

# Paving the Road for Better Capacity

June 2007

Professor Ken Gwilliams,  
Institute for Transport Studies, University of Leeds  
(Former World Bank Transport Economic Adviser)





# Paving the Road for Better Capacity

June 2007

This case study was made possible by a grant from the World Bank's OPCRX/HRSLB Results Knowledge and Learning Small Grants Program. The case-study was commissioned and overseen by William Rex, Lead Country Officer, World Bank Office Vientiane, and Richard Tobin, Manager, World Bank Institute Evaluation Group.

## ACRONYMS AND ABBREVIATIONS

AccPac	Computer accounting package
ADB	Asian Development Bank
APL	Adjustable program loan
CAS	Country Assistance Strategy
CRC	Community Road Committee
CRTF	Community Road Trust Fund
DCTPC	Department of Communication, Transport, Post, and Construction
DOT	Department of Roads
GOL	Government of the Lao People's Democratic Republic
JICA	Japan International Cooperation Agency
Lao PDR	Lao People's Democratic Republic
LSRSP	Lao-Swedish Road Sector Project
LTDP	Lao Transport Development Partnership
MPWT	Ministry of Public Works and Transportation
MMDD	Management-Manpower Development Division
NDF	Nordic Development Fund
NGPES	National Growth and Poverty Eradication Strategy
NSEDP	National Socio-Economic Development Plan
OCTPC	Office of Communication, Transport, Post, and Construction
PHRD	Japan Policy and Human Resources Development Fund
PIU	Project Implementation Unit
PMD	Project Management Division
PRoMMS	Provincial Road Maintenance Management System
PRF	Poverty Reduction Fund
RMF	Road Maintenance Fund
RMP	Road Maintenance Program
RMS	Road Management System
SED	Social and Environment Division, Department of Roads
SIDA	Swedish International Development Cooperation Agency
THIP	Third Highway Improvement Project

## CONTENTS

Introduction .....	4
National Strategy of the Lao PDR .....	5
The History of Road Sector Policy .....	9
The Road Sector's Capacity Development Strategy .....	14
Capacity Development and Aid Effectiveness .....	20
Conclusions .....	24
Persons Consulted .....	27
References .....	28

# INTRODUCTION

Development in the Lao People's Democratic Republic (Lao PDR) cannot be achieved solely by the best-intentioned development assistance or foreign investment. In addition to physical capital, development depends critically on institutional and human capacity to deliver desired policy outcomes. The core responsibility for creating that capacity rests with government, and many capacity-development activities can be implemented by governments using their own resources. The function of development assistance is to assist that locally generated activity by the provision of additional financial and technical resources.

The transport sector, and particularly the roads sector, appears, *prima facie*, to be a good model of what can be achieved through strong government ownership, donor alignment and harmonization with government policies, integration of project implementation arrangements, and sensible medium term investments in capacity development. This report examines the way in which the roads sector can contribute to national development objectives. To do so this report describes the nature of the achievements so far, identifies the forces that have motivated those achievements, and suggests lessons that may be applicable in other sectors and/or in other countries with similar development. Special attention is paid to the critical role of government leadership; the internal institutional arrangements that have facilitated progress; the nature and extent of harmonization of approaches by donors; and an assessment of the sustainability of the approach within the Ministry of Public Works and Transportation (MPWT).

# NATIONAL STRATEGY OF THE LAO PDR

## ■ The national development strategy

A national development strategy for Lao PDR was enunciated in the National Growth and Poverty Eradication Strategy (NGPES) in 2004. It identified capacity building as a key challenge and expressed the desire to develop an inventory of capacity-building initiatives; to identify and prioritize capacity-building requirements at all levels; to create a comprehensive capacity-building strategy based on these assessments; and to implement the strategy through an approach that ensures coordination among the various levels of the Government of the Lao PDR (GOL) and its development partners. The transport sector has an important role to play both as a major sector supporting development and potentially as a means to test strategies for accelerating development.

The GOL's strategy is operationalized in the National Socio-Economic Development Plan for 2006-10 (NSEDP). The plan, which was developed in a participatory and consultative manner, has four main pillars, namely (i) to move from underdevelopment to fast and stable development; (ii) to increase competitiveness and utilize comparative advantages to implement effectively international economic commitments in the frameworks of the Association of Southeast Asian Nations and other commitments including the World Trade Organization; (iii) to strengthen links between economic and social development and protect natural resources and the environment; and, (iv) to accelerate the building of a comprehensive socioeconomic infrastructure and finalize the establishment of a market-oriented economy with a socialist orientation to form the basis for industrialization and modernization.

The plan specifically refers to the need to maintain, improve, and develop Lao PDR's infrastructure to

create favorable conditions for development. The future performance of the roads sector is thus critical to achievement of the NSEDP's objectives.

## ■ Transport infrastructure needs

Achievement of the desired contribution of the transport sector to Lao PDR's national development objective is inherently difficult. The country is poor and has a low average population density of 23 persons per square km. Some 80 percent of the population lives in rural areas and agriculture presently is responsible for over 50 percent of the Gross National Product and 80 percent of employment. Road length per 1,000 people is 6.04 km, which is more than twice that in Cambodia and Vietnam. Vehicle ownership is low (7 vehicles per 1,000 people) and traffic volumes on the road network are similarly low. Only 11.7 percent of roads carry more than 1,000 vehicles per day. Nevertheless, Lao PDR is heavily dependent on road transport to support its development. The fact that 3,500 villages, nearly 40 percent of the total of 9,262 rural villages, still have no proper road access is a significant impediment to development.

### This situation leads to at least four problems.

- ▶ The primary road network of 7,000 km of roads and associated bridges will need extended capacity as incomes and activity increase. The MPWT's plan for the five-year period 2005-06 to 2009-10 implies an annual investment of about \$200 million compared with the current annual level of about \$60 million.
- ▶ The rural road network must be developed to access the primary network. The MPWT's draft *White Paper on Rural Transport*



Deteriorated road in Nakai, Khammouane Province

*Infrastructure* (Lao PDR 2007b) estimates that \$165 million will be required to complete the network considered necessary for economic accessibility. In addition, the *White Paper* estimates that a further \$50 million will be required to upgrade the 9,200 km of existing rural road – 81 percent of the total – to make them accessible throughout the year.

- ▶ The entire network must be properly maintained to ensure that the existing assets are not lost. Between \$30 and \$46 million will be required for the maintenance of the network, compared with the \$17.5 million that is presently committed to it.<sup>1</sup>
- ▶ Finally, there is the challenge of development

itself. As the Asian Development Bank (ADB) (2006) has observed, in countries with small economies, such as Lao PDR, “maintenance of the road system funded by general revenue will likely eat into the funding needed for other basic social requirements like education or health. Trying to maintain and develop a road system without the necessary economic base from which to support that system is doomed to failure. The roads will inevitably deteriorate and ultimately reconstruction will be needed, but no funds will be available for that reconstruction.”

Addressing these problems remains a major challenge in Lao PDR and yet also a major opportunity to reduce poverty. According to the MPWT’s analysis,

<sup>1</sup> Thirty million dollars, the lower limit estimated, represents about 2.1 percent of the estimated asset value of \$1,417 million (ADB 2006), while the \$46 million estimated by Bray (2006) is 3.2 percent. This range is not out of line with the standard of about 2.5 percent, which the ADB and European Union recommend (ADB 2006). However, the “economic burden” of the road network for the economy may be seen in terms of the ratio of the Asset Replacement Value of the road network to the country’s gross domestic product. For Lao PDR, this ratio is 51 percent, which is more than double the typical ratio of 20 to 25 percent.

based on the Lao Expenditure and Consumption Survey, 2002-03, households with all-year road access have 50 percent more spending power than those without road access, and even those with access only during the dry season have 33 percent more spending power than those with no road access. Warr's (2005) analysis of data from the consumption surveys in 1997-98 and 2002-03 concluded that about one-sixth of the reduction in rural poverty between the two surveys can be attributed to wet season road access. Furthermore, he estimates that providing all-weather road access to all rural households would reduce the incidence of rural poverty by about 7 percent, which is the equivalent of about 5.6 percent of Lao PDR's total population.

However desirable an improved rural road network may be for Lao PDR, "significant road improvement is generally not a form of investment that rural people can make for themselves. Public sector involvement is required" (Warr 2005). The following sections describe the nature and effect of this involvement.

## ■ The transport sector's development strategy

The MCPTC's strategy (Pholsena 2007) for the transport sector concentrates its attention on road infrastructure and has three main thrusts.

► **Investment mobilization.** Mobilizing the necessary resources for investment is a primary concern. The strategy identifies 36 projects in the national, provincial and rural networks, together with new bridges. Likely sources of funding are identified, including grants and loans, as well as the possibilities of mobilizing private finance through build-own-operate-transfer and turnkey arrangements.

► **Revenue enhancement.** The strategy is intended to improve and strengthen the organization of the sector to increase revenues, mainly through more efficient user charges. The increased emphasis on maintenance and

the establishment of the Road Maintenance Fund (RMF) is referred to as an achievement of the previous five-year period. A review of strategy on tolls has been undertaken and is now being considered by government.

► **Technology and Human Resource Development.** The strategy is intended to promote the use of advanced technology to manage the sector and to develop staff capabilities. The organization of the sector is to be improved at the national and local levels. A new emphasis is to be given to road safety through the establishment of a Council and Committee for Road Safety to be supported by a newly developed Road Traffic Safety Fund. In the context of emphasizing professional staff development, specific reference is made to the need to upgrade the Transport Research Institute to service the MCPTC's needs.

## ■ Delegated implementation

Road administration in Lao PDR depends heavily on a system of delegated, decentralized implementation developed over a period of years by MPWT working together with key development partners. Maintenance of the national road system as well as management of the implementation of investments in provincial and lower order roads is delegated to the provincial Departments of Communication, Transport, Post, and Construction (DCTPCs). Similarly, the DCTPCs delegate tasks to the district Offices of Communication, Transport, Post, and Construction (OCTPCs), which are headed by DCTPC staff. The World Bank's first Road Maintenance Project (RMP-1) supported that delegation in eight provinces, and the lessons learned from that experience are being applied nationwide in the project's second phase. While some functions are still retained centrally, the MPWT is now delegating further tasks to the provinces, including financial management and responsibility for signing contracts for civil works. Such delegation, which requires training, stimulates capacity development. Delegation creates an awareness of the need for training and provides incentives for officers and



Government and donor training in anti-corruption in the roads sector

operatives to improve their skills even at the lowest levels of the ministerial organization.

## ■ Community participation

The most ambitious delegation, proposed in the recent draft *White Paper* (Lao PDR 2007b), concerns community participation.<sup>2</sup> Several varieties of a community road model have been developed, with support from the ADB, Agence Française de Développement, Japan International Cooperation Agency (JICA), the Japan Social Development Fund, the International Labor Organization, and the Swedish International Development Cooperation Agency (SIDA). These models have involved village committees or units in responsibility for maintenance (and sometimes construction) of basic access routes, which may be simple paths or full-fledged roads. This approach is consistent with the “*kum ban*” concept developed under the NGPES as the local center for infrastructure and markets.

The draft *White Paper* proposes an extension of this approach, formally separating basic access, to be

identified as the class of community roads, from general access. The institutional arrangements proposed are relatively simple. Community road responsibilities would be delegated to Community Road Committees (CRC). Community roads would include all rural roads and unclassified paths and tracks linking a village to the main network and might also include district roads if the CRC desired. Consistent with the MCPTC’s approach to capacity development, delegation of responsibility to the communities would be unconditional. They would, however, be given incentives to create formal arrangements to participate in the scheme in the form of technical and financial support in performing their tasks. A new Community Road Trust Fund (CRTF) would be established to assist the communities with finance on a cost-sharing basis. The CRTF might receive its funds from the Poverty Reduction Fund (PRF), from the Road Maintenance Fund, and directly from donors. A preliminary phase in introduction of the system would concentrate on 47 priority districts, in compliance with the requirements of the NGPES.

<sup>2</sup> The *White Paper*, completed in March 2007, remains a draft and has not yet received formal government approval.

# THE HISTORY OF ROAD SECTOR POLICY

The history of road transport sector in Lao PDR is one of a progressive shift from the creation of physical infrastructure to the creation of the physical and human resource capacity to sustain that infrastructure.

## ■ Rehabilitating the primary network

At the end of the 1980s, as Nogales (2004) explains, much of the country's road network was in poor condition, and little attention was devoted to maintenance or rehabilitation. This situation changed in the first half of the 1990s, when the GOL directed about half of all public investment to the rehabilitation and improvement of roads. During the 1990s a series of investment projects rehabilitated about 3,000 km - about 45 percent - of the arterial road network. Many donors were involved. The ADB has completed 10 transport projects, mostly concerned with strategic roads in the Greater Mekong System or for access roads in poorer regions. SIDA is in its third project, and significant

investments have been made by development agencies from China, France, Germany, Japan, and the Netherlands. By the end of the twentieth century only 38 percent of the national road network was considered to be in good or fair condition and most provincial and district roads were impassable in the rainy season. Moreover, many of the roads that had been rehabilitated or reconstructed were deteriorating faster than expected.

There were several reasons for this situation. The major donor efforts were directed at rehabilitation and extension of the national road network and not at maintenance. Construction and maintenance work was undertaken inefficiently by personnel employed by the MPWT (often referred to as force account). Responsibilities for maintenance were unclear and largely unfunded. Periodic maintenance was poorly programmed and the bulk of the activity consisted of spot improvements and emergency works were undertaken by state-owned enterprises.



## ■ Shifting the focus: improving maintenance

The GOL decided in 1997: (i) to place greater emphasis on systematic maintenance of the core sustainable network in lieu of the continued expansion of the network and (ii) to introduce competitive bidding of periodic and routine maintenance works progressively. Attention was thus shifted to the preservation of roads, with priority for preserving the national roads rehabilitated during the previous decade.

Donors have strongly supported that decision. For example the World Bank's Third Highway Improvement Project (THIP), which became effective in September, 1997, established a dialogue between the World Bank and the government on maintenance and provided the basis for the creation of a sustainable framework for road maintenance. In addition to upgrading 200 km of national road and constructing a new link to bypass Savannakhet, THIP established a Road Maintenance Program including periodic maintenance of 600 km of high priority roads with a counterpart program of routine maintenance of 13,700 km of roads to be financed entirely by the government. All maintenance contracts were procured on the basis of cost-effective, competitive bidding procedures.

THIP also contained an institutional component to strengthen the MCPTC's capacity to prepare medium-term investment plans, and to better implement, account, and audit the roads program in the more competitive framework. An instructional program of English language was introduced, increasing the number of staff conversant with English from 15 people in 1997 to about 50 percent of the staff (70 people) by 2003. On-the-job training of local supervision staff took place from 1998 to 2002. Training was provided to the staff of the State Enterprise for Survey and Construction Material Laboratory. The Telecom and Communications Training Institute, Vientiane University College and the University of Laos trained managerial and engineering staffs. SIDA and the Nordic Development

Fund (NDF) cofunded training, construction supervision, and technical assistance.

Six important lessons emerged from this early experience: (i) good project design is fundamental to success; (ii) knowledge transfer begins at preparation; (iii) strong and committed leadership is essential to achieving outcomes; (iv) project implementation is best mainstreamed in the MPWT's core structure; (v) technical audits are an effective instrument for enhancing quality; and (vi) gradual introduction of competitive bidding can be highly successful. The MPWT documented this new approach in *Strategic Directions for the Development of the Road Sector* in June 2000.

## ■ Reforming project implementation

As dialogue between donors and government continued and understanding of the issues deepened, the GOL took an important decision. In 2000 it recognized that traditional project-specific project implementation units (PIUs) created parallel systems that distorted incentives because of the better facilities and working environment, were wasteful of scarce skills, and, by limiting spillover effects, undermined capacity development, coordination, harmonization, ownership and transparency. The government therefore replaced all PIUs with a single Project Management Division (PMD) within the Department of Roads to coordinate and monitor all donor-funded projects, while line functions were distributed to the divisions concerned. This step was critical in establishing a basis for effective use of technical assistance to develop capacity in the transport sector.

## ■ Reforming the financing of roads

The program of physical works and capacity development in THIP was accompanied by an institutional reform intended to put the new maintenance culture on a sustainable footing. The RMF was established in 2001, to be managed partly by representatives of major road users. The RMF's establishment thus introduced an element of transparency into road financing and was instrumental

in the introduction of longer term performance-based contracting for routine maintenance on parts of the national network. However, control over the program's composition and financial allocations remained with the minister or director of roads.<sup>3</sup>

The RMF collected its first revenues in February 2002, consisting of payment of fuel taxes collected by the provinces, revenue from road tolls, annual heavy vehicle fees, and fines for overloading. The target was for RMF to finance maintenance for all categories of road, throughout the country, by 2009 mainly through regular increases in the fuel tax. In practice the increase in the tax rate has fallen behind the original schedule, and tax rate is low by international standards in developing countries with such funds.<sup>4</sup> Moreover, most of the Fund's revenues are committed as the government's counterpart contribution to maintenance programs that SIDA and the World Bank finance (World Bank 2004). For the RMF to operate as originally intended and to act as an effective instrument to ensure adequate maintenance of the road network, it needs to secure an increased revenue flow. The RMF may also consider taking responsibility for quality control.

The fundamental problem is that the improvement in the average state of the roads in recent years has resulted from large amounts of development assistance for maintenance. Donors may not be willing to continue such assistance in the absence of

the GOL's willingness to maintain or improve the country's road network. Bray (2006) has calculated that an average annual expenditure of \$48 million will be required to sustain the road system after the backlog has been addressed, and that such a sum is likely to exceed available resources on current policies. The RMP-2 Project Appraisal Document estimated continuing needs at a lower figure of \$30 million but even this is not near to being funded by domestic finance by 2009. Consequently, the likely constrained program of maintenance, even if optimized in allocation, will result in deterioration of the road network beyond that which is desirable.

## ■ Focusing on capacity development

Several donors have supported the government's initiatives to maintain the country's roads. In mid-2001, as an illustration, the World Bank Road Maintenance Project was initiated in the form of an Adaptable Program Loan (APL).<sup>5</sup> The project was commenced in parallel with the second Lao-Swedish Road Sector Project (LSRSP-2), which involved Japan's Policy and Human Resources Development Fund (PHRD) for preparatory work, the World Bank (as the lead agency on policy development and financer of civil works on the national road network), the NDF (as cofinancer of civil works on the national road network), and SIDA (as financer of engineering and construction supervision services on local roads). The Danish aid agency, Danida, joined SIDA in funding some international training.

---

<sup>3</sup> For example, early in 2007 the Minister instructed the Fund to make 10 percent of its revenues available for road safety initiatives.

<sup>4</sup> In April 2004, the fuel levy was 40 kip per liter (International Labor Organization 2004) and had increased to 100 kip per liter in January 2005. To meet the anticipated needs for road maintenance funds from the RMF, the fuel tax may need to be as high as 365 kip per liter (or about \$0.037 per liter) (Nogales 2004; International Labor Organization 2004).

<sup>5</sup> Adaptable Program Loans provide phased support for long-term development programs. APIs involve agreement on (a) the phased long-term development program supported by the loan; (b) sector policies relevant to the phase being supported; and, (c) priorities for sector investment and recurrent expenditures. Progress in each phase of the program is reviewed and evaluated, and additional analysis undertaken as necessary, before the subsequent phase can be initiated.

Capacity development was the heart of the effort. Even in the road works component, financing of a program of maintenance on nearly 7,000 km of road was accompanied by technical assistance for preparation, design, supervision, and monitoring of works and the construction of 38 district offices. In a heavy transport management component, the project financed seven permanent axle load weight stations and associated equipment together with assistance to develop and implement the related regulations and policy reforms.

An institutional strengthening component was created in parallel with the works component. The former included the establishment of a Road Management System (RMS) for the road network; implementation of the new Road Maintenance Fund (discussed previously); technical assistance to improve project preparation, execution, and monitoring; support for a strategy to improve performance of the local contracting and consulting industry; and measures to foster the involvement of villages in the maintenance of local roads.

The outcomes of the first phase of the program were largely satisfactory. The targets for civil works for periodic and routine maintenance were exceeded due to the MPWT's high level of commitment and to the unexpected cost effectiveness of the competitive bidding arrangements for periodic maintenance contracts. Between 2001 and 2004 the network grew by 4.2 percent per annum and the proportion of the national and provincial road network in excellent condition had risen to 35 percent from 25 percent while the share of the roads in poor condition had fallen to 2 percent from 5 percent. By April, 2007, 67 percent of the national road network was in excellent or good condition. The necessary works for the heavy transport management program were also completed with the NDF's assistance. The Road Management System became operational in June 2004. The number of local contractors had increased, and a large amount of basic skills and technical training of MCPTC staff was accomplished. Only in a few areas were the program's targets not

met: the creation of an association of road users; the development of a strategy for strengthening the performance of the local contracting and consulting industry; technical assistance on project management and monitoring; and the advice in development of the road fund. In sum, it is clear that:

- the impact of RMP-1 on institutional development was substantial;
- the staff of MCPTC were enthusiastic to improve their skills further; and,
- the APL gave the World Bank and the GOL the structure within which to address the observed deficiencies.

Despite this successful outcome, progress in improving the condition of the local road network was slow. Only 15 percent of the provincial road network was in excellent or good condition by April 2007. Moreover, capacity development had not gone deep enough to be considered effectively sustainable by the donors. While the necessary road maintenance management systems had been put in place the capability to exploit their potential has been moderate. For example, DCTPCs are now capable of preparing an annual work plan- using PROMMS as a planning tool, taking data collected from the field, procuring maintenance contracts, supervising road works, and managing financial account. However, the World Bank (2004) reported that there was little in-house capability at the Department of Roads (DOR), or by local experts, for preparation of future works programs. Similarly the quality of maintenance works was in some cases below the expected standard.

The second phase of the Road Maintenance Program (RMP-2) was expected to be the phase for operation and expansion of road maintenance management systems that had been initiated and developed in the first phase. The emphasis of the works component of RMP-2 was therefore shifted towards local roads, with 24 percent of the funding to

go to provincial roads and 44 percent to local roads. Given that the APL triggers had been met, Phase 2 became effective in September 2004. Moreover, the program of capacity development was to be further extended.

### ■ The focus on poverty alleviation

The most recent thrust in donor collaboration with government in transport in Lao PDR is an emphasis on poverty reduction, particularly in rural areas.

The *White Paper* (Lao PDR 2007b) addresses the funding of community roads and their maintenance. By passing the formal responsibility of the designated roads to the communities, the *White Paper* implicitly passed the costs of these activities to subnational levels of government and their communities. The paper does indicate, however, that technical assistance and training might be obtained through the district offices and suggests the creation of a Community Roads Trust Fund, which might give some financial support on a matching basis. The *White Paper* is not explicit about where this trust fund will acquire its resources, though both the Road Maintenance Fund and the Poverty Reduction Fund (PRF) are mentioned. Neither are likely sources of funding. As noted earlier, the RMF is struggling to obtain funds to cover the routine maintenance of the classified network. The PRF make grants to villagers for individual projects, over a range of types of infrastructure. The PRF is unlikely to be able to make any general transfer to another centralized fund, even one created exclusively for infrastructure in rural villages. Nonetheless, there is a considerable commonality of interest here to suggest that the capacity-development efforts in the transport sector and those of the PRF and other funds enabling communities to develop their facilities should be coordinated by the donors to avoid wasteful duplication of effort.

# THE ROAD SECTOR'S CAPACITY DEVELOPMENT STRATEGY

The World Bank's Country Assistance Strategy (CAS) for Lao PDR argues that "achieving specific, measurable results requires attention not only to appropriate skills, but to incentive systems, organizational processes and institutions. This implies a broad country-led approach to capacity development going beyond the transfer of skills to an endogenous process of strengthening institutional and management arrangements and systems" (World Bank 2005c). Having made that general observation, the CAS identifies the road sector as one that has made significant progress in the right direction. The purpose of this section is to identify a number of elements that have contributed to the achievement of effective capacity in the road sector.

## ■ A systematic approach to capacity development

Many donors have included technical assistance in their projects as their contribution capacity development, but they have often expressed concern about the effectiveness of that effort. For example, the ADB evaluated its capacity-development assistance over its entire portfolio in Lao PDR in 2004. The evaluation concluded that "Capacity development objectives were not well articulated, and anticipated outcomes were not stated in terms that would allow focusing assistance and measuring outcomes. Implementation plans focused on project inputs, i.e. training and consultants, rather than on organizational changes that could be sustained. Implementation suffered from (i) lack of staff and resources; (ii) a mechanistic adoption of new systems without an understanding of their purpose; and (iii) a common practice of capacity substitution, where resources [for capacity development] were used in place of local ones, in the absence of which capacities cannot be developed or sustained" (ADB 2004). The report further concluded that increased attention would need to be given to the framework for capacity development, looking at

the fundamental issue of public sector management, including human resource development.

The experience of the road sector is a striking counterpoint to this general criticism. Capacity development in the MPWT has been approached in a systematic way, identifying three levels of capacity development, namely:

► **Institutional**, which concerns the incentives, norms, laws, rules or policies that enable organizations and individuals to achieve development results. This has included clarification of the roles of agencies within the GOL as well as reforming the role of the private sector as maintenance contractors, technical consultants, and trainers.

► **Organizational**, which concerns the process and systems enabling task-oriented organizations to manage resources, perform functions, and achieve and sustain outcomes. This level has included activities to enhance the capabilities of contractors, consultants, and training institutions as well as those of the various levels of administration in the MPWT.

► **Individual**, which concerns targeted skills and the knowledge necessary for individuals to perform functions. This level has included not only the traditional skills in financial management, project administration and technical implementation but also the development of new awareness of issues in occupational health and environmental sustainability at construction worksites as well as within the MPWT.

## ■ Creating an institutional basis for capacity development

A critical initial step was institutional change. In 2000 a Project Monitoring Division was established as a permanent unit in MPWT. This immediately replaced the traditional, project specific, PIUs in the Department of Roads and took over the PIUs' functions of monitoring contracts and disbursements for all donor-funded projects. Traditionally each project had its own PIU, served by an international consultant working with assigned ministry staff. This institutional rearrangement eliminated the special conditions attached to both expatriate and local PIU staff, which frequently acted as a barrier to transfer of knowledge between those involved with donor-funded projects and other local staff. The establishment of PMD was also a spur to harmonization among donors of procedures for financial management, procurement, reporting, and monitoring. For example, there is a unified accounting system and a single audit for the agencies involved in road maintenance. This step has given a new sense of government ownership of these processes and obviated the employment of foreign consultants as project management became mainstreamed into MPWT.

The expectation was that the PMD would be the entry point to the ministry for all sectorally related donor projects and that it would serve as a liaison between the donors and the relevant implementing departments of the ministry. There would be no specially formed PIUs and hence no need for project-specific consultants. The relevant skills – in financial management, procurement, contracting, etc – would be developed throughout the implementing departments and would be applied to locally as well as to donor-financed projects. To facilitate the change

and assist the development of the PMD's functions, an international consultant was supported, but this role is now the responsibility of a local consultant. To assist the mainstreaming of implementation, donors also financed other consultants, for example in the Department of Transport and in the Planning and Technical Division and the DOR's Social and Environment Division (SED).

For this type of reform to succeed a number of supporting conditions must be met. First, the PMD must be adequately staffed. In MPWT the initial appointments in the PMD were good, but it is equally important that the quality of this cadre be maintained over time.<sup>6</sup> Second, the PMD must be adequately funded. Given the pervasive shortage of funds within the MPWT, some of the operating costs of the implementing units have been met by donor funding in the transitional period. To support fundamental reforms, donors must view this type of interim arrangement sympathetically. Third, it is critical not to lose sight of the underlying philosophy of the reform – to mainstream implementation skills. There is an understandable tendency for the PMD to attempt to extend its functions by taking over functions such as procurement and contracting on donor-funded projects. This must be resisted to avoid the creation of a “super-PIU,” which would undermine the mainstreaming and capacity-development effort.

The PMD's creation was not the only element of institutional development. A Management-Manpower Development Division (MMDD) was also established in the Department of Personnel in the MPWT to be responsible for preparing, implementing, monitoring and evaluating its capacity-building plan.

---

<sup>6</sup> The PMD is the entry point to the MPWT for all donors, so it is inevitable that any of its failings could have wide-ranging impacts. Such risks may be mitigated by the fact that the structural arrangement provides for donors to remain in contact with the relevant implementing units.

MMDD has prepared and delivered the training and development activities for the staff of the MPWT and DCTPCs and districts in road and transport in accordance with the Master Plan for Human Resource Development of the MPWT from 2006-10. A formal analysis has been completed of the capacity-building efforts of the staff of the MPWT and DCTPC's implementation of the financial management system in the 17 provinces nationwide under LSRSP-3 and RMP-2 to end of the fiscal year 2005-06. In addition, the capacity building of the Basic Access Component, under LSRSP-3 has been developed and assessed regularly through quarterly reports prepared by the DOR's Local Road Division.

## ■ The capacity development plan

The World Bank Institute helped to design a process to prioritize and monitor critical capacity issues, and a consultant identified training needs and prepared a three-year rolling plan to meet these needs. In

discussions of the preliminary assessment in 2004 and 2005, there was general agreement about the need for skills upgrading and training over a broad canvas.<sup>7</sup>

The approach to skills development has been comprehensive, ranging from English training courses at different levels, through general management skill training, on-the-job training technical training, workshops and seminars, and long-term training in country, to study visits, short-term training and long life education overseas. The program has been directed not only at central staff but also at provincial staff, with the proportions from different units depending on the perceived needs, as shown in table 1. It is noteworthy that as planning is largely a central function the language and management training is focused (though not exclusively) on central staff. Higher level training, whether abroad or in-country has been primarily for central staff.

**Table 1. Training activities undertaken by the World Bank's Road Maintenance Program (2002-07)**

Training activity	Total participants	MPWT	Provinces
English language	151	108	43
General management	301	254	47
Technical courses	357	13	344
Technical workshops	651	34	617
Long-term higher level	13	11	2
Short-term higher level	12	12	0
Study tours abroad	21	18	3

<sup>7</sup> The consultants identified training needs in the following areas:

- General knowledge, including definitions and implications of a “market economy” in relation to the road transport sector (i.e. benefits of competitive transport services, managing roads as a business, business areas of the MPWT, MPWT and its service relationship with its customers (road users);
- English language;

To test the appropriateness of the training program, the MMDD conducted a survey of job descriptions and skills from October 2006 to January 2007. The survey concluded that, while the majority of the job positions matched their qualifications, the matching was more successful at the central level. The assessment therefore suggested that more training, including technical, managerial, and administrative, should be provided for districts and village staff because the majority of activities implemented need to be decentralized to the districts and village levels. In particular, provincial staff confirmed their need for refresher courses, mainly on technical topics such as routine maintenance, finance and accounting, procurement, village participation, and other general courses like English, administration and management, and computers. A further comprehensive systematic assessment process was conducted during May and June 2007 using a form of capacity rating at individual and organizational levels.

MPWT is not the only ministry to have designed a training strategy. It appears to be unique, however, in having actually implemented an action plan thoroughly. It has been supported in this by several donors – most notably SIDA, JICA, and the World Bank – who have helped develop an approach customized to Lao PDR's needs and aspirations. So far, however, these have been parallel but separate exercises concentrating on different points of influence

(World Bank at MPWT and DCTPC level, SIDA at more local levels, etc), though it is hoped to move to an agreed sectorwide support for capacity development in the future. The clearest distinguishing feature of the MPWT experience is the high degree of commitment that it has shown, at the highest level, to the implementation of a strategy. Strong ministerial leadership has been particularly crucial.

## ■ The significance of donor harmonization

Harmonization of donor projects is important for several reasons. First, it economizes on scarce staff skills and training. Second, it facilitates the concentration of project management in a single division, using in-house staff rather than a series of "one-off" international consultancies. Third, harmonization supports the ministry's philosophy of allocating responsibilities and then supporting and training staff "on-the-job." Finally, it makes it easier for local training and consulting institutions to be directly involved in the dissemination of process skills.

How quickly complete internalized harmonization of process can be expected is a matter of judgment. For example, competency in financial management in Lao PDR is weak. Good accountants are still mostly foreign trained. There is a need to review if adequate training skill in either the National Organization for

- 
- Computer applications and information and communications technology;
  - Administrative management (relating to upgraded systems and procedures, and including information and records management);
  - Personnel management (including staff records, skills development, performance appraisals, career development, succession planning, motivational strategies);
  - Planning (all aspects, including setting targets, quantifiable performance indicators);
  - Contracts administration and management;
  - Construction and maintenance management and supervision;
  - Procurement of goods and services;
  - Project management, monitoring, and evaluation; and
  - Financial management and accounting.
  - Transport management
  - Environment practice in road maintenance and construction

the Study of Politics and Administration or the National University of Lao in financial management, and it might take two or three years for the establishment of a financial management system adequate to support a sectorwide approach. The importance of the initial step by MPWT was recognized and quoted as a “great example of best practice” in the memorandum of understanding between the government, ADB, SIDA, and the World Bank arising from the *Joint Portfolio Effectiveness Review* (Lao PDR 2005a).

In connection with this institutionalization of capacity development, there is a shared desire to harmonize all training activities whatever their source of funding. So far this has been applied only to training funded in association with World Bank and SIDA projects, including funding from the NDF and Japan’s PHRD. The goal is to integrate training from other agencies such as the ADB in the future. MMDD manages all general training topics (e.g., English, computer training, administration and management, and other general courses) while technical courses are managed by the technical department concerned. MMDD and by the Personnel and Administration Division of the Department of Roads provide oversight of the latter training.

## ■ Providing the tools

Capacity development has been seen not only as a matter of developing the institutional and human resource skills but also as a matter of providing the hardware and software tools with which trained personnel can work. For example, in the matter of hardware, RMP-2 has supported decentralization of responsibility for road maintenance by financing office buildings and equipment for DCTPCs and OCTPCs. Likewise, several donors have financed the computing equipment necessary to operate modern management systems.

Software development has been even

more critical. The World Bank has financed technical assistance that has enabled a complete RMS to be installed for planning and prioritizing maintenance activities on the national road network. For local roads, SIDA has similarly financed a simple provincial road maintenance management system (PRoMMS). Even though the financial management system had been introduced, implemented, and assessed in various DCTPCs, it was suggested that the computer accounting package (AccPac) and RMS system needed to be upgraded to utilize their usefulness.

Although experience with these developments has not been without problems, it is clear that the provision of the tools has fostered a culture in which staff appreciate the need to monitor road conditions to better allocate funds available for road maintenance and rehabilitation. And they have been developing the skills to implement that culture. Swedish-financed consultants have been engaged continuously over a long period and have undertaken substantial training in both procedures and implementation of local road maintenance. This effort cascades down through provincial staff trained by the consultants giving training to district staff.



Local team rehabilitating a road, one of the implementing works of Road Maintenance Project Phase 2 (RMP2)



H.E. Sommad Pholsena (right hand), Minister of Public Works and Transport, was key to implementing the reforms in the Ministry

### ■ Supporting devolved responsibility

As mentioned earlier, the administration of the road sector in Lao PDR is increasingly decentralized, with both provincial and district offices playing an important role in maintenance of the national and provincial roads. This delegation of responsibility for implementation of the maintenance program to the provincial level has been reflected in capacity-development activities. The technical training shown in table 1 has focused primarily on provincial staff as it is with the DCTPCs that have primary responsibility for implementation. This has required a cascading down of knowledge and skills. This explains the emphasis on workshops, often held in the provinces, which embody a “learning-by-doing” approach. Based on decentralization of road maintenance in seven pilot provinces in the first phase of the Road Maintenance Project, the second phase is developing a comprehensive human resource strategy to standardize skills and processes for decentralization in all provinces.

The proposal to move to increase community participation in rural road strategy also has substantial implications for capacity development. The *White Paper* (Lao PDR 2007b) states that the MPWT will be obliged to identify personnel in its district offices to be responsible for managing and implementing a support program at the village level, including various types of rolling courses, provided at the district level,

appropriate to the new mechanism. SIDA is expected to assist in the establishment of such arrangements.

### ■ Leadership and commitment

Most reforms succeed only when they have an influential champion. In Lao PDR’s transport sector, the role played by the Minister Sommad Pholsena cannot be underestimated. He has been the one constant factor in the sector over a period of a decade, first as director of roads, then as vice minister, and presently as minister. He was responsible for the RMF’s creation and the decision to abolish PIUs and channel all aid projects through a central line department, consistently showing a challenging skepticism of the usefulness of international consultants in project preparation. He has been a strong advocate of decentralized administration of road maintenance, increasingly outsourcing maintenance to private sector contractors, and promoting local responsibility for community roads.

The counterpart to the government commitment has been a strong supporting commitment from the donors, in particular a consistent long-term commitment to the policies emerging from the partnership dialogue on knowledge sharing and human resource development. That has been assisted by a considerable degree of stability in the composition of donors’ teams involved with the MPWT.

# CAPACITY DEVELOPMENT AND AID EFFECTIVENESS

Effective approaches to capacity development and increased aid effectiveness are mutually reinforcing: increasing government capacity increases its ability to manage aid productively, while increasing harmonization and alignment reduce the wasteful burden on scarce government capacity. In practice, however, donors' effectiveness in helping to develop capacity has often been limited as a consequence of the failure to mainstream capacity development within donor activities.

## ■ The Vientiane Declaration on Aid Effectiveness

The formal locus of donor collaboration in Lao PDR is the Vientiane Declaration, which is a counterpart of the Paris Declaration on Aid Effectiveness of March 2005. The declaration is based on the principle that the government exercises effective leadership over development policies and strategies and coordinates development actions. Similarly, partners are expected

to align their interventions with these strategies and are thus more harmonized, transparent, and collectively effective. Government and partners work together to strengthen the government's capacity for results-based management. The Vientiane Declaration embodies some of the lessons of the transport sector already discussed, notably the mainlining of technical assistance through the abolition of PIUs and the need for process harmonization between donors and government.

Accompanying the Declaration is an Action Plan. Transport is identified as a sector in which there is already an articulated development strategy and in which a capacity development framework is being developed and will be finalized by the end of 2008. As described above, many of the actions that are deemed appropriate for the key sectors have already been piloted in the transport sector, thus reinforcing the idea that Lao PDR's transport sector offers valuable lessons for other sectors.



## ■ Achievements in the transport sector

The transport sector has already made significant progress across several elements of the Vientiane Declaration. A Sector Working Group has been established to enhance coordination between MCTCP and the development partners working in the area. The outputs from this group have been slow and of variable success. Prior to that, however, the strongest formal step was the creation of a Lao Transport Development Partnership (LTDP) to work for better collaboration in capacity building on a sectorwide approach. The aide mémoire for the RMP2 supervision mission (World Bank 2005d) included a note on donor collaboration on capacity development. The note distinguished between overall harmonization – or streamlining and coordination of interventions within the transport sector and a specific and separate focus on building national capacity through a coordinated approach. A timetable of activities was suggested with responsibility for actions assigned between the partners. A series of multidonor workshops organized by MPWT have addressed specific issues but do not appear to have concluded with any practical commitment to enhanced collaboration.

In May, 2006, MPWT, ADB, SIDA, and the World Bank proposed a memorandum of understanding, “Donor Harmonization in the Transport Sector, Coordination Framework Agreement,” and agreed to coordinate their activities as the LTDP. The memorandum states that the Framework Agreement shall contain at a minimum the following areas of coordination: national road transport policy; rural transport infrastructure policy; road safety; transport regulatory framework; governance and anticorruption; HIV/AIDS prevention; capacity development in each area; and organizational effectiveness and business modernization, including planning process, financial management, auditing and accounting, procurement and bidding processes, environmental and social safeguards processes, and project management.

## ■ Alignment and harmonization

Two distinct aspects of collaborative activity arise

from the Vientiane Declaration. The first concerns the *alignment of donor activities* in development and support of the national transport strategy. That does not necessarily imply that all donors would contribute to all aspects of the national strategy. For example, within the LTDP, the ADB is the dominant contributor to the rehabilitation of primary road network and extension; the World Bank is primarily concerned with supporting the government’s maintenance initiatives; and SIDA is primarily concerned with improvement and maintenance of the local road network. Attempts are being made to exploit the synergies between SIDA’s and the World Bank’s current activities. The collaboration between them and ADB (and more so the relationships with the other donor and lending agencies, such as the Japanese, Dutch, and Chinese, who are contributing to network rehabilitation or expansion) is still limited. But any extension of that alignment effort is almost certainly dependent on the development of a clear national transport strategy to which the donors can subscribe. The recent efforts to articulate a policy for community participation in rural transport may prove to be a strong catalyst for alignment of donor support in this field.

The second area of potential concerns the *harmonization of process*, which the MPWT strongly encourages. This is where much of the effort of the harmonization workshops has so far focused. Significant progress has already been made in aligning financial management and procurement processes as well as reporting and monitoring. For example, DOR, ADB, and the World Bank agreed to accept the recommendations proposed under LSRSP-1 to meet the long-term objective of establishing a uniform financial and accounting system that includes all sources of funding and consolidates DCTPC accounts within MPWT. The ADB (1999) assisted this development under its Rural Access Roads Project and a technical assistance project to assist the GOL in strengthening accounting systems in the Ministry of Finance and some line ministries.

MPWT attempted to establish a harmonized safeguard procedure in line with country laws and acceptable

to ADB, SIDA, and the World Bank requirements. During the implementation of RMP-2 key safeguard policy frameworks and/or technical guidelines were put in place at the beginning of the project. Training on the safeguard screening and monitoring was provided at central and DCTPC levels during 2005-06 with SIDA's technical assistance. Effective implementation of safeguards is constrained by the government's limited budget and the weak technical and management capacity of staff at the local level, because implementation is taking place in a decentralized manner. The capacity of the Environment and Social Department to assist the subproject owners during the preparation and implementation requires further improvement. Similarly, the capacity of DCTPCs to assess, supervise, and monitor safeguards on the ground needs strengthening. Capacity, willingness, and/or awareness of other divisions, units, agencies on their responsibilities related to safeguards are sometimes inadequate so that further clarification of roles and responsibilities of the concerned divisions, units, and agencies with respect to safeguard implementation appear necessary.

High-level government commitment is also crucial. The implementation of the five year Public Expenditure Management Strengthening Program under the Ministry of Finance and the Prime Minister's Office has stimulated improved financial management throughout the central government, as has the establishment of a new Government Financial Information System in all ministries and most provinces.

While the effects of the partnership have so far been limited, they have been significant. SIDA and the World Bank have worked together effectively in designing and implementing the road maintenance initiatives of RMP-2 and LSRSP-3. This has included synchronization of missions and acceptance of common procurement rules. But even then there have been limitations, with SIDA accepting the GOL's procedures on economic and social safeguards while the World Bank does not. The path is not smooth even for such willing partners as SIDA and the World Bank. There is a similar joint activity to develop an

action plan on road safety involving the NDF, ADB, and SIDA. Nevertheless, the general model for collaboration clearly needs further elaboration to broaden the scope of joint discussions and hence attract the more active participation of all donors.

Government initiative is critical to such collaboration. So far it has tended to develop best where an individual director is trying to launch an activity requiring inputs from several donors. A current example is the effort SED's director is making to harmonize donors' approaches on social and environmental safeguards. SED has drafted a schedule for harmonization and is preparing a work plan and defining roles and responsibilities for implementation. The success of this initiative in a difficult field is yet to be seen, but the effort highlights the needs for the development of guidelines for the development of the activity and the establishment of effective secretariat arrangements.

There is a strong willingness from the Ministry and Development Partners to move forward in the harmonization agenda. This motivation was reflected in the last harmonization workshop in April 2007 by the chairmanship of the Minister and attendance of all key partners. SIDA has agreed to assist the MPWT harmonization secretariat in the preparation of the forthcoming harmonization workshop by translating the actions agreed in the Vientiane Declaration and Action Plan on Aid Effectiveness into the transport context.

## ■ Next steps

Although donors maintain extensive dialogue both with the GOL and among themselves, and tend to identify areas of special interest to themselves (SIDA in community roads, the World Bank in road maintenance, ADB in the Greater Mekong System and road safety), there is need for a clearly defined prioritization and balance within the overall program. The harmonization workshops that the MPWT has organized have shown important commitment but tended to be weak in terms of operational commitment. Additionally, the partnership that the LTDP represents is still limited in membership and

scope. What would seem to be required is a concerted effort to bring together all the major donors in a forum in which they can have meaningful discussions with government on major strategic issues. Such a forum would make sense only if it was driven and chaired by MPWT. That does not preclude a secretariat function being offered by one of the donors (as is the case in SIDA's contribution to harmonization efforts and that of the Japanese secretariat in the Transport Partnership Group in Vietnam)

The ultimate objective of collaboration may be seen as a sectorwide approach in which the government formulates a strategy and operational plan for the sector and in which all donors agree to support financially, using harmonized procedures for prioritization, procurement, financial management, and environmental and social safeguards. The advantages of such an arrangement to government are clear as they increase the scope for strategic direction of the sector while reducing the costs of doing business. Graduating to such a situation, which appears to have been the long held aspiration of the present minister, imposes two main requirements, however.

First, there must be a well-articulated *government strategy*, including a clearly prioritized program of supporting actions. While the sector strategies have so far fallen short of this, some of the tools for formulating a plan – for example, the RMS – are in place. In the transport sector it is now a matter of learning how to use the information the systems are capable of yielding in supporting strategic planning. The donors can help in this but it must be a government-owned strategy. Without government ownership, donors may simply see a sectorwide approach as a dilution of their ability to ensure their funds are being well used. With strong government commitment the countries and multilateral agencies that invest most heavily, notably China, Japan, and the ADB, can feel assured that projects which their funding is being used for are of the highest priority to the country and are going to receive the necessary support.

Second, MCTCP must have the capability to introduce and implement *processes* that it owns yet which are capable of attracting donors' confidence. This includes strengthening and harmonization of processes for financial management, procurement, project management, monitoring and evaluation, and social and environmental safeguards. Again, the government will need to take the initiative to achieve that harmonization so donors can align to them. The capacity-development efforts so far have gone a considerable way towards achieving that confidence. But there is still some way to go, and capacity-development efforts might now be focused in terms of meeting the conditions for a sectorwide approach to funding to be put in place.

# CONCLUSIONS

## ■ Successes achieved to date

The road system in Lao PDR has improved dramatically over the last decade. In particular,

- ▶ The road network has been expanded at about 4 percent per annum.
- ▶ The average condition of the road network improved substantially with two-thirds of the national road network now in good or excellent condition.

Improved outcomes in the physical condition of the road network have resulted partly from the injection of funding into the sector, for new construction, for rehabilitation and for periodic and routine maintenance. These good outcomes have also depended critically on the institutional, organizational, and individual capacity development that has occurred over the decade.

*Institutionally*, the critical developments have been:

- ▶ Recognition of the need for adequate funding of road maintenance and the establishment of a Road Maintenance Fund;
- ▶ Dramatic revision of the project management institutions to replace separate project-based units by the Project Management Division;
- ▶ Delegation of responsibility for road maintenance and management, which has revitalized local skills and commitment, and which is being progressively extended;
- ▶ Concern for personnel development, which has been institutionalized by the creation of a specialized development function within the MPWT; and,



Renewed LanXang Avenue, Vientiane Capital

- ▶ Extensive use of local contractors and consultants.

**Organizationally**, capabilities have been improved in several ways:

- ▶ Data are now systematically collected on the state of the road network at all levels;
- ▶ Systems are in place to prioritize expenditures on roads at the national and subnational level;
- ▶ Considerable donor coordination has been achieved, and project processes have been simplified and harmonized; and,
- ▶ Capacity development is approached systematically.

**Human resource development**, necessary to make the institutional and organizational development work, has had many components:

- ▶ Basic skills, for example in language and computing, have been improved substantially at all levels in the MPWT;
- ▶ Management skills, particularly in financial management, have been improved at central and provincial levels;
- ▶ Technical skills have been improved by training programs directed particularly to the DCTPC staff;
- ▶ Skills have been cascaded down through the processes of “learning by doing” and “training trainers”; and,
- ▶ Training support has been extended to external contractors.

Although there is much still to be done, it is clear that the capacity of the road sector in Lao PDR has been

much improved during the last decade starting from a situation in which neither funding, skills, nor understanding were adequate for the task.

## ■ Challenges to be addressed

Lao PDR remains poor and highly dependent on foreign assistance, so there are many challenges in need of continued attention.

▶ **Maintenance finance.** Despite the emphasis given to maintenance in recent years, including the mobilization of donor funding for periodic maintenance and the establishment of a Road Maintenance Fund, the basis for maintaining the asset is still weak. The ostensible aim of making the country able to maintain its road assets adequately by 2010 is unlikely to be met with current policies, at least in part because the relatively small increases necessary in the fuel tax to achieve that are not proving politically acceptable. Maintaining the assets will require continued support from the donor community and a new resolve from the GOL to increase self financing.

▶ **Donor collaboration** is still limited. The Memorandum of Understanding on collaboration effectively links the GOL only with ADB, SIDA, and the World Bank. Furthermore, while the range of issues identified as part of the Comprehensive Framework Agreement is extensive, much of that agenda needs reviewing. However, the country-wide commitments around the Vientiane Declaration and the high level presence on the April 2007 transport harmonization workshop are indicative of the willingness of MPWT and DPs in moving forward on this issue.

▶ **Sector reform** has been addressed only to a limited extent, mostly in the freight sector. Overloading has been the subject of both physical and regulatory reform, with weigh

stations funded through projects and maximum weight regulation and obligations to subject to weighing undertaken by government. Entry to the market and regulation of the passenger transport sector has not yet been addressed.

## ■ Lessons of the sector experience

Some of the lessons learned in the transport sector over the last decade, which explain the improvements in human skill and organizational capacity in the transport sector, are as follows:

- ▶ For an effective capacity-development effort to be launched, capacity development needs to be recognized as a major component at the sectoral level and a major priority of those responsible for the sector, particularly the current minister. Leadership is essential.
  - ▶ Ownership of the capacity-development effort needs to be internalized in the local institutions by appropriate recognition and incentives. This technical assistance is best directed through a single Project Management Department rather than through project-specific PIUs.
  - ▶ Devolution of responsibilities to province and district levels creates an awareness of the needs for training and stimulates staff to seek training even at the lowest levels of an organization.
  - ▶ The personnel function must be given high status and adequately staffed, and a formal capacity-development strategy is required at the sector level.
  - ▶ This strategy must be comprehensive, in terms of the human resource skills addressed, covering basic skills as well as management and technical competencies.
  - ▶ The training strategy must be inclusive,
- ▶ Training programs should be based on thorough reviewing of personal, organizational, and institutional needs and subject to ex-post appraisal of their effectiveness.
  - ▶ Donor assistance in capacity development has the greatest leverage, and is likely to be most effective, when it is embodied as a major component of a broader development activity, rather than in a free-standing capacity development project.
  - ▶ A degree of stability in the composition of donor teams is important to the creation of confidence in government to work together with donors on a longer term capacity development effort.
  - ▶ Program-based assistance, because it has a longer time scale, and can contain triggers related to capacity-development efforts, is a more appropriate vehicle for capacity development than traditional project loans.
  - ▶ Donor assistance is also likely to be more effective if it can be arranged as collaboration between government and several donors. While government must ultimately lead the effort, donors should be pro-active in establishing and supporting the institutions of collaboration.
  - ▶ Careful attention needs to be paid to the arrangements for the “training of trainers,” which can effectively cascade down a training effort. This may require assessment and support of the local education and training institutions, but also requires a structure for transfer of skills internally within the government institutions.

addressing needs at all levels and not only in central staff functions. Only in this way can a culture of capacity development pervade the whole sector.

## PERSONS CONSULTED

<b>ANDERSSON, Karin.</b>	Coordinator Transport Issues, SIDA.
<b>CASADO, Cayetano.</b>	Research Analyst, World Bank
<b>CHANTRA, Chinnakorn,</b>	Senior Procurement Officer, World Bank
<b>HJELM, Sture.</b>	Consultant to SIDA.
<b>KATTIGNASAK, Sengdarith,</b>	Director, Local Road Division, MPWT
<b>KUMAR, Arun.</b>	Professor of Infrastructure Management, Queensland University of Technology
<b>MEKTAKUL, Somnuk,</b>	Deputy Director, Local Road Division, MPWT
<b>NUGENT, James.</b>	Country Director, Asian Development Bank
<b>NUNEZ, Maria Margarita.</b>	Senior Highway Engineer, World Bank
<b>PHANVISUK, Chantaphone.</b>	Director, Road Maintenance Fund, MCPTC
<b>PHOLSENA, H.E. Sommad,</b>	Minister, MPWT
<b>RATTANAVONG, Souvanny.</b>	Deputy Director General, Department of Personnel, MPWT
<b>REX, William.</b>	Lead Country Officer, World Bank
<b>RIGOLINI, Jamele.</b>	Task Manager, Poverty Reduction Fund Credit, World Bank
<b>ROBITAILLE, Denis.</b>	Operations Manager, World Bank
<b>SIHARATH, Daochinda.</b>	Deputy Director, Project Monitoring Division, MCPTC
<b>SIRIBUDDHAMAS, Nipa.</b>	Financial Management Specialist, World Bank
<b>SOUVANNAVONG, Pho Ngeun.</b>	Director, Social and Environment Division, MPWT
<b>TOBIN, Richard.</b>	Manager, Evaluation Group, World Bank Institute
<b>TOMKINS, Richard.</b>	Advisor, Department of Roads, MPWT
<b>UNKULVASAPAU, Manida.</b>	Senior Environmental Specialist, World Bank
<b>WOOD, Greg.</b>	Wood International Consultants
<b>ZHI, Liu.</b>	Lead Infrastructure Specialist, World Bank

## REFERENCES

- Alameddine, C., and M. Hart-Poliquin. 2005. *Applying a Capacity-results Framework in Lao PDR and Other Pilot Countries*. World Bank Institute Capacity Development Brief No. 14.
- ADB. 1999. TA 3309 Lao: Enhancing Government Accounting Regulations and Procedures.
- \_\_\_\_\_. 2000. *Report and Recommendation on a Proposed Loan and Technical Assistance Grant to the Lao PDR for A Rural Access Roads Project*.
- \_\_\_\_\_. 2004. *Special Evaluation Study on Capacity Development Assistance of the ADB to the Lao PDR*.
- Bray, D. 2006. *Lao PDR: Review of Transport Sector Development Priorities*. World Bank. Draft.
- International Labor Organization. 2004. *Review of Rural Road Maintenance in Lao PDR: Current Status, Issues and Options*. Prepared for Local Roads Department, MPWT. Available at [http://www.ilo.org/public/english/employment/recon/eiip/download/review\\_lao.pdf](http://www.ilo.org/public/english/employment/recon/eiip/download/review_lao.pdf)
- Lao PDR. 2003. MPWT. *Technical Specifications for Maintenance Works on Local Roads Networks*.
- \_\_\_\_\_. 2004. MPWT. *The Road Maintenance Procedures for Road Networks*.
- \_\_\_\_\_. 2005a. *Joint Portfolio Effectiveness Review (JPER) GOL-ADB-SIDA-World Bank*.
- \_\_\_\_\_. 2005b. *Institutional Capacity Building; Final Report* Report by N.D.Lea Associates.
- \_\_\_\_\_. 2006a. *National Socioeconomic Development Plan (2006-2010)* October
- \_\_\_\_\_. 2006b. *Development of a Rural Transport Infrastructure Policy for the Lao PDR*; Fact Finding and Issues Report prepared by Lan Xang International.
- \_\_\_\_\_. 2006c. *National Growth and Poverty Eradication Strategy*.
- \_\_\_\_\_. 2007a MPWT RMP-2 *Institutional Capacity Building A proposal for the training programs for the fiscal year 2006-07*.
- \_\_\_\_\_. 2007b. MPWT. *Draft White Paper: Policy on Rural Transport Infrastructure*
- \_\_\_\_\_. 2007c. MPWT. *Report on the Operation of the Road Maintenance Fund during the first quarter of FY 2006/7* March.
- \_\_\_\_\_. 2007d Ministry of Foreign Affairs. *The Sectoral Working Group Mechanism in Laos: How well is it working and how can it be strengthened*.
- \_\_\_\_\_. 2007e. MPWT *Road Maintenance Program Phase 2 Capacity Building Report FY 2005- 06* April.
- Nogales, Alberto. 2004. *Lao PDR: Transport Sector Brief*. Available at <http://siteresources.worldbank.org/INTTRM/Resources/514793-1131130428609/EAP-LAO-output.pdf>
- Pholsena, Sommad. 2007. *MPWT Strategy Paper*.
- SweRoad. 2006. *Data Exchange between RMS 1.2 and PRoMMS 2.0*. January.
- Warr, Peter. 2005. *Roads and Poverty in Rural Laos*. Available at <http://ideas.repec.org/p/pas/papers/2005-04.html>
- World Bank. 2002. *Project Appraisal Document of a Poverty Reduction Fund Credit*.
- \_\_\_\_\_. 2004. *Implementation Completion Report on the Third Highway Improvement Project*.
- \_\_\_\_\_. 2005a. *Implementation Completion Report on the First Road Maintenance Project*.
- \_\_\_\_\_. 2005b. *Concept Note on Donor Harmonization on Capacity Development in the Transport Sector Supervision Mission Aide Memoire*, November.
- \_\_\_\_\_. 2005c. *Country Assistance Strategy for Lao PDR*.
- \_\_\_\_\_. 2005d. *Concept Note on Donor Harmonization on Capacity Development in the Transport Sector Supervision Mission Aide Mémoire*.
- \_\_\_\_\_. 2007. *Lao PDR: Public Expenditure Review*. Chapter 4. The Road Sector.





**The World Bank Group**  
The World Bank Lao PDR Country Office  
Patouxay Nehru Road  
P.O Box 345  
Vientiane, Lao PDR  
Tel: (856-21) 414209, 450010  
Fax: (856-21) 414210  
Websites: [www.worldbank.org/lao](http://www.worldbank.org/lao)

**The World Bank**  
1818 H Street, NW  
Washington, D.C. 20433, USA  
Tel: (202) 4731000  
Fax: (202) 4776391  
Website: [www.worldbank.org](http://www.worldbank.org)