehabilitated as part of the TRIP had to be upgraded by a subsequent loan project. This raises the issue about the adequacy of the design of these roads and about the quality at entry of the PR component.

However, the NH component accounts for at least 80% of project cost and had sufficiently good quality at entry. As a result, the overall rating of the Project is confirmed to be highly relevant (on low side).

The targeted outputs (with additions) were achieved, and the TRIP was highly effective in achieving intended outcomes initially outlined in the development monitoring framework of the RRP and PCR. In general, the TRIP also supported continuing ADB policy dialogue (e.g., implementation of the SDP action plan), as well as action on capacity constraints and institutional weaknesses to establish the appropriate policy, regulatory, and financial environment to improve transport efficiency, despite inefficiencies in the implementation process (e.g., delays, complex procedures). The assessment on investment efficiency is upgraded to efficient (from less efficient) based on the good economic rates of return.

Sustainability is less likely largely due to maintenance budget constraints for national and provincial roads. The sector covenant on road maintenance was not fully met at project completion, as the roads are only partly maintained because funds are inadequate. The PCR found that rationalized plans for sourcing maintenance funds will take time to emerge. The expanded responsibilities of VRA have resulted in some institutional issues that will also take time to resolve. In the short term, VRA cannot be expected to have the budgetary planning program that balances capital works and preservation unless the outputs of the implementation of SDP component are fully realized and mainstreamed. Nevertheless, given the importance of NH1, it will probably receive funds for maintenance, but this will be delayed depending on budgetary allocations.

## **b. Lessons**

Further to the lessons identified by the PCR, this validation report makes the following observations:

- (i) ADB needs to ensure adequate project preparation, particularly for novel areas of ADB country operations, which could result in implementation issues, as well as time and cost overruns.
- (ii) ADB oversight should act flexibly and proactively to address planning deficiencies identified during project implementation. This highlights the importance of real-time feedback within the same regional department and operational division on implementation issues, especially for similar projects or phased projects being implemented on overlapping basis.
- (iii) Frequency and high-quality ADB supervision missions, as well as continuity in ADB staff appreciation and approach, contributes to project success.
- (iv) ADB still needs to add more value by bringing in innovative practices and ideas for improving the road network and institution capacity.
- (v) Integrating a key NH with nearby local road networks is beneficial as the connection maximizes development impacts by strengthening local development.
- (vi) Rigorous attention is needed to elucidate project impacts, outcomes, and outputs in terms of quantified targets and indicators that can be monitored. This will establish a clear basis for evaluating social and economic impacts.
- (vii) Agricultural development might not follow road development.
- (viii) The TRIP demonstrates the importance of enforcing vehicle axle weight regulations, particularly for trucks.

## **c. Recommendations**

Further to recommendations in the PCR, this validation report suggests continued ADB policy dialogue with the Government to resolve the issue of road maintenance allocation at the national and provincial levels, as well as national and provincial efforts to strengthen policy on key transport issues, such as road safety, vehicle axle load, vehicle emissions, and sector regulation.

## **6. Monitoring and Evaluation Design, Implementation, and Utilization (Evaluator Assessment)**

Monitoring and evaluation design focused mainly on transport project analysis (i.e., outcomes and outputs of the NH1 and link road components). As in the RRP, the PCR did not use a rigorous socioeconomic impact assessment and develop indicators on direct effects (project output and outcome) and indirect

effects (welfare outcome) of the Project. While it might be difficult to clearly attribute benefits from the project roads, the PCR could have carried out a survey in the project area to assess the changes on the socioeconomic parameters, as well as poverty indicators.

#### 7. Other (Safeguards, Including Governance and Anticorruption; Fiduciary Aspects)

Safeguards generally were complied with, although environment and resettlement issues arose during implementation (sections 4e and 9). Possible risks to ethnic minorities were observed during implementation. Similar risks to other ethnic minority areas were addressed through an ethnic minority development plan in the subsequent the Provincial Road Improvement Sector Project (PRISP) approved in 2001.

8. Ratings	PCR	OED Review	Reason for Disagreement/Comments
<b>Relevance:</b>	Highly Relevant	Highly Relevant	PCR rating is confirmed, but the PR component design could have avoided several deficiencies in physical designs, demand analysis, and proactive action on capacity strengthening at the provincial level for road maintenance.
<b>Effectiveness in Achieving Outcome:</b>	Highly Effective	Highly Effective	
<b>Efficiency in Achieving Outcome and Outputs:</b>	Less Efficient	Efficient	Targets (including additions) were completed within the appraisal cost estimate. At completion, the reestimated EIRR for NH component was 21.2% and for the PR component was 20.3%. EIRR for the Project was not calculated at appraisal and completion.
<b>Preliminary Assessment of Sustainability:</b>	Less Likely	Less Likely	PCR rating is confirmed. However, given the importance of NH1, it will probably receive maintenance funds, but later than optimal.
<b>Borrower and EA:</b>	Generally Satisfactory	Generally Satisfactory	
<b>Performance of ADB:</b>	Satisfactory	Satisfactory	
<b>Impact:</b>	Satisfactory		
<b>Overall Assessment:</b>	Successful	Successful	
<b>Quality of PCR:</b>		Satisfactory	

## 9. Comments on PCR Quality

The PCR quality is rated satisfactory and provides a comprehensive analysis to substantiate its ratings and assessments. Comments on the PCR quality are:

- (i) The PCR was candid and accurate in its assessment of sustainability due to the prospect of continued low budget allocations for maintaining national and provincial road networks.
- (ii) The PCR assessment of efficiency was conservative given that the EIRRs ranged from 20% to 21% for the NH and PR components. Based on the OED guidelines for evaluating the efficiency of projects, project rating on efficiency is based mainly on the EIRR. The implementation issues could affect the rating, although on a smaller scale. It could be safely concluded that the TRIP is not highly efficient, but it would be difficult to justify a rating of less efficient. Moreover, the economic analysis does not explain the change in the economic reevaluation method from appraisal. The economic analysis was not supported by a systematic socioeconomic impact assessment, instead drawing largely from anecdotal evidence during the PCR fieldwork.
- (iii) The PCR lacks a socioeconomic impact assessment of NH1 and provincial roads. It does not present any evidence of impacts, despite civil works being completed at least 3.5 years earlier in December 2003. These include evidence on the positive impact on users in terms of higher quality of life, better access to services, reduced costs, and creation of an enabling environment for the private sector.
- (iv) The PCR could have assessed overall performance at three levels: NH component, PR component, and the whole project. The relative share of importance of the two key components to expected project outcomes can be accounted for by their estimated share of project cost. The PCR could have provided a breakdown of the actual cost of the NH1 and PR components.
- (v) The RRP on PRISP in 2001 reported that the TRIP would require little resettlement, but assessed the resettlement plan preparation and implementation to be inadequate (paras. 30–31, pages 9–10) (footnote 1). The PRISP report said sites were handed over to contractors before compensation was paid. While compensation in the PR component was to be paid at replacement cost, the payments were based on government rates, not market rates. As a result, the affected households could not buy replacement land. After a request from under-compensated affected persons for replacement land, the Government provided a grant to relocating households sufficient to purchase replacement land.
- (vi) In terms of ethnic minorities, PRISP reported that a review of road influence in hilly areas (populated mainly by ethnic minorities) under the PR component of the TRIP showed that minorities were ill-equipped to take advantage of the opportunities from the recently improved roads. As subsistence farmers, their integration into the market economy is minimal. In the immediate term, road improvement is likely to benefit the ethnic majority, which could encourage in-migration. As a result, minorities could lose their land, causing inequity at the local level.

## **REGIONAL DEPARTMENT'S RESPONSE TO THE PROJECT COMPLETION REPORT VALIDATION REPORT**

On 17 October 2007, Director, OED2, Operations Evaluation Department (OED), received the following comments from the Viet Nam Resident Mission, Southeast Asia Department.

We have reviewed OED's earlier draft Project Completion Report (PCR) Validation Report circulated to us on 17 October 2007 and its final draft that was sent to us for review on 17 October 2007. We appreciate that the comments we made to OED on the earlier draft have been adequately incorporated in the final draft. Therefore, we have no further comment to make on the final draft.