

ASIAN DEVELOPMENT BANK

**TPA: CAM 2001-08
TPA: VIE 2001-08**

TECHNICAL ASSISTANCE PERFORMANCE AUDIT REPORT

ON

**ADVISORY TECHNICAL ASSISTANCE FOR INSTITUTIONAL
STRENGTHENING IN TRANSPORT PLANNING AND ADMINISTRATION**

IN

CAMBODIA AND VIET NAM

August 2001

ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
EA	–	Executing Agency
JBIC	–	Japan Bank for International Cooperation
JICA	–	Japan International Cooperation Agency
MPWT	–	Ministry of Public Works and Transport
MOT	–	Ministry of Transport
OEM	–	Operations Evaluation Mission
PCR	–	project completion report
PMU	–	project management unit
SIDA	–	Swedish International Development Cooperation Agency
SNC	–	Supreme National Council
TA	–	technical assistance
TCR	–	technical assistance completion report
TOR	–	terms of reference
TPU	–	transport planning unit
TPAR	–	technical assistance performance audit report
UNDP	–	United Nations Development Programme
VRA	–	Viet Nam Road Administration

NOTE

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

BASIC TECHNICAL ASSISTANCE DATA

TA 1996-VIE: Institutional Strengthening of the Ministry of Transport¹

Cost (\$'000) ²	Estimated	Actual
Foreign Exchange	1,725	1,818
Local Currency	175	0
Total	1,900	1,818

No. of Person Months (Consultants): 96 168

Executing Agency Ministry of Transport

Milestones	Actual
President's/Board Approval	29 Nov 1993
Signing of TA Agreement	25 Apr 1994
Fielding of Consultants	14 July 1994
TA Completion: Expected	31 Dec 1997
Actual	30 Nov 1996
TCR Circulation	27 Oct 2000 ³

Missions

Type	Number	Date
Fact-Finding ⁴	1	13-29 Mar 1991
Inception	—	—
Review (footnote 4)	6	16-21 Jan 1995
		27-29 Jul 1995
		26 Oct-3 Nov 1995
		30 Jan-6 Feb 1996
		4-15 Mar 1996
		26 Jun-5 Jul 2000
Operations Evaluation ⁵	1	22-27 Apr 2001

TA = technical assistance, TCR = technical assistance completion report.

¹ Attached to Loan 1272-VIE: *Road Improvement Project*.

² Financed by the Asian Development Bank.

³ Circulation date of the project completion report for Loan 1272-VIE: *Road Improvement Project*, which also covered this TA.

⁴ Undertaken in conjunction with missions for Loan 1272-VIE: *Road Improvement Project*.

⁵ The mission comprised C.C. Yu, Evaluation Specialist and Mission Leader; Mayumi Ozaki, Evaluation Specialist; and Shizuo Iwata, International Consultant.

TA 1866-CAM: Transport Rehabilitation Study

Cost (\$'000)⁶	Estimated	A Actual
Foreign Exchange	1,223	1,243
Local Currency	96	0
Total	<u>1,319</u>	<u>1,243</u>

Number of Person-Months (Consultants): 63 61

Executing Agency Ministry of Public Works and Transport

Milestones	Actual
President's/Board Approval	31 Mar 1993
Signing of TA Agreement	28 Jul 1993
Fielding of Consultants	02 Sep 1993
TA Completion: Expected	31 Dec 1994
Actual	31 May 1995
TCR Circulation	24 Sep 1996

Missions

Type	Number	Date
Fact-Finding	1	24 Nov-11 Dec 1991
Inception	—	—
Review ⁷	3	29 Sep-6 Oct 1993
		4-6 Dec 1993
		17-22 Sep 1994
Operations Evaluation (footnote 5)	1	30 Apr-5 May 2001

TA = technical assistance, TCR = technical assistance completion report.

⁶ Financed by the United Nations Development Programme (\$719,400) and Swedish International Development Cooperation Agency (\$600,000).

⁷ Undertaken in conjunction with Loan 1199-CAM: *Special Rehabilitation Assistance*.

TA 2416-CAM: Developing a Planning Capability in the Ministry of Public Works and Transport

Cost (\$'000)⁸	Estimated	Actual
Foreign Exchange	744	730
Local Currency	<u>56</u>	<u>0</u>
Total	800	730

Number of Person-Months (Consultants): 30 28

Executing Agency Ministry of Public Works and Transport

	Actual
Milestones	
President's/Board Approval	02 Oct 1995
Signing of TA Agreement	10 Oct 1995
Fielding of Consultants	07 Feb 1996
TA Completion: Expected	26 Nov 1998
Actual	26 Nov 1998
TCR Circulation	—

Missions

Type	Number	Date
Fact-Finding	1	31 Mar-7 Apr 1995
Inception	<u>—</u>	—
Review (footnote 7)	2	22-28 April 1996 9-12 Nov 1996
Operations Evaluation (footnote 5)	1	30 Apr-5 May 2001

⁸ Financed by the Asian Development Bank from the Japan Special Fund.

EXECUTIVE SUMMARY

Transport and the institutional capacities in transport planning and administration are often considered a bottleneck for many of the developing member countries of the Asian Development Bank (ADB) in furtherance of their economic development. This is particularly true for war-torn countries like Cambodia and, to a lesser degree, Viet Nam, where much of the limited road networks were destroyed in war, a situation exacerbated by the loss of a cadre of experienced road engineers and management personnel. In response to this situation, after a series of consultations with the governments in these two countries, ADB provided assistance through investment in rehabilitating and upgrading existing road networks. Together with the physical investments, ADB made several technical assistance (TA) grants to improve the “software” needed to manage the road networks. Three advisory TAs⁹ were selected for evaluation in this TA performance audit report, which reflected such efforts to improve management of the physical infrastructure and the institutional capacity in Viet Nam and Cambodia. The three TAs, for a combined grant amount of \$4.0 million (including cofinancing), were approved between 1993 and 1995, and completed between 1995 and 1998.

The objective of the Viet Nam TA was to provide advisory services to help the Ministry of Transport (MOT) in (i) organizing and improving the administrative efficiency of the Viet Nam Road Administration (VRA); (ii) assisting VRA to implement various road and road transport subsector reforms; (iii) drafting a road act for legislation in 1995 and other rules and regulations; (iv) establishing a computer-based transport databank for MOT and training staff in transport statistics preparation, analysis, and dissemination; and (v) strengthening project management unit (PMU) capabilities to deal effectively with foreign-assisted projects.

The objective of the first Cambodia TA was to help rebuild the economic, social, and physical systems disrupted or destroyed during the previous two decades by addressing the most urgent transport rehabilitation needs, taking into account ongoing and planned assistance programs, refugee repatriation, and general economic recovery. The scope of the TA included identifying the essential transport rehabilitation requirements in all regions of Cambodia and encompassed all modes of mechanized transport except civil aviation. The output was to be a list of screened and ranked rehabilitation projects along with proposed institutional strengthening programs.

The objective of the second Cambodia TA was to (i) establish a Transport Planning Unit (TPU) within the Ministry of Public Works and Transport (MPWT), and (ii) train the TPU staff so that they would be able to operate it on a self-sustaining basis. The newly established TPU would perform a series of core functions in the areas of transport sector policies, medium- and long-term traffic forecasting, preparing and reviewing investment programs, setting up and maintaining central transport databases, and helping prepare and monitor major externally assisted projects. Additional tasks under the TA included analyzing the functions and efficiency of the structure and operations of MPWT, and making necessary recommendations.

The Operations Evaluation Mission (OEM), which visited Viet Nam and Cambodia from 22 April to 5 May 2001, found that while all three TAs had achieved or partly achieved their objectives, the degree of achievement varied significantly.

⁹ TA 1996-VIE: *Institutional Strengthening of the Ministry of Transport*, for \$1,900,000, approved on 29 November 1993; TA 1866-CAM: *Transport Rehabilitation Study*, for \$1,319,400, approved on 31 March 1993; and TA 2416-CAM: *Developing a Planning Capability in the Ministry of Public Works and Transport*, for \$800,000, approved on 2 October 1995.

For the Viet Nam TA, a major service provided by the consultants was to assist in the drafting of the Road Act with a focus on providing assistance in legal technicality and introducing experience from other countries. It took 10 rounds of revisions before the National Assembly finally ratified the Act on 6 June 2001. The OEM believes that the main reasons for the slow pace were more political than technical. A road fund was proposed under the Road Act. Other line ministries and the Ministry of Finance raised concerns over whether the road sector had a real need for a separate account, and over which agency was to manage the fund. The Road Act approved by the National Assembly does not include a road fund. Another important contribution of the TA to the legal framework was the VRA Regulation, which the Government issued based partly on the TA's input. The Regulation defined the role and mandate of VRA.

The second significant service was the development of a transport databank for inland waterways and training of MOT staff on how to use the information system. The databank developed, however, did not meet the requirement of the terms of reference, which specified that the databank should cover all transport subsectors. As a result, its user value was greatly undermined. Third, a series of training activities was carried out which succeeded in increasing VRA's exposure to experience of other countries. These included two Canadian study tours that 13 senior VRA officials attended, and an overseas training course in Malaysia that 17 mid-level officials attended. However, since most of the participants of the Canadian study tours have since retired, the overall effectiveness of these tours was somewhat reduced. Fourth, the consultants conducted an analysis of VRA's existing organizational structure, systems, procedures, and policies, and recommended institutional changes to reform VRA's core functions. Among the 28 recommendations made, 18 have already been adopted or partly adopted, 4 are not yet adopted but are being considered, and the rest are either deemed not applicable/impractical or the status is unknown. Those recommendations that are currently not yet adopted (including those being considered) are mostly related to the privatization of VRA's commercial-oriented functions, e.g., driver training programs. In general, the capacities of VRA have improved in some areas. However, its overall structure and operation still carry many *pre-doi moi* (renovation) characteristics such as weak capacity in policy formulation and planning, and a mixture of state enterprise and commercial functions. Finally, some assistance was provided to improve the capacities of PMU-1 in the areas of contract implementation guidelines for rehabilitation projects, and interpretation and application of legal and technical aspects of contracts. The capacity of PMU-1 has clearly improved since then.

Under the first Cambodia TA, the main service provided by the consultants was to conduct a detailed survey of transport needs and to propose a rehabilitation program for 1995-1999. The program contained a series of recommendations of prioritized reconstruction projects for roads and bridges, railways, international ports, and inland waterways. The rehabilitation study has been widely viewed as a benchmark for the transport sector in Cambodia. Two ADB projects¹⁰ were directly derived from the study. The World Bank and the Japan Bank for International Cooperation have also used the study as a basis for their own road, bridge, and port improvement projects. Results from interviews and the questionnaire survey conducted with MPWT show that it is highly satisfied with the consultants' performance and the services provided.

The main service provided under the second Cambodia TA was to conduct a formal training program for the newly established Planning Department (referred to as TPU in the TA report) of MPWT, which included 18 courses on subjects related to transport planning. A questionnaire survey and interviews conducted with six target recipients revealed that the

¹⁰ Loan 1697-CAM(SF): *Primary Road Restoration Project*, for \$68 million, approved on 21 September 1999; and Loan 1659/1660-CAM(SF): *Phnom Penh to Ho Chi Minh City Highway Project*, for \$140 million, approved on 15 December 1998.

trainees were highly satisfied with the program itself. However, the costs of the training program amounted to \$500,000, and the trainees have had few opportunities to perform the planning functions in which they were trained. This circumstance has arisen since most aid project opportunities go to PMUs, which are additional to the regular organizational framework, while non-aid projects are extremely rare in Cambodia. As a result, the long-term sustainability of the Planning Department is very much in question. Furthermore, few of the consultants' recommendations to improve MPWT's efficiency were adopted.

In sum, all three TAs had and continue to have high relevance in terms of conformity with the two governments' priorities and goals. The first Cambodia TA achieved its main objective of prioritizing rehabilitation needs, and most of its recommendations have been adopted. The Viet Nam TA achieved most of its objectives while the second Cambodia TA accomplished its training program but achieved little in terms of improvement of MPWT's institutional efficiency. Against other criteria such as cost-effectiveness and sustainability of impacts, the second Cambodia TA is also ranked lower than the first Cambodia TA and, to a lesser degree, the Viet Nam TA. The overall ratings of the three TAs are TA 1996-VIE: successful; TA 1866-CAM: highly successful; and TA 2416-CAM: partly successful.

Three key issues affected the TAs' effectiveness. First, PMUs have rapidly proliferated in both countries. While they are justified from the viewpoint of efficient execution of aid projects, PMUs tend to have adverse impacts on the capacities of existing road planning and maintenance agencies by drawing away qualified personnel due to the substantial benefits and other incentives that they offer. Second, road maintenance is underfunded in both countries but severely so in Cambodia. Unless innovative ways of raising domestic resources are initiated to improve the financing of road maintenance, e.g., a fuel tax or increased vehicle registration fees, the weak capacities of the road maintenance agencies, such as VRA, will not be fundamentally improved. Third, bilateral and multilateral aid funding is a major source of investment in the road sector in both countries and, in Cambodia, almost the only source. Aid coordination, including a concerted and focused strategy, is crucial in terms of working with the governments to carry out institutional and policy reforms necessary to achieve better management of the transport sector.

The main lessons are the need for (i) a long-term cost-effective strategy for capacity building; (ii) better TA design, supervision, self-evaluation, and record keeping; and (iii) improving government ownership. With respect to the first lesson, the training of six MPWT planning staff members (in addition to up to 50 non-regular participants) at an estimated cost of \$500,000 under the second Cambodia TA was clearly not a cost-effective nor sustainable way to achieve institutional strengthening. A more cost-effective approach would have been to “train the trainers” by involving existing research institutes and universities. As to the second lesson, sound design is a necessary first step for a successful TA. The scope of the Viet Nam TA was too ambitious, resulting in resources being spread too widely. The low cost-effectiveness of the second Cambodia TA was largely due to the poor design of the training approach. Closer supervision and better self-evaluation of its TAs by ADB could go a long way to improve the quality of both ongoing and future TAs. Regarding the third lesson, the Viet Nam and the second Cambodia TAs did not fully achieve their objectives due largely to lack of government ownership. Such ownership may be improved through (i) greater involvement of the recipient governments in TA formulation and consultant selection; and (ii) making strong efforts to identify practical solutions suitable for the needs of developing member countries, which should be tried out on a pilot basis before wide-scale application.

I. BACKGROUND

A. Introduction

1. Transport and the institutional capacities in transport planning and administration are often considered a bottleneck for many of the developing member countries (DMCs) of the Asian Development Bank (ADB) in furtherance of their economic development. This is particularly true for war-torn countries like Cambodia and, to a lesser degree, Viet Nam, where much of the limited road networks have been destroyed by wars, a situation exacerbated by the loss of a cadre of experienced road engineers and management personnel. In response to this situation, after a series of consultations with the governments in these two countries,¹¹ ADB provided assistance through investment in rehabilitating and upgrading existing road networks. Together with the physical investments, ADB made several technical assistance (TA) grants to improve the “software” needed to manage the road networks.

2. Three advisory TAs¹² were selected for evaluation in this TA performance audit report (TPAR), which reflected such efforts to improve the management of physical infrastructure and institutional capacity in Viet Nam and Cambodia. The three TAs, for a combined grant amount of \$4.0 million (including cofinancing), were approved between 1993 and 1995, and completed between 1995 and 1998.

B. Rationale, Objectives, and Scope

3. The rationale of all three TAs was based on the recognition by the governments and ADB that rehabilitation of the physical road network was unlikely to be sustainable if it was not accompanied by a simultaneous improvement in the capacities of the government institutions responsible for managing and maintaining the infrastructure. The overall goal for all three TAs was to further economic recovery and development by addressing the urgent needs for improving the physical road network and/or institutional capacities in transport planning and administration in the two countries.

4. The Viet Nam TA was attached to a loan of \$120 million for rehabilitating existing highways.¹³ In formulating the loan, ADB and the Government recognized that the newly created Viet Nam Road Administration (VRA) under the Ministry of Transport (MOT), as the principal government agency for road sector policy formulation, as well as transport planning and management, had inadequate capacity to perform these functions. The Government and ADB accorded a high priority to strengthening VRA’s capacity. The objective of the Viet Nam TA was to provide advisory services to help the MOT in (i) organizing and improving the administrative efficiency of VRA; (ii) assisting VRA to implement various road and road transport subsector reforms; (iii) drafting a road act, and other rules and regulations; (iv) establishing a computer-based transport databank for MOT and training of staff in transport statistics

¹¹ ADB did not have a country operational strategy for these countries at that time.

¹² TA 1996-VIE: *Institutional Strengthening of the Ministry of Transport*, for \$1,900,000, approved on 29 November 1993; TA 1866-CAM: *Transport Rehabilitation Study*, for \$1,319,400, approved on 31 March 1993; and TA 2416-CAM: *Developing a Planning Capability in the Ministry of Public Works and Transport*, for \$800,000, approved on 2 October 1995.

¹³ Loan 1272-VIE: *Road Improvement Project*, for \$120.0 million, approved on 29 November 1993 and completed in June 2000.

preparation, analysis, and dissemination; and (v) strengthening project management unit (PMU) capabilities to effectively deal with foreign-assisted projects.

5. The objective of the first Cambodia TA was to help plan the rehabilitation of economic, social, and physical systems disrupted or destroyed during the previous two decades, by identifying the most urgent transport rehabilitation needs, taking into account ongoing and planned assistance programs, refugee repatriation, and general economic recovery. A further objective of the TA was to enhance Cambodia's capacity for planning transport infrastructure investments. The scope of the TA included identifying the essential transport rehabilitation requirements in all regions of Cambodia and encompassed all modes of mechanized transport except civil aviation. The output was to be a list of screened and ranked rehabilitation projects along with proposed institutional strengthening programs.

6. The formulation of the second Cambodia TA was based partly on a recommendation made by the consultants for the first TA regarding institutional strengthening needs. The administrative capacity of the Ministry of Public Works and Transport (MPWT) was weak after years of war, and upgrading its capacity in transport planning and in policy and project formulation was essential for the sector's long-term and self-sustainable development. The objective of the second Cambodia TA, therefore, was to (i) establish a Transport Planning Unit (TPU) within MPWT, and (ii) train the TPU staff so that they could operate it on a self-sustaining basis once the TA had been completed. The newly established TPU would perform a series of core functions in the areas of transport sector policies (with a particular emphasis on roads), medium- and long-term traffic forecasting, preparing and reviewing investment programs, setting up and maintaining central transport databases, and helping prepare and monitor major externally assisted projects. In addition, the consultants would analyze the functions and efficiency of the present structure and operations of MPWT, and develop alternative arrangements to improve MPWT's overall efficiency and effectiveness.

7. The scope and nature of the three TAs varied substantially. The first Cambodia TA, the rehabilitation study, aimed primarily to produce a technical output, i.e., an investment plan that would prioritize physical transport investment needs related to the goal of economic recovery and development. The other two TAs targeted the institutional capacity in transport planning and administration capacities necessary for long-term economic development. In doing so, the second Cambodia TA focused on training and building capacity in the TPU. The Viet Nam TA was more comprehensive, in simultaneously addressing institutional, legal, and technical aspects of road sector management.

C. Completion and Self-Evaluation

8. For the Viet Nam TA, the project completion report (PCR) for the loan to which the TA was attached, was circulated on 27 October 2000. The PCR was brief in assessing the effectiveness of the TA, indicating that all the TA objectives were met and the performance of the TA consultants was satisfactory, and it gave no separate rating to the TA. Based on the TA outputs, the VRA Regulation was issued, which clearly defined the role of VRA.¹⁴ The PCR suggested that, as VRA's development was in the nascent stage, a follow-up TA of \$2 million should be implemented to continue the capacity building for VRA.

¹⁴ The Regulation referred to was one of the two decrees issued by the Government that defined the role and scope of VRA. Unlike laws that must be ratified by the National Assembly, decrees are administrative orders and provisional in nature.

9. The TA completion report (TCR) for the first Cambodia TA was circulated on 24 September 1996. It rated the TA as generally successful, and attributed the success to satisfactory consultant performance, the excellent cooperation with the Cambodian authorities, and ADB's professional approach in supervising and monitoring the work. Major lessons learned included close monitoring, selection of dedicated and well-qualified consultants, and aid coordination as key for project success.

10. No TCR has been circulated for the second Cambodia TA even though the financial closure of the TA took place in May 1999. The Transport and Communications Division (West) indicated to the Operations Evaluation Mission (OEM) that the TCR would be prepared soon.

11. Given the large resources spent on the TAs, self-evaluation of the TAs was inadequate with the exception of the first Cambodia TA. Evaluation of the Viet Nam TA in the PCR consisted of one paragraph describing TA objectives and scope, and another stating that the TA objectives were met and the performance of the consultants was satisfactory. It gave no evidence on the effectiveness of training activities, the status of the Road Act, or usage of the databank. No analysis was conducted to identify main issues and lessons that affected the effectiveness of the TA. This was partly due to constraints in the PCR framework in which evaluation of attached TAs generally constituted a small component.

D. Operations Evaluation

12. This TPAR focuses on evaluating the TAs' effectiveness in meeting their objectives, as well as on identifying key issues that affected that effectiveness. To accomplish this, various aspects of TA formulation, design, implementation, inputs/outputs, and impacts are assessed. The assessment is based on a review of ADB documents, discussion with ADB staff, and findings of the OEM, which visited Viet Nam and Cambodia from 23 April to 4 May 2001. During the visit, OEM members met with officials of the executing agencies (EAs) for the TAs, i.e., MOT in Viet Nam, and MPWT in Cambodia, other concerned government agencies, and bilateral and multilateral aid agencies active in the sector. In addition, a questionnaire survey was conducted with the EAs and with the participants of the training program under the second Cambodia TA. A wrap-up meeting was held in each country,¹⁵ which was attended by representatives from the government, aid agencies, and other stakeholders. The meetings provided an opportunity not only for the OEM to present its preliminary findings but also for officials of the aid agencies and the governments to exchange views on the key issues identified by the OEM.

13. Despite the OEM's efforts during field missions and in-house research, the evaluation was constrained by limited institutional memory of the TAs in both ADB and the EAs, as well as a lack of TA records in some cases. In addition, compared to physical investment projects, the impacts of TAs are generally difficult to assess, and the results are often influenced by the views of specific individuals interviewed. Extensive consultation was conducted with concerned ADB staff throughout the evaluation process. Copies of the draft TPAR were sent to the EAs and the concerned ADB staff for review and all comments received were taken into consideration in finalizing the TPAR.

¹⁵ The meetings were chaired by the Director of Project Management Unit (PMU)-1, MOT, in Viet Nam and by the Honorable Minister of Public Works and Transport, in Cambodia.

II. ASSESSMENT OF IMPLEMENTATION PERFORMANCE

A. Design of the Technical Assistance

14. From the perspective of the EAs, the questionnaire surveys and interviews indicated that the three TAs were highly relevant in terms of their consistency with the governments' goals and priorities. Both EAs also assessed the physical TA inputs in the form of computers, software, and other equipment as adequate. MOT of Viet Nam indicated that it had "positively" participated in the process, while MPWT of Cambodia indicated a lower participation level. For all three TAs, no major revisions to the terms of reference (TOR) were needed. There were only some minor variations of the contract and reallocation of the budget for the Viet Nam TA. The consultants and the EA also requested additional resources, in the amount of \$771,000, for further database development, road legislation support, and extension of services in other areas. ADB approved the contract variations but disapproved the request for additional funding. The OEM considers both decisions appropriate. While minor changes in the use of available resources during TA implementation were to be expected, the requested budget increase represented 40 percent of the originally approved amount. Most of the tasks proposed under the increased budget were either premature at the time (e.g., further road legislation support) or should have been completed within the original budget (e.g., database development; see para. 29).

15. The OEM believes that the need for all three TAs was clearly justified as the severe destruction of the road network and, in Cambodia's case, of human resources, hindered effective prioritization of road sector interventions. For Viet Nam, TA formulation was conducted in conjunction with the loan and another parallel engineering TA. Although the EA indicated that the Government "positively" participated in TA formulation, most available documents focused on loan formulation and contained little information on how the Government contributed to the formulation of the TA scope and the TOR for the consulting services. Sections about the TA in these documents were largely confined to stating that ADB and the Government had reached a consensus that the institutional capacity of MOT, particularly VRA, was weak and needed strengthening. With hindsight, the weak capacities of MOT, including VRA, in all areas, and the sense of urgency as to the need to enhance such capacities may have led to the TA's overly ambitious scope, covering institutional, technical, management, and legal aspects, and a consequent lack of clear focus. This will be illustrated in the ensuing sections (paras. 26-28, 31-32, and 38-40).

16. There were no major design problems with the first Cambodia TA, although no records are available to indicate the extent to which the Government participated in the TA formulation. For the second Cambodia TA, records indicate that the Government was consulted on the scope of the TA during the TA Fact-Finding Mission, although the Government's exact contribution was not clear. As will be discussed in greater detail below (paras. 35-36), the TA's main design deficiency was the low cost-effectiveness and non-sustainability of its training program.

B. Engagement of Consultants

17. For the Viet Nam and second Cambodia TAs, available records show that the recruitment of consultants was carried out in accordance with ADB's *Guidelines on Use of Consulting Services* through evaluation of technical proposals. ADB involved the governments

in recruiting consultants by inviting government representatives to be observers in the contract negotiations. For the first Cambodia TA, no detailed records on consultant engagement are available. However, the TA report indicated that consultants would be selected in accordance with ADB's *Guidelines on the Use of Consulting Services*. Information provided by the ADB project officer for the TA and technical assistants also suggests that, despite the fact that the TA was cofinanced by the Swedish International Development Cooperation Agency (SIDA) and the United Nations Development Programme (UNDP), and that a Swedish consulting firm won the contract, the TA was not tied to Swedish consulting firms.

18. It can be concluded that, for all three TAs, ADB's guidelines were observed in the engagement of consultants. In accordance with the guidelines, ADB, through its Consultant Selection Committee, played the major role in consultant selection. The role of the TA recipients, the governments or EAs, was limited to providing comments or objections, if any, to the firms included in the shortlist and to participating in the contract negotiations as observers. The governments' limited participation in consultant selection could have been one of the factors that contributed to their low level of ownership of the TAs (para. 62).

C. Organization and Management

19. For the Viet Nam TA, MOT served as the EA and the Vice Minister for Infrastructure was responsible for implementation. The consultants, led by a resident team leader who was assisted by a team of short-term experts, were to work under the direct supervision of the Vice Minister in close coordination with the General Directors of VRA, and other relevant government agencies. In the event, the Vice Minister designated the General Director of PMU-1¹⁶ as the coordinator of the TA despite the fact that capacity building for PMU-1 was a relatively small component of the TA. Although this arrangement recognized the fact that PMU-1 was experienced in implementing ADB investment projects, it may have adversely affected the level of ownership of the TA by VRA, which was the main target recipient of the TA. The VRA's lack of ownership was evident during the OEM's visit for which PMU-1 made all the arrangements, and VRA officials interviewed suggested that this was "PMU-1's TA."

20. For the first Cambodia TA, the Supreme National Council (SNC), the de facto Government under the Paris Accord prior to the establishment of an elected government, in consultation with the United Nations Transitional Authority in Cambodia, assigned a national project director as the counterpart to the consultancy team leader. In addition, SNC provided technical counterparts to work with the consultants who carried out the study. SNC also appointed the then Ministry of Communications, Transport and Posts as ADB's counterpart agency to provide logistical support. Compared to the Viet Nam TA and the second Cambodia TA that had an emphasis on institutional strengthening, the nature of the rehabilitation study was relatively less dependent on the capacity of the participating EA. The logistical support and provision of counterpart staff proved effective for the execution of the TA.

21. For the second Cambodia TA, MPWT served as the EA. The Secretary of State of MPWT assumed the overall responsibility of the TA, and was to oversee coordination of other agencies within MPWT, and with other government ministries and ADB. Under the TA agreement, some senior MPWT officials were to be appointed to form the nucleus of the proposed TPU. The consultants, led by a resident team leader and comprising a group of short-term experts in different areas related to transport planning, conducted the formal training program for the staff members of the newly established Planning Department, the equivalent of the proposed TPU (para. 30).

¹⁶ Organizationally, PMU-1 and VRA are in parallel under MOT but are very much separated in their functions.

D. Implementation Schedule and Financing Arrangements

22. All three TAs were implemented roughly on schedule. The Viet Nam TA started in mid-1994 and the final report was received in November 1996, compared with the expected date of July 1996. The first Cambodia TA started mid-1993 and was completed in May 1995 through submission of the final report, approximately five months behind schedule. The second Cambodia TA was disrupted by the 1997 period of instability when the resident team leader left the country. However, most of the training activities, which were the main component of the TA, had already been completed. ADB had to press the consultants to complete the draft final report, which was delayed by more than a year, although the TA was completed on schedule. The disruption and the resultant delay had negative implications for the dissemination of TA findings and the potential adoption of TA recommendations (para. 42).

23. ADB provided a grant of \$1.9 million to finance the Viet Nam TA; actual disbursement was \$1,817,800. The first Cambodia TA was administered by ADB based on cofinanced grants from UNDP (\$719,400) and SIDA (\$600,000); actual disbursement amounted to \$1,242,600. The second Cambodia TA was entirely financed by ADB from the Japan Special Fund. Actual disbursement was \$729,800, compared to the approved amount of \$800,000. In short, all three TAs received adequate financing for their tasks.

E. Supervision

24. The level and quality of ADB supervision of the three TAs varied. For the Viet Nam TA, six TA review missions were undertaken. This unusually large number was due to the fact that the TA was attached to a loan (footnote 3); the review missions were for the loan as well. Existing records also indicate that ADB provided close supervision for consultants during TA implementation, mostly on administrative matters such as budget reallocation and handling requests for additional resources. For the first Cambodia TA, three TA review missions were fielded, as part of larger ADB review missions that covered loans and other TAs. The TCR attributed the success of the TA to "ADB's close monitoring and active supervision of work under the TA." For the second Cambodia TA, two review missions were fielded, also part of larger review missions. Available back-to-office reports of the review missions were brief in evaluating the progress of the TA, and raised no substantive issues regarding TA implementation.

F. Performance of Consultants

25. MPWT of Cambodia indicated that the performance of the consultants for both TAs, i.e., a Swedish consortium, was highly satisfactory in terms of technical expertise and understanding of specific local issues facing the sector. In comparison, MOT of Viet Nam, while pointing out that the consultants, a Canadian-German consortium, were experienced and qualified to implement the TA, expressed a lower degree of satisfaction with the consultants' performance. MOT also indicated in the questionnaire survey that the final recommendations did not adequately reflect its issues and opinions. OEM's review of available records, which revealed the request for additional funding (para. 14), and evaluation of the consultant reports (paras. 26 and 29) support these assessments.

III. EVALUATION OF OUTPUTS AND IMPACTS

A. Adequacy and Quality of Reports and Services Provided

1. TA 1996-VIE: Institutional Strengthening of the Ministry of Transport

26. The OEM considers the quality of the final report as not good in terms of quality of presentation and organization of materials, even though most recommendations made by the consultants were valid. The consultants partly justified the poor report quality by suggesting that they had adopted a “process” approach, which placed less emphasis on “dry reports, guidelines, and manuals,” but more on “changing the way of thinking.” The consultants tried to implement the new process approach by conducting interactive weekly seminars to discuss various relevant issues facing MOT and VRA. According to the final report, the seminars gradually gained recognition and were well attended by some senior officials. However, the long-term effects of these seminars and other training activities seem to be limited (paras. 31-32).

27. A major service provided by the consultants under the TA was to assist in the drafting of the Road Act with a focus on providing assistance in legal technicality and introducing experience from other countries. In the questionnaire survey, MOT rated the role of the consultants’ contribution as less than significant. This was partly due to the fact that there was a drafting committee, which had already produced the first draft prior to the involvement of the consultants. At the time of the OEM, the National Assembly had still not ratified the Act after 10 rounds of revisions. The OEM believes that the main reasons for the slow pace were more political than technical in nature. A road fund was proposed under the Road Act. Other line ministries and the Ministry of Finance raised concerns over whether the road sector had a real need for a separate account, and over which agency was to manage the fund. As such, two versions of the Road Act were created, with the shorter version excluding the road fund.¹⁷ A more definite contribution of the TA to the legal framework was the VRA Regulation issued by the Government, which clearly defined the role and the mandate of VRA. As mentioned earlier (footnote 4), the Regulation was an administrative decree, and hence provisional in nature. However, in Viet Nam where the legal framework is relatively underdeveloped, the importance of government administrative decrees should not be underestimated.

28. Under the TA, a transport databank for inland waterways was established for MOT. However, officials interviewed claimed no knowledge of it. The questionnaire survey indicated that the consultants conducted training for 26 MOT staff on how to use the database, but failed to indicate if the information system was still functional. Even if it was, its potential use for transport management and policy making would be undermined by the fact that it covered only inland waterways, which have much lower transport capacity than the road network. The TOR required the consultants to “develop the initial transport database covering all transport subsectors.” The database developed did not meet this requirement. However, as part of TA outputs, the consultants produced a framework for developing the database for the road sector. The Government has clearly recognized the importance of having such a database, subsequently engaging in its development under an ongoing advisory component, Improvement

¹⁷ VRA has recently advised that the Road Act was finally ratified on 6 June 2001 and that it does not provide for a road fund.

of Highway Management Capacity, of an ADB loan¹⁸ and using the framework produced by the consultants.

2. TA 1866-CAM: Transport Rehabilitation Study

29. The main service provided by the consultants under the TA was to conduct a detailed survey of transport needs, and to propose a rehabilitation program for 1995-1999. As shown in Appendix 1, the program contained a series of recommendations of prioritized reconstruction projects for roads and bridges, railways, international ports, and inland waterways. Most of the recommendations have been adopted or are being considered. The study has been widely viewed as a benchmark for the transport sector in Cambodia. Two ADB projects¹⁹ were directly derived from the study. The World Bank and the Japan Bank for International Cooperation (JBIC) also used the study as a basis for their own road, bridge, and port improvement projects. Results from interviews and the questionnaire survey conducted with MPWT show that it is highly satisfied with the consultants' performance and the services provided. The OEM also considers the quality of the report generally satisfactory, as it provided very detailed survey results and the recommendations were well presented.

3. TA 2416-CAM: Developing a Planning Capability in the Ministry of Public Works and Transport

30. The main service provided under the TA was to form a TPU under MPWT, and to conduct a formal training program for the staff of the TPU. In the event, a Planning Department had already been established within MPWT prior to the start of the TA. The effectiveness of the formal training program is assessed below (paras. 34-37).

B. Training and Transfer of Technology

1. TA 1996-VIE: Institutional Strengthening of the Ministry of Transport

31. A series of training activities was carried out aimed at increasing VRA's exposure to experience in other countries. These included two Canadian study tours attended by 13 senior VRA officials, and an overseas training course in Malaysia attended by 17 mid-level officials. In addition, a series of weekly seminars was conducted to discuss issues related to drafting the Road Act and provisions for the road fund. However, very limited institutional memory exists about the weekly seminars. Only 3 of the 13 participants of the Canadian study tours are still working at VRA; the others have retired. In contrast, 13 participants of the Malaysian training program are still with VRA or MOT. Interviews with some of them suggested that the training program was mostly a tour of Malaysia's road infrastructure and management systems that served as a useful eye-opener for the participants.

¹⁸ Loan 1487-VIE (SF): *Second Road Improvement Project*, for \$120 million, approved on 21 November 1996.

¹⁹ Loan 1697-CAM(SF): *Primary Road Restoration Project*, for \$68 million, approved on 21 September 1999; and Loan 1659/1660-CAM(SF): *Phnom Penh to Ho Chi Minh City Highway Project*, for \$140 million, approved on 15 December 1998.

32. In general, the effectiveness and impacts of the training activities under the TA were questionable. While the format of overseas study tours may have been justifiable in the early stages of *doi moi* (renovation) in Viet Nam, its cost-effectiveness appeared low, given the fact that senior officials tend to be rewarded with such opportunities and, in this case, most of them retired soon after the study tour.

2. TA 1866-CAM: Transport Rehabilitation Study

33. Although the main service provided under this TA was to conduct an investment needs survey, the consultants also actively involved MPWT staff in the survey work. Interviews with some participating staff members suggested that they had learned much in the process. The consultants also made recommendations regarding further institutional-strengthening needs, which led to the formulation of the second TA.

3. TA 2416-CAM: Developing a Planning Capability in the Ministry of Public Works and Transport

34. A questionnaire survey conducted among the 6 target recipients of the formal training program, which included 18 courses on subjects related to transport planning such as transport economics, transport policy, and traffic forecasts, indicated that the trainees were highly satisfied with the program. Five respondents (one has retired and did not respond to the survey) indicated that the training was highly relevant for improving Cambodia's transport training capacity but indicated a lower relevance for their own career development. This is primarily due to the fact that they have had few opportunities to participate in the planning and implementation of aid projects. Most such implementation opportunities go to PMUs and, in Cambodia, non-aid projects are extremely rare. As mentioned earlier (para. 22), ADB's assistance programs in Cambodia including this TA were interrupted in 1997. When assistance resumed following the approval of the Primary Road Restoration Project in 1999, MPWT's Planning Department played no role in project formulation. Its regular core planning functions, i.e., policy formulation, traffic forecasting, preparing investment programs, annual budgeting, and database development and maintenance, were also performed in a very limited manner due to severe underfunding and low morale.²⁰

35. The cost-effectiveness of the formal training program seemed to be very low. The actual disbursement of the TA was \$729,858, including \$727,340 claimed by the consulting firm and \$2,518 used to cover the expenses of the Government's observer for TA negotiations. Among the amounts claimed by the consulting firm, approximately \$540,000 was for remuneration, which covered 28 person-months of services performed by 9 consultants. The balance was used for international travel, per diem, equipment (two computers and one copier) and other out-of-pocket expenses. The TOR for the consulting services mainly covered two tasks: (i) to establish the TPU and train its permanent staff in specified areas, and (ii) to conduct an analysis of the structure and operations of MPWT and make necessary recommendations. In view of the large amount of work involved in preparing and offering 18 courses under the training program, the OEM estimates that most of the costs on remuneration and out-of-pocket expenses, i.e., no less than \$500,000, can be attributed to task (i). The remaining \$227,000 was used for task (ii) in conjunction with the preparation of the final report.

²⁰ In a meeting held with the Planning Department, the staff informed the OEM that this was the first time that they had had a meeting with an ADB mission since the capacity-building TA completion in November 1998.

36. The Government recognized the low cost-effectiveness of the training program. Available records indicate that the advisor of the Minister in charge of MPWT contacted ADB to notify that “the TA only selected four people [the actual number was six] to receive training by consultants, while the Minister had prepared a more extensive list of staff to be trained.” The advisor questioned the cost-effectiveness of the TA and expressed concerns with the arrangement. It is unclear what actions were taken after this communication. According to the final report, in addition to the 6 target trainees, up to 50 MPWT staff members participated in at least one seminar on planning and policy issues.

37. In the survey, respondents were asked to rank the usefulness of the 18 courses for the performance of the core functions identified for the Planning Department. The results indicated that the 18 courses covered the five main planning functions well and were considered useful for the respective functions (Appendix 2), even though these functions were actually performed in a very limited manner (para. 34).

C. Institution Building

1. TA 1996-VIE: Institutional Strengthening of the Ministry of Transport

38. Strengthening of VRA was accorded high importance in the overall design of the TA. Under this TA component, the consultants conducted an analysis of VRA’s existing organizational structure, systems, procedures, and policies, and identified key weaknesses of VRA as the Government’s primary agency for road management and policy. The consultants recommended institutional changes required to perform each of VRA’s core functions, including managing road transport (driver training programs, the vehicle registration program), road safety and environment, and road infrastructure (planning and maintenance). As indicated in Appendix 3, among the 28 recommendations made, 18 have already been adopted or partly adopted, 4 are not yet adopted but are being considered, and the rest are either deemed not applicable/impractical or the status is unknown. The 18 recommendations adopted or partly adopted relate mainly to addressing the information needs of VRA, strengthening VRA’s means to inspect transport safety violations (e.g., automated information gathering from the vehicle registration and vehicle license programs), and introducing portable scale enforcement units to check overloading. Those recommendations that are currently not yet adopted (including those being considered) are mostly related to the privatization of VRA’s commercial-oriented functions, e.g., driver training programs, vehicle inspection function, and licensed private repair stations to perform inspections.

39. In general, although the capacity of VRA has improved in the areas of information management and capacity for road safety management, the overall structure and functionality still carry many *pre-doi moi* characteristics such as weak capacity in policy formulation and planning, and a mixture of state enterprise and commercial functions. Appendix 4 provides the organizational chart of VRA, which illustrates that it administers many PMUs²¹ and transport companies.

40. At the time of TA implementation, MOT had little experience in implementing aid projects. Assistance was provided under the TA in the areas of contract implementation guidelines for rehabilitation projects, interpretation and application of legal and technical aspects

²¹ These PMUs, authorized to implement projects under \$2 million, are not to be confused with PMU-1 and others listed in para. 47 under MOT, which are authorized to execute externally funded projects.

of contracts, training of PMU-1 staff through seminars, and on-the-job training. The capacity of PMU-1 clearly improved. In addition to the training activities under the TA, PMU-1 has been able to “learn by doing” as it has had ongoing opportunities to execute ADB loan projects.

2. TA 1866-CAM: Transport Rehabilitation Study

41. The TA had no explicit goal in terms of institution building except identifying needs for training and institutional strengthening to be taken care of by future assistance.

3. TA 2416-CAM: Developing a Planning Capability in the Ministry of Public Works and Transport

42. The consultants studied the organizational structure of MPWT and characterized it as “developed casually” and in “continuous crisis management.” The planning process was also very much aid driven in the sense that the projects submitted for aid funding were largely dictated by priorities and agendas of aid agencies, rather than by MPWT’s own analysis of the projects’ economic and social effects. The consultants recommended a step-by-step strategy for MPWT to (i) clearly define functions of different departments, and enhance the role of the Planning Department in the overall hierarchy; (ii) privatize some of the state enterprises; and (iii) improve its human resources through training and recruiting qualified staff from the private sector and among overseas Khmers. Interviews and the survey results indicate that the present situation remains largely the same. Appendix 5 provides the organizational chart for MPWT and shows that the Planning Department is positioned at the bottom of the hierarchy. Some progress has been made in terms of privatizing state enterprises with the exception of the railway, ports, and some ferries. However, with an average salary of \$20 per month for many MPWT staff, increasing numbers of more experienced and trained MPWT staff are moving to the private sector or aid agencies, not vice versa. Due to the period of instability in 1997 and the fact that the team leader had to be evacuated, completion of the draft final report was delayed by more than a year (para. 22). As a result, no tripartite discussions were held—such discussions could have resulted in more “buy-in” from the Government of the findings and recommendations.

D. Impact of Technical Assistance

43. The previous sections (paras. 26-42) describe principally the outputs and some of the immediate impacts of the three TAs. Long-term impacts of the outputs depend on many other factors and are much more difficult to assess. For the Viet Nam TA, one of the main outputs was a draft Road Act. As illustrated by the time taken for its actual ratification, political factors may be a larger consideration than technical factors. Until the political issues are resolved, there will be no legal impacts. However, the process of drafting, commenting on, and revising the Road Act has resulted in a series of brainstorming sessions among officials and consultants on the key issues involved such as raising the awareness of the need for road maintenance, identifying and evaluating different options for financing road maintenance, and the need for a sound legal framework for road sector development. The positive impacts in the process can be significant, and assessment of such impacts must take a longer-term view. The impacts of the other outputs of the Viet Nam TA, i.e., the transport database for inland waterways and 28 recommendations aimed at improving VRA’s administrative efficiency, also depend on factors such as the decision-making process and political commitment to reforms. Certain positive

impacts were generated in the process regardless of the final outcome. For example, although most of the consultants' recommendations regarding privatizing VRA's commercial functions had not been adopted yet, comments from VRA staff indicated that they were becoming more aware that some of VRA's commercially oriented functions, e.g., driver training programs, could be outsourced.

44. For the two Cambodia TAs, the first TA generated significant impacts in terms of laying the foundation for a series of investment projects that followed. In the second TA, the lack of post-training support from either the Government or ADB severely compromised the potential long-term impacts of the training program. On the other hand, however, the newly created Planning Department may play an increasingly important role in the sector's development if more resources are made available and if a more enabling institutional and political environment is created over the longer term.

E. Other Aspects

45. Because TAs often target a particular area of government agencies, a division may be created unintentionally between the targeted recipient's area and other agencies. Other possible inadvertent impacts of TAs include fostering a tendency on the part of governments toward overreliance on external assistance. As an example, the Government of Cambodia spends a very small proportion of its budget on road maintenance compared to its neighbors (para. 48). The OEM experienced repeated requests from officials interviewed for ADB to finance the maintenance of roads that were recently rehabilitated under ADB or other aid funding.

IV. CONCLUSIONS

A. Key Issues

1. Project Management Units vs Road Management Agencies

46. PMUs have rapidly proliferated in both Cambodia and Viet Nam. This trend has been caused primarily by (i) weak capacity in existing government agencies to administer aid projects; and (ii) aid agencies' own drive for convenience and efficiency for implementing their projects, which often require different accounting and reporting standards from the existing ones. While PMUs are justified from the viewpoint of efficient execution of aid projects, they tend to have adverse impacts on the capacities of existing road planning and maintenance agencies, i.e., VRA in Viet Nam and MPWT's Departments of Planning and Road Infrastructure in Cambodia, by drawing away qualified personnel due to the significant benefits and other incentives that they offer. The long-term prospects of PMUs are also unclear. In Viet Nam's case, there are four PMUs for roads—PMU-1, -5, -18, and the PMU for Ho Chi Minh Road—and two for bridge projects; all are executing projects supported by ADB,²² JBIC, or the World Bank. Some of them are actively lobbying aid agencies to solicit financing for more projects after the earlier ones are completed. In Viet Nam, the Government and aid agencies may consider adopting a strategy that would gradually phase out PMUs, by either using existing road management agencies such as VRA to administer aid projects, or corporatizing and privatizing the PMUs.

47. In Cambodia's case, although PMUs are more justified as the country is in a less advanced stage of road construction than Viet Nam, their negative impacts on the already weak capacities of different departments of MPWT can be even more severe because of its acute shortage of qualified human resources. As discussed in the next paragraph, the PMU issue and its impact are closely related to different funding sources for road construction and maintenance.

2. Road Maintenance Financing and Impacts on Road Management Agencies

48. Road maintenance is underfunded in both countries but severely so in Cambodia. In Viet Nam, VRA officials interviewed indicated that the Government provides less than one third of the total estimated funds needed for road maintenance. In Cambodia, there is no regular government budget for road maintenance, and MPWT has to submit a proposal to the Ministry of Economy and Finance for any road maintenance activities (project-styled financing).²³ So far, all aid financing in the sector in both countries has gone to road reconstruction and restoration, which partly explains the weakening capacities of road maintenance agencies such as VRA in Viet Nam and MPWT's Department of Road Infrastructure in Cambodia. Unless innovative ways of raising domestic resources are introduced to improve the allocation of finance for road

²² ADB's next pipeline project, *Provincial Roads Improvement Project*, is to be implemented by PMU-5.

²³ Official statistics indicate that the Cambodian Government spent 7.5 percent of its total expenditure on transport and communications in 1999. ADB's Cambodia Resident Mission estimated that, out of the 7.5 percent, only 3 percent was used for the transport sector and less than 1 percent for maintenance. In comparison, for Viet Nam, official estimates obtained by the OEM indicate that, in 1998, total central and local government expenditure in the transport sector amounted to 35 percent of the national budget, with over 5 percent allocated to maintenance.

maintenance, e.g., through dedicated fuel tax or increased vehicle registration fees, the weak capacities of the road maintenance agencies will not be fundamentally improved.

3. Aid Coordination

49. Bilateral and multilateral aid funding is a major source of investment for the road sector in both countries and, in Cambodia, almost the only source. In Viet Nam, the aid agencies have an informal coordination channel, and Japan International Cooperation Agency (JICA) is the lead agency for the transport sector. In Cambodia, however, no such mechanism exists. As ADB is the largest source of aid funding in Cambodia and approximately 40 percent of total ADB funding has gone to the road sector, ADB is well positioned to lead the aid agencies in coordinating their efforts in this sector. Such a concerted strategy is particularly important in terms of carrying out policy dialogue²⁴ and working with both governments to carry out institutional and policy reforms necessary to achieve better management of the transport sector. Aid agencies also need to be particularly aware of the adverse impacts of aid financing on the recipient countries in terms of weakening their capacities in transport planning and road maintenance, and of overreliance on aid funding for all activities (para. 45).

B. Overall Assessment

1. Relevance

50. All three TAs had and continue to have high relevance in terms of their conformity with the governments' goals and policy at the time of TA formulation and at present. This is partly due to the fact that, despite improvements in the road networks and institutional capacities, transport and transport-related administrative capacities continue to be a bottleneck hindering economic development in both countries, particularly Cambodia. Furthermore, the three TAs have been widely viewed as benchmark efforts among aid agencies, including JICA and the World Bank, in the sense that many recommendations have been endorsed and, in some cases, pursued further by other aid agencies in their own assistance projects.

2. Efficacy

51. The first Cambodia TA (the rehabilitation study) has fully achieved its main objective, which was to address the most urgent transport rehabilitation needs. The main output of the study, a list of screened and ranked rehabilitation projects, has been used as a blueprint for several subsequent aid projects including two funded by ADB and several others funded by JBIC and the World Bank. The TA's recommendation on institutional strengthening needs was also partly adopted with the formulation and implementation of the second Cambodia TA.

52. The results of the Viet Nam TA were more mixed as progress was made on most tasks but some were not accomplished fully. Most of the consultants' recommendations have been adopted and the capacities of VRA have improved in some areas. However, VRA remains relatively weak in the overall organizational hierarchy of MOT. Commercial functions, rather

²⁴ ADB's Cambodia Resident Mission has been very active in conducting such dialogue on a regular basis.

than policy and planning, continue to dominate VRA's structure and activities (paras. 38-39). The TA's training activities, including three overseas study tours, succeeded in increasing VRA's exposure to experience of other countries. However, since most of the participants of the Canadian study tours have since retired, the overall effectiveness of these tours was somewhat reduced. The weekly seminars provided a platform for VRA staff and the consultants to discuss key issues facing the sector. The Road Act, which the consultants helped draft under the TA, took long to get ratified by the National Assembly due to political reasons. The Government, however, issued the VRA Regulation based partly on the TA's input, which defined the role and mandate for VRA. The transport databank developed under the TA did not cover all transport subsectors (para. 28) and, therefore, its value was substantially diminished. Finally, the capacity of PMU-1 has been greatly strengthened.

53. The second Cambodia TA (developing planning capability) aimed to establish a TPU and to train its permanent staff so that they could operate TPU on a self-sustainable basis. A Planning Department was created within MPWT before the start of the TA. The training program, which primarily trained 6 target recipients and covered up to 50 other non-regular participants, was highly beneficial for the former. However, due to lack of post-training support, the impacts of the training program did not materialize as envisaged as the trainees did not have opportunities to perform the functions for which they were trained. The other objective of the TA was to conduct analysis of the organizational structure of MPWT and make recommendations on how to improve its overall efficiency. The final report presented an analysis and made recommendations, but the OEM found little evidence that MPWT benefited from these recommendations (para. 42).

3. Cost-Effectiveness

54. Viewing the achievement of the objectives relative to the TAs' actual costs, the first Cambodia TA (the rehabilitation study for \$1.24 million) was the most cost-effective. The primary output of the second Cambodia TA (developing planning capability for \$0.73 million) was the training of the six target recipients at an estimated cost of approximately \$0.5 million (paras. 35-36). This indicates very low cost-effectiveness. Other well-tested training methods could have achieved much more (para. 59). For the Viet Nam TA, its overly wide scope may have spread the resources of \$1.82 million too broadly.

4. Sustainability

55. The Cambodia rehabilitation study had the most sustainable impacts on the physical infrastructure. For the Cambodia capacity building TA, the long-term sustainability of the Planning Department is very much in question if the current financial and institutional conditions are not improved soon. The training method adopted in the TA would also be prohibitively expensive to be conducted on a sustainable basis. For the Viet Nam TA, the impacts of the overseas study tours and the transport databank do not appear sustainable. By contrast, the Road Act, the consultants' recommendations on measures to reform VRA (many of which have already been adopted), and the much strengthened PMU-1 are likely to have sustainable impacts on the future development of the road sector.

5. Institutional Development and Other Impacts

56. To varying degrees, all three TAs had positive impacts on the institutional development of the EAs, with the Viet Nam TA and the second Cambodia TA having institutional development as their main objective. In addition to the direct impacts presented earlier (paras. 43-44), the TAs may have had other less tangible but beneficial impacts. For example, the Viet Nam TA, particularly the strengthening of PMU-1, may in the long term influence MOT's procurement methods even for domestically funded projects by introducing the open bidding method. Through the three TAs, the EAs acquired exposure to international consultants, new technologies, and management models, which could influence the EAs' ways of thinking and conducting their business.

6. Overall Rating

57. Based on the above evaluation against different criteria, the overall ratings of the three TAs are TA 1996-VIE: successful; TA 1866-CAM: highly successful; and TA 2416-CAM: partly successful.

7. Self-Evaluation by Executing Agencies

58. In the questionnaire surveys, the EAs were asked to rate the TAs from their standpoint based on their own assessment of the achievement of the objectives and actual costs of the TAs. For the Viet Nam TA, MOT rated the TA successful, while indicating that the final outputs reflected little MOT input. No rating was given to the first Cambodia TA and a partly successful rating was given to the second one.

C. Lessons Identified

1. Long-Term Cost-Effective Strategy for Capacity Building

59. Capacity building is a long-term task that requires a consistent and cost-effective strategy. The training of six MPWT planning staff members at an estimated cost of \$500,000 was clearly not a cost-effective and sustainable way to achieve institutional strengthening, even though the trainees expressed a high level of satisfaction with the training program itself. Furthermore, because of the lack of support and opportunities for the trainees to perform the functions they were trained for, the knowledge they gained was largely lost. ADB's future capacity-building efforts should seek cost-effective and sustainable methods to maximize training effects. One well-tested approach is to "train the trainers" by involving existing research institutes and universities, e.g., the Transport Development Strategy Institute in Viet Nam and the Institute of Technology of Cambodia. These institutions could in turn provide training for

other government officials and students on a more regular and low-cost basis.²⁵ Even if the train the trainer approach is not possible, the training activities should try to reach the widest target recipient base possible.

60. Given its resource constraints, ADB's capacity-building efforts should be as consistent as possible in terms of providing training opportunities as well as post-training support. In Cambodia, ADB may consider allocating a small portion of future ADB loans for road restoration and rehabilitation to support MPWT's Planning Department in performing its key functions.

2. Technical Assistance Design, Supervision, Self-Evaluation, and Record Keeping

61. First, sound design is a necessary first step for a successful TA. The scope of the Viet Nam TA appeared to be overly ambitious and lacked a clear focus. In addition, the effectiveness of some TA components, such as overseas study tours, proved to be limited. For the second Cambodia TA, the formal training program, as discussed earlier (para. 59), could have been better designed by involving existing training institutions. Second, close ADB supervision of all TAs, but particularly those related to institutional strengthening, is clearly warranted to address unanticipated issues as they emerge. A good example in this regard is the training program under the second Cambodia TA. After the Government expressed its concerns to ADB about the training program's low cost-effectiveness (para. 36), a corrective action of increasing the target recipient base could have been taken. Third, the current guidelines for TA evaluation by operational departments, i.e., TCR or PCR for attached TAs, are inadequate for the amount of resources invested in ADB TAs. Self-evaluation provides a unique learning experience for the operational departments, and the timing for self-evaluation is in many ways more advantageous than TPAR due to fresher institutional memory and wider availability of TA-related information. Finally, better record keeping for all phases of TA formulation, consultant recruitment, and implementation and supervision is strongly recommended. The file folder for the first Cambodia TA cannot be located. For the second Cambodia TA, records for the period after the start of its implementation are scarce.

3. Improving Government Ownership of Technical Assistance

62. This lesson is relevant for both ADB and recipient governments. The Viet Nam and the second Cambodia TAs did not fully achieve their objectives due largely to lack of government ownership. Unlike loans, TAs are largely funded and procured by ADB and their scope and outputs are also mainly determined by ADB and consultants. Ownership by governments may be improved at two levels. First, in terms of TA formulation and consultant selection, the governments should be involved to the greatest extent possible. As discussed earlier (para. 18), the current guidelines for selecting consultants limit a government's participation to a relatively low level. There have been extensive discussions within ADB on ways to increase government participation in the consultant selection process amid concerns raised by some DMCs, ranging from greater EA participation in developing the long lists of consultants to government assistance in identifying domestic consulting firms or individual consultants. In view of the ongoing review of ADB's TA policy and management and calls for increased TA cost-sharing by DMCs to improve ownership of TAs, ADB is considering steps to address these issues. Second, at the TA implementation stage, strong efforts should be made to identify practical solutions

²⁵ It should be recognized, however, that at the time of formulating the second Cambodia TA in 1995, the capacities of existing academic institutions were weak and it would have been difficult to apply such an approach.

suitable for the needs of DMCs, which may be implemented on a pilot basis to generate experience before wide-scale application. For example, based partly on the Viet Nam TA's recommendation, Ho Chi Minh City has already started to experiment with the idea of outsourcing its driver training program. VRA may extrapolate from the pilot experience once it proves successful. In addition, reaching high-level decision makers with new thinking is crucial. To a certain extent, the consultants for the three TAs worked with lower mid-level officials and the end results were copies of reports (English only for the Cambodia TAs), which had little chance of being read by high-ranking (ministerial or vice ministerial) officials. On the other hand, governments also need to recognize that, although aid agencies (and consultants) can help introduce new concepts, technologies, and management models, significant social changes cannot take place without government commitment.

D. Follow-Up Actions

63. In view of the findings from the TPAR, the OEM sees no substantial value to be gained from preparing at this stage a TCR for the Cambodia planning capacity-building TA, and recommends waiving the exercise.

APPENDIXES

Number	Title	Page	Cited on (page, para.)
1	TA 1866-CAM: Transport Rehabilitation Study: Recommendations and Adoptive Status	18	7, 29
2	TA 2416-CAM: Developing a Planning Capability in the Ministry of Public Works and Transport: Results of Evaluation by Trainees on the Usefulness of the Courses Offered with Respect to Core Planning Tasks	19	9, 37
3	TA 1996-VIE: Institutional Strengthening of the Viet Nam Ministry of Transport: Recommendations and Adoptive Status	20	10, 38
4	Organizational Chart: Viet Nam Road Administration (VRA), Viet Nam	21	10, 39
5	Organizational Chart: Ministry of Public Works and Transport (MPWT), Cambodia	22	10, 42

**TA 1866-CAM: TRANSPORT REHABILITATION STUDY:
RECOMMENDATIONS AND ADOPTIVE STATUS**

Recommendation	Yes¹	No²	No³
1. Roads and Bridges			
Reconstruction of Road 1: the whole road 56 km	✓		
Reconstruction of Road 2: Phnom Penh-Takeo 64 km	✓		
Reconstruction of Road 5: Phnom Penh-Oudong 35 km	✓		
Reconstruction of Road 6: Skun-Kompong Thum 119 km	✓		
Reconstruction of Road 7: Skun-Kompong Cham 45 km	✓		
Raising maximum safe load to 15 tonnes for all road bridges for Roads 2, 3, 6 and 7			
Raising maximum safe load to 18 tonnes for all road bridges for Roads 5 and 51			
Raising maximum safe load to 20 tonnes for all road bridges for Road 1			
2. Railways			
No action needed to rehabilitate the Northern railway line		✓	
Rehabilitation of the Southern railway line	✓		
3. International Ports			
Extension of oil jetty, Sihanoukville		✓	
Relocation of an existing workshop to a new location within the port area, Sihanoukville			✓
4. Inland Waterways			
Improvement of Phnom Penh and other main domestic ports		✓	

km = kilometer.

¹ Adopted; the project is either completed or being constructed.

² Not adopted but being considered.

³ Not adopted because no need, or expensive or impractical.

**TA 2416-CAM: DEVELOPING A PLANNING CAPABILITY IN
THE MINISTRY OF PUBLIC WORKS AND TRANSPORT:
RESULTS OF EVALUATION BY TRAINEES ON THE USEFULNESS OF THE COURSES
OFFERED WITH RESPECT TO CORE PLANNING TASKS**

	Task (a) Policy Development	Task (b) Traffic Forecast	Task (c) Investment Programs	Task (d) Annual Budgeting	Task (e) Database Development/ Maintenance
Math and Statistics	(0) 1, (0) 2, (0) 3	(1) 1, (2) 2, (2) 3	(3) 1, (1) 2, (0) 3	(2) 1, (1) 2, (0) 3	(0) 1, (2) 2, (3) 3
General Economics	(4) 1, (0) 2, (0) 3	(2) 1, (1) 2, (0) 3	(2) 1, (2) 2, (0) 3	(3) 1, (0) 2, (1) 3	(2) 1, (1) 2, (0) 3
Transport Sec. Management	(1) 1, (2) 2, (3) 3	(1) 1, (2) 2, (2) 3	(1) 1, (3) 2, (1) 3	(2) 1, (2) 2, (3) 3	(1) 1, (2) 2, (1) 3
Road Management	(1) 1, (2) 2, (0) 3	(1) 1, (2) 2, (2) 3	(1) 1, (3) 2, (0) 3	(2) 1, (1) 2, (1) 3	(0) 1, (3) 2, (2) 3
Transport Planning	(2) 1, (2) 2, (1) 3	(1) 1, (2) 2, (2) 3	(1) 1, (1) 2, (2) 3	(2) 1, (2) 2, (1) 3	(1) 1, (1) 2, (3) 3
Transport Economics I	(0) 1, (2) 2, (0) 3	(3) 1, (1) 2, (1) 3	(2) 1, (1) 2, (1) 3	(3) 1, (1) 2, (1) 3	(1) 1, (2) 2, (1) 3
Survey Techniques	(2) 1, (2) 2, (0) 3	(0) 3, (1) 2, (4) 3	(1) 1, (2) 2, (1) 3	(1) 1, (2) 2, (1) 3	(0) 1, (2) 2, (3) 3
Transport Policies I	(0) 1, (0) 2, (3) 3	(1) 1, (3) 2, (0) 3	(2) 1, (1) 3, (0) 3	(1) 1, (2) 2, (0) 3	(2) 1, (1) 2, (0) 3
Traffic Forecasts	(0) 1, (1) 2, (0) 3	(0) 1, (0) 2, (5) 3	(0) 1, (3) 2, (1) 3	(1) 1, (1) 2, (1) 3	(0) 1, (1) 2, (4) 3
Road Costing	(2) 1, (1) 2, (0) 3	(1) 1, (0) 2, (3) 3	(0) 1, (3) 2, (1) 3	(0) 1, (1) 2, (2) 3	(0) 1, (1) 2, (3) 3
Transport Economics II	(0) 1, (2) 2, (0) 3	(1) 1, (2) 2, (1) 3	(3) 1, (1) 2, (1) 3	(2) 1, (2) 2, (1) 3	(2) 1, (1) 2, (1) 3
Data Applications	(1) 1, (1) 2, (1) 3	(1) 1, (1) 2, (2) 3	(2) 1, (1) 2, (1) 3	(1) 1, (1) 2, (1) 3	(2) 1, (2) 2, (3) 3
Transport Policies II	(0) 1, (0) 2, (3) 3	(1) 1, (2) 2, (3) 3	(2) 1, (1) 2, (0) 3	(1) 1, (2) 2, (0) 3	(2) 1, (1) 2, (0) 3
Road Maintenance	(1) 1, (2) 2, (1) 3	(1) 1, (0) 2, (3) 3	(0) 1, (1) 2, (3) 3	(0) 1, (1) 2, (3) 3	(1) 2, (0) 2, (4) 3
HDM II	(1) 1, (2) 2, (0) 3	(1) 1, (1) 2, (1) 3	(0) 1, (2) 2, (1) 3	(1) 1, (1) 2, (1) 3	(0) 1, (3) 2, (1) 3
Transport Monitoring	(0) 1, (2) 1, (1) 2	(0) 1, (1) 2, (3) 1	(3) 1, (0) 2, (1) 3	(1) 1, (1) 2, (1) 3	(1) 1, (2) 2, (0) 3
Environmental Impact Assessment	(1) 1, (2) 2, (0) 3	(4) 1, (0) 2, (0) 3	(2) 1, (0) 2, (2) 3	(2) 1, (0) 2, (1) 3	(2) 1, (1) 2, (1) 3
Planning for Rural Roads	(1) 1, (1) 2, (1) 3	(1) 1, (2) 2, (0) 3	(3) 1, (1) 2, (0) 3	(3) 1, (1) 2, (1) 3	(2) 1, (2) 2, (1) 3

HDM = Highway Design and Maintenance.

1 = Somewhat Useful, 2 = Useful, 3 = Very Useful.

Note: Numbers in bold/() refer to the number of respondents who gave the assessments. A total of five respondents completed the survey.

**TA 1996-VIE: INSTITUTIONAL STRENGTHENING OF THE
MINISTRY OF TRANSPORT: RECOMMENDATIONS AND ADOPTIVE STATUS**

Recommendation	Yes¹	No²	No³
VRA takes a detailed study of information management needs over the next 5 years within the Road Administration	✓		
Delegate the signing of the driver license form to subordinate officials	✓		
Establish the Road Transport Department within the VRA as the focal point for driver and vehicle information collection	✓		
MOT, together with Ministry of Education, should take a review and analysis of the current curriculum for driving training	✓		
Abolish the mandatory driver training prior to take an exam to qualify for a driver license		✓	
MOT should privatize its driver training function		✓	
VRA continue close cooperation and exchange of information with the Traffic Police Bureau, Ministry of Interior	✓		
VRA continue the Motor Vehicle License Program as it is currently established	✓		
MOT and VRA should examine the possibilities of automated data capture of necessary information from both the Vehicle Registration Program and the Motor Vehicle Operating License Program	✓		
Maintain the current universal Vehicle Inspection Program		✓	
Privatize the vehicle inspection function			✓
No longer establish public enterprises whose only duty is to perform mandatory vehicle inspections			✓
License private qualifying repair stations to perform the inspections, set fees, while continuing to provide repair services			✓
License public qualifying repair stations to perform the inspections, set fees, while continuing to provide repair services			✓
Place no restrictions on vehicle owners in selecting inspection service stations	✓		
VRA should actively investigate and update the existing geometric design standards to reflect changes in vehicle size and weight		✓	
Develop geometric standards for intersection design			
Geometric design standards should be made based on the functional classification of roads			
Increase the authority of highway inspectors to stop vehicles and enforce weights and dimension legislation	✓		
Further refine vehicle loading and weight regulation to specify axle group weights, and introduce equipment at weight scales that is capable of weighing axle groups	✓		
Introduce portable scale enforcement units at key locations to add an element of unpredictability to the Heavy Vehicle Enforcement Program	✓		
Refine the procedure at weigh scales so that a cursory safety inspection may be performed as the vehicles stops for a weight check	✓		
Update manuals and educational materials to reflect recent changes in traffic control programming	✓		
Concentrate resources on improving the skills of the Traffic Safety Department	✓		
The Traffic Safety Department should coordinate with the Ministry of Education to produce quality public education materials with respect to road safety	✓		
Strengthen the capacity of the Traffic Safety Department	✓		
The Traffic Safety Department should receive adequate information to report to the Chairman of the VRA on the effectiveness of safety programs	✓		
A computerized traffic accident reporting system should be developed within VRA	✓		

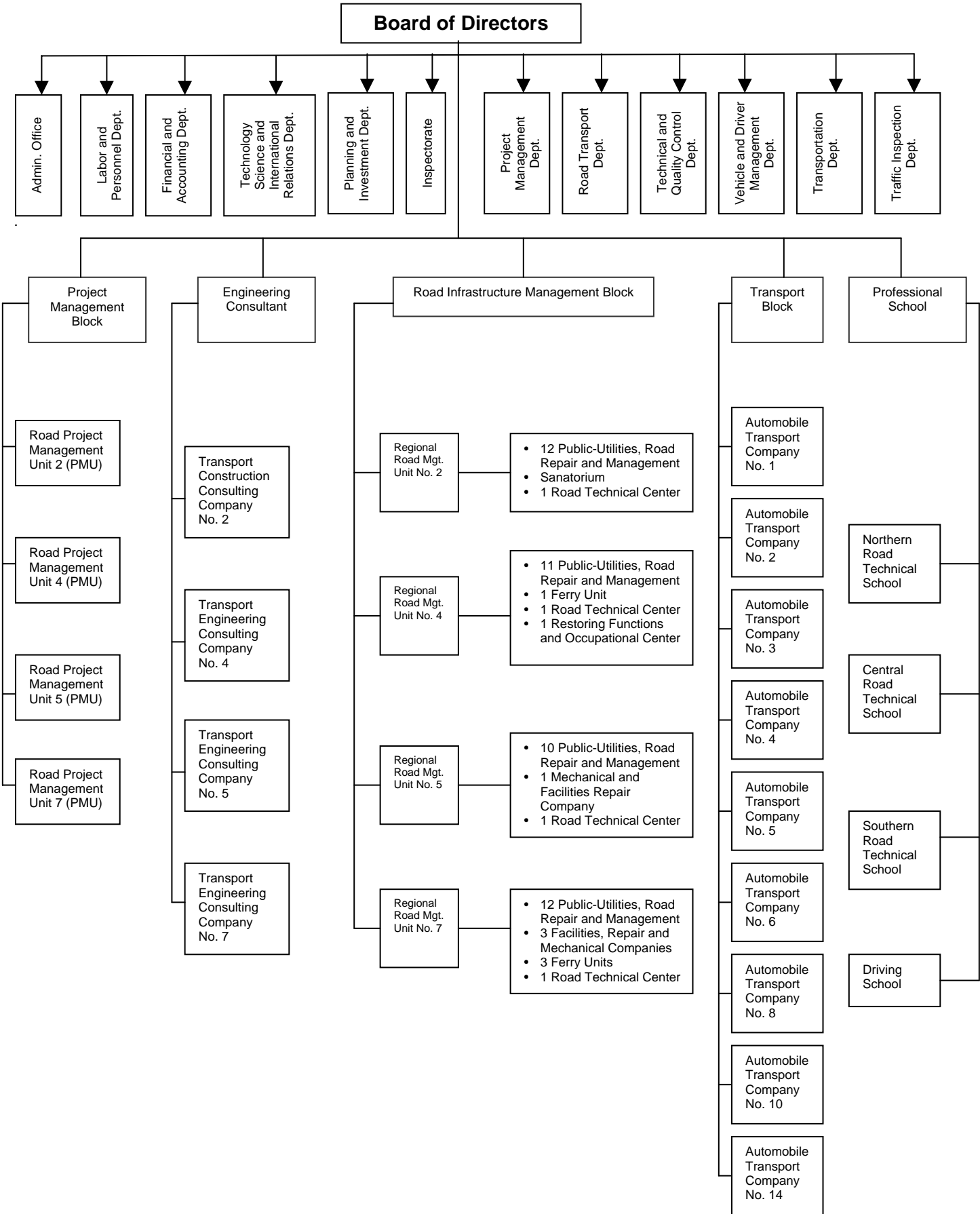
MOT = Ministry of Transport, VRA = Viet Nam Road Administration.

¹ Adopted.

² Not adopted but being considered.

³ Not adopted because not applicable, too expensive, or impractical.

ORGANIZATIONAL CHART: VIET NAM ROAD ADMINISTRATION (VRA), VIET NAM



ORGANIZATIONAL CHART: MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT), CAMBODIA

