INCREASING BENEFITS THROUGH ECONOMIC CORRIDOR DEVELOPMENT IN THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

Barend Frielink and Shunsuke Bando

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Increasing Benefits Through Economic Corridor Development in the Lao People's Democratic Republic

Barend Frielink and Shunsuke Bando No. 17 | April 2018 Barend Frielink is an independent consultant with a focus on the Lao People's Democratic Republic (Lao PDR). Shunsuke Bando is a senior country specialist in the Lao PDR Resident Mission, Southeast Asia Department (SERD), Asian Development Bank. This report was produced under TA-8977 REG: Knowledge Development Support for Southeast Asia.









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ABBREVIATIONS

ADB - Asian Development Bank

ASEAN – Association of Southeast Asian Nations

CBTA - cross-border trade agreement

DIC - Department of International Cooperation

ECF – Economic Corridors Forum

EWEC – East-West Economic Corridor

GDP – gross domestic product

GMS - Greater Mekong Subregion

Lao PDR - Lao People's Democratic Republic

M&E – monitoring and evaluation

MPI - Ministry of Planning and Investment

NSEC - North-South Economic Corridor

NSEDP – national socioeconomic development plan

PCR – project completion report

PPER – project performance evaluation report

PRC – People's Republic of China

RRP - report and recommendation of the president

SAP - strategy and action plan

SEZ - special (or specific) economic zone

TA - technical assistance

WGF - working groups and forums

EXECUTIVE SUMMARY

The Greater Mekong Subregion (GMS) program was established in 1992 and has been a resounding success. It has brought the six member countries closer and has resulted in substantial investments. However, for the Lao People's Democratic Republic (Lao PDR), it is not always clear to what extent the country has benefited from the GMS program, even though the Lao PDR has been the focus of major GMS investments. This report reviews the available literature and identifies opportunities for the Lao PDR to increase the benefits it derives from GMS projects, particularly economic corridors.

The Lao PDR has been integral to the GMS program from its inception. The Lao PDR shares borders—sometimes very long ones—with the other five GMS countries, namely, Cambodia, the People's Republic of China (PRC), specifically Yunnan Province and Guangxi Zhuang Autonomous Region; Myanmar; Thailand; and Viet Nam. The Lao PDR is an agrarian society characterized by low productivity; however, in the context of the GMS, there are ample opportunities for inclusive economic development. These range from niche and specialty agriculture products, tourism and light manufacturing, to transport and logistics services. The Government of the Lao PDR has made good progress toward diversifying the economy in recent years. Further steps in that direction should include making better use of GMS infrastructure and services, through improvements in the business environment, a focus on basic skills development, and improving agriculture productivity through better linking to regional value chains. A key success factor would be a reduction in transport costs.

The governance arrangements of the GMS program at the national level determine to what extent a country can benefit from regional programs. Regional projects and arrangements open possibilities and provide opportunities, but national policies, capacities, and implementation arrangements determine the success of regional projects from a national perspective. Regional governance arrangements can never be a substitute for national governance arrangements. The national socioeconomic development plan (NSEDP) would benefit from a strategic analysis of the role of the Lao PDR in the GMS.

In the Lao PDR, coordination of the GMS program is the responsibility of the Ministry of Planning and Investment. Planning and implementation of GMS projects follow the same approach as national projects. The general lack of intersectoral coordination prevents the Lao PDR from maximizing the potential benefits from GMS projects. The absence of a monitoring and evaluation (M&E) system focusing on measuring national benefits of GMS projects makes it difficult to assess the benefits of the Program.

Increased benefits to the Lao PDR from the GMS program starts with localizing the current 3Cs of the GMS, namely connectivity, competitiveness, and community. There is a need for better **coordination** of planning and implementation of GMS programs and projects at the national and provincial levels. There is also a need for more **concentrated** efforts to focus on GMS projects from the national perspective, including M&E. Finally, in the context of the GMS, the uniqueness of the Lao **culture** needs to be amplified and preserved.

Landlocked and at the heart of the GMS, the Lao PDR is central to the development of economic corridors. Yet, the lack of major centers of economic activity and a difficult topography in the East and to the North mean that this key role has not yet been fully realized. Initially, the program included the East-West Economic Corridor (EWEC), the North-South Economic Corridor (NSEC), and the Southern Economic Corridor (SEC). The first two are partially located in the Lao PDR. The impact of

the EWEC on Savannakhet Province has been positive, although some districts have benefited more than others. It is too early to draw evidence-based conclusions on the impact of the NSEC on the Lao PDR. Initial anecdotal evidence is mixed, but in several cases, negative impacts have been mitigated through special projects.

The GMS literature emphasizes the special role that special economic zones (SEZs) in border areas can play in the development of economic corridors. In the Lao PDR, along the EWEC, this would be the Savan–Seno Special Economic Zone; and along the NSEC, it is the SEZ in Boten.

Making GMS corridors work better for the Lao PDR requires concentrated and concerted action by the Government of the Lao PDR with support from development partners, to put in place measures and actions that reinforce or complement recommended GMS actions to take full advantage of the economic corridors. These include strengthening the governance mechanism, optimizing corridor competitiveness, and ensuring an adequate business environment.

The study concludes with the following recommendations:

GMS Program

- Vision: Localize the 3Cs
- Strategy: Include an analysis of the role of GMS in the Lao PDR in the NSEDP
- Projects: Increase synergies through better planning and coordination
- M&E: Specific monitoring system for GMS projects

Economic Corridors

- Vision and strategy: Enhance the area development concept
- Governance: Make use of the opportunities that the Economic Corridor Forum offers, have an agency for each corridor, and introduce Lao-centric names
- Transport and trade: Adjust the Cross-Border Transport Agreement to allow for dry ports and logistics centers
- M&E: Specific monitoring system for economic corridors

I. INTRODUCTION

- 1. The Greater Mekong Subregion (GMS) program has, by and large, been a resounding success. It has brought the six member countries closer and has resulted in substantial investments in infrastructure, complemented by capacity building support and technical assistance (TA) in various sectors. Data show that transport and trade have expanded faster than growth of gross domestic product (GDP) in the subregion, an outcome to which the GMS program has contributed. The Lao People's Democratic Republic (Lao PDR) occupies a central and strategic location in the GMS.
- 2. However, it is not always clear to what extent the Lao PDR has benefited from the GMS program. The Lao PDR has been a major beneficiary of the GMS program, at least in terms of dollars invested, with much of the investments having gone into building the GMS road network in addition to hydropower schemes. The Lao PDR has also benefited substantially from knowledge transfer, capacity building, and establishment of regional networks through the structure of GMS meetings and summits. Yet, the question arises whether the Lao PDR has benefited from the GMS program to the fullest extent possible, and, if and how, the Lao PDR could benefit more from the program.
- 3. This study reviews the literature on the GMS program as far as it is relevant to the Lao PDR. In preparing this report, the focus is on how the Lao PDR could benefit more from the GMS program and from the GMS economic corridors program. In reviewing the available literature, the approach has been to identify opportunities for the Lao PDR to increase the benefits it gets from GMS projects, especially economic corridors. The focus of the analysis is on investment projects, as regional TA and capacity building initiatives have not been well documented on a per-country basis. The review is qualitative as most projects are under implementation, and of those completed, few postevaluations have been done.
- 4. The structure of this report is as follows. The first section briefly looks at the GMS program in the Lao PDR, and compares it with the other countries. The purpose is to look at some simple indicators to compare the Lao PDR with its neighbors. The second section discusses the institutional arrangements for the GMS program in the Lao PDR and looks at the links with the national planning process. This part also includes a discussion of the implementation modalities of the GMS program. The purpose of this part is to look at the governance factors that may influence the benefits that the Lao PDR derives from the GMS. In the third section, this report reviews some of the literature on economic corridors, assess the status of the two major corridors in the Lao PDR, and suggests how to improve the impact of these and future economic corridors. The fourth and final section summarizes the findings and make suggestions for the Government of the Lao PDR on how to further increase the benefits from the GMS program. The literature reviewed is in Appendix 1.

¹ The Southern Economic Corridor currently has little relevance to the Lao PDR and is excluded from the analysis in this report.

Box: The Greater Mekong Subregion Program: A Brief Introduction

In 1992, the six countries comprising the Greater Mekong Subregion (GMS), with assistance from the Asian Development Bank (ADB) and building on their shared histories and cultures, launched the GMS Economic Cooperation Program to enhance their economic relations.

The GMS consists of Cambodia, the People's Republic of China (PRC), specifically Yunnan Province and Guangxi Zhuang Autonomous Region; the Lao People's Democratic Republic (Lao PDR); Myanmar; Thailand; and Viet Nam. The GMS is a natural economic area bound by the Mekong River, with an area of 2.6 million square kilometers and a combined population of about 328 million.

The GMS Program, with the support of ADB and other development partners, helps identify and implement high-priority subregional projects in a wide range of sectors. Substantial progress has been achieved in terms of implementing GMS projects since 1992. Priority infrastructure projects worth around \$19 billion have either been completed or are being implemented. Among these are the upgrading of the Phnom Penh (Cambodia)—Ho Chi Minh City (Viet Nam) highway, and the East–West Economic Corridor (EWEC) that will eventually extend from the Andaman Sea to Da Nang (Viet Nam).

The GMS Program has adopted a three-pronged strategy (connectivity, competitiveness, and community or the 3Cs) to realize its vision of a prosperous, integrated, and harmonious subregion:

- increasing **connectivity** through sustainable development of physical infrastructure and the transformation of transport corridors into transnational economic corridors;
- improving competitiveness through efficient facilitation of cross-border movement of people and goods and the integration of markets, production processes, and value chains; and
- building a greater sense of community through projects and programs that address shared social and environmental concerns.

In 2011, the leaders of the GMS countries adopted a 10-year Strategic Framework to guide the GMS in 2012–2022. The framework builds on the countries' commitment and national development plans to promote regional cooperation and integration within and beyond the GMS.

The GMS Regional Investment Framework (RIF), endorsed by the GMS Ministers in December 2013, operationalizes the Strategic Framework by identifying a pipeline of priority investment and technical assistance projects from 2013 to 2022. The RIF contains more than 200 projects across 10 sectors with an estimated investment of more than \$50 billion. The 10 sectors are transport, transport and trade facilitation, energy, agriculture, environment, human resources development, urban development, tourism, information and communication technology, and border economic zones.

At the 22nd GMS Ministerial Conference on 20 September 2017, GMS Ministers acknowledged the Midterm Review of the GMS Strategic Framework, 2012–2022 and endorsed the GMS RIF 2022 with a pipeline of 222 investment and technical assistance projects valued at \$64 billion.

Source: Asian Development Bank.

II. THE LAO PEOPLE'S DEMOCRATIC REPUBLIC EXPERIENCES IN THE GREATER MEKONG SUBREGION PROGRAM

A. The Lao People's Democratic Republic Economy

5. The Lao PDR has been integral to the GMS program from its inception. The country is strategically located and is central to international cooperation in the GMS. The Lao PDR shares borders—sometimes very long ones—with the other five GMS countries. Table 1 illustrates the relatively small size of the country, its small population, and its long borders. The border with Thailand is partially defined by the Mekong River, and the border with Viet Nam by a continuous mountain range, which relatively isolated the Lao PDR for some time in modern history. The construction of five major bridges over the Mekong River and the improvement in roads between the PRC, the Lao PDR, and Viet Nam, complemented by modern communications technology, has opened the country and increased its potential role in the GMS.

Table 1: Land Area and Population Size of Greater Mekong Subregion Countries

	Land Area (km²)	Population (latest year, million)	Shared Border with the Lao PDR (km)
Cambodia	181,000	15.3 (2014)	435
Lao PDR	238,000	6.8 (2015)	
Myanmar	677,000	53.9 (2015)	238
PRC ^a	631,000	92.0 (2010)	505
Thailand	513,000	68.0 (2015)	1,835
Viet Nam	331,000	91.7 (2015)	2,069
Totals	2,571,000	327.7	5,082

km = kilometer, km² = square kilometer, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: The figures in this tale are rounded, are not authoritative, and only used as illustration.

Sources: Land area and population from various World Bank publications; border length from http://www.na.gov.la/appf17/about_laos.html.

- 6. The Lao PDR is an agrarian society characterized by low productivity. The agriculture sector accounted for 64% of employment in 2013 (World Bank 2016). During 2003–2013, GDP more than doubled and employment increased by 20% (or around 500,000 jobs). With a significant portion of the population engaged in subsistence farming, the official unemployment rate remains low. About 80% of jobs created were nonfarm jobs of which 17% were in the public sector. Most of the jobs created were in wholesale and retail trade with low technology and productivity. Meanwhile, productivity in the agriculture sector has remained stagnant. In 2014, average agricultural value added per hectare (in 2005 \$ prices) was \$578, compared to \$994 in Thailand and \$1,380 in Viet Nam.
- 7. The incidence of poverty has declined over the last 10 years, helping the Lao PDR achieve its Millennium Development Goal target of halving extreme poverty by 2015. This translated in a 0.47% reduction in poverty for every percentage point of GDP growth, which is the lowest in the GMS. Poverty reduction has been driven by rising agriculture incomes, improvements in nonincome poverty indicators, and increases in nonfarm incomes. However, the country's reliance on capital-intensive

^a The PRC includes the Guangxi Zhuang Autonomous Region and Yunnan Province only.

resource sectors meant that consumption only increased by 2% per year, lagging behind the 6% annual per capita GDP growth rate. As the relatively small increase in consumption benefited the nonpoor more, inequality has increased. About half of the poor in fiscal year (FY) 2013 were previously nonpoor in FY2008 and more than two-thirds of them had been nonpoor at some point during that 10-year period. Many people escaping poverty remain close to the poverty line.

8. Low productivity in the farm and nonfarm sectors combine with a still-difficult business environment, despite some improvements in recent years. The 2017 Ease of Doing Business Survey shows that the Lao PDR has one of the lowest rankings in the GMS (Table 2). This hampers investment and job creation. In agriculture, this hinders the effective functioning of the supply chain, keeping prices low for farmers and high for consumers. Outside agriculture, basic skills (literacy and numeracy) are often lacking, even when good jobs are available.

Table 2: Ease of Doing Business Ranking, 2017

	World Ranking (out of 190)	GMS Ranking (out of 6)
Cambodia	131	4
Lao People's Democratic Republic	139	5
Myanmar	170	6
People's Republic of China	78	2
Thailand	46	1
Viet Nam	82	3

GMS = Greater Mekong Subregion.

Source: The World Bank. Economy Rankings. http://www.doingbusiness.org/rankings.

9. In the context of the GMS, there are ample opportunities for inclusive economic development in the Lao PDR. These range from niche and specialty agriculture products, tourism and light manufacturing, to transport and logistics services. The Government of the Lao PDR has made good progress toward diversifying the economy in the recent years, making it less dependent on mining and hydropower development. Further steps in that direction need to include making better use of the GMS infrastructure and services provided, together with improvements in the business environment, a focus on basic skills development, and improving agriculture productivity through better linking to regional value chains. A key success factor would be the reduction in transport costs.

B. Comparison with Other Greater Mekong Subregion Countries

10. The Lao PDR has benefited substantially from investments under the GMS program in comparison to other GMS countries.² Table 3 shows that on a per capita basis, the Lao PDR has been a strong beneficiary of the GMS program. Because roughly 94% of the funds invested in the Lao PDR were for the construction of assets in energy, transport, and other infrastructure, the GMS program has contributed greatly to the development of the Lao PDR.³ Appendix 2 has a complete list of GMS projects by country.

² This section compares the Lao PDR with Cambodia, the PRC, and Viet Nam. Low historic GMS investment levels in Myanmar and Thailand do not allow for meaningful comparison.

³ It could be argued that some of the national infrastructure would have been built anyway in the absence of GMS investments. However, because of the financing structure of GMS projects in the Lao PDR under the Asian Development Fund, the GMS program provided additional financing, which otherwise would not have been available.

	=		
Country	Average Population, 1994–2016 (million)	GMS Investment, ^a 1994-2016 (\$ million)	GMS Investment per Capita (\$)
Cambodia	13.1	722	55
Lao PDR ^b	5.7	1,372	241
PRC ^c	89.3	4,843	54
Viet Nam	83.4	4,704	56

Table 3: Average Greater Mekong Subregion Investments per Capita

GMS = Greater Mekong Subregion, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Sources: Asian Development Bank.

11. The largest per project financing amounts are in the PRC and Viet Nam, and the smallest in Cambodia. Table 4 compares the financing of projects in five GMS countries.⁴

Table 4: Financing of Greater Mekong Subregion Projects, 1994–2016

	Cambodia	Lao PDR ^b	Myanmar	PRC ^c	Viet Nam	GMS
Total financing (\$ million) ^a	722	1,372	416	4,843	4,704	12,057
Number of projects	18	21	2	13	26	80
Average cost per project (\$ million)	40	65	208	373	181	151

GMS = Greater Mekong Subregion, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Asian Development Bank.

12. The implementation of the GMS program in the Lao PDR has been through 22 approved investment projects,⁵ of which 10 have been completed and 12 are under implementation.⁶ In this section, we look at the approved projects by sector through the lens of regionality. For each project, we assess whether it covers more than one country, whether the report and recommendation of the President (RRP), describing the terms and conditions of a project for consideration for approval by ADB, mentions the GMS context, and whether the economic evaluation includes cross-border components. It has been 23 years since the first GMS project was approved by ADB (ADB 1994a, 1994b), but in the Lao PDR, it took more than a decade for the program to gain meaningful momentum, as Table 5 shows.

^a Financing by ADB and cofinanciers and excluding government contributions.

^b The Lao PDR investments exclude the Nam Theun 2 hydropower project because its size would distort the figures; and the Nam Ngum 3 hydropower project, which was approved for financing but was cancelled subsequently.

^c The PRC includes the Guangxi Zhuang Autonomous Region and Yunnan Province only.

^a Financing by ADB and cofinanciers and excluding government contributions.

^b The Lao PDR investments exclude the Nam Theun 2 hydropower project because its size would distort the figures; and the Nam Ngum 3 hydropower project, which was approved for financing but was cancelled subsequently.

^c The PRC includes the Guangxi Zhuang Autonomous Region and Yunnan Province only.

⁴ Excluding Thailand, which had only one GMS project in that period.

⁵ This excludes the Nam Ngum 3 Hydropower project, which was approved by the ADB Board but subsequently cancelled at the request of the government.

This excludes pure private-sector-financed projects, implemented under the GMS umbrella, notably in information and communication technology.

Table 5: Number of Greater Mekong Subregion Investment Projects Approved, by Country

	Can	nbodia	Lac	PDR	PI	RC	Viet	Nam	Tota	al
	No.	CUM	No.	CUM	No.	CUM	No.	CUM	No.	CUM
1994			1	1	1	1			2	2
1995			1	2		1	1	1	2	4
1996	1	1	1	3	1	2	1	2	4	8
1997		1		3		2		2		8
1998	1	2		3		2	1	3	2	10
1999		2	1	4	1	3	1	4	3	13
2000		2		4		3		4		13
2001		2		4	1	4		4	1	14
2002	2	4	2	6		4	1	5	5	19
2003	1	5		6	1	5		5	2	21
2004		5		6	2	7		5	2	23
2005	1	6	2	8		7	2	7	5	28
2006	2	8		8		7	1	8	3	31
2007	2	10	1	9	1	8	2	10	6	37
2008		10	1	10	1	9	2	12	4	41
2009	1	11		10		9		12	1	42
2010	2	13	4	14	2	11	4	16	12	54
2011		13		14		11		16		54
2012	3	16	4	18		11	4	20	11	65
2013		16	1	19	1	12	2	22	4	69
2014		16	1	20		12	1	23	2	71
2015	1	17		20		12	1	24	2	73
2016	1	18	1	21	1	13	2	26	5	78

ADB = Asian Development Bank, CUM = cumulative, GMS = Greater Mekong Subregion, Lao PDR = Lao People's Democratic Republic, No. = number, PRC = People's Republic of China.

Note: This table excludes Myanmar and Thailand, which have had a negligible number of projects (three in 2015/2016 and one in 2009, respectively); and lists only projects financed by ADB and its cofinanciers.

Source: Asian Development Bank.

13. An important feature of the GMS program is the availability of a substantial number of regional TA projects, primarily financed by ADB.⁷ Regional TA projects have played a key role in the development of the GMS program, including supporting the Lao PDR in project formulation; capacity support for the GMS secretariat, national secretariats, and working groups; capacity development support in technical areas; and studies, research, and conferences. These regional TA projects for regional projects in the Lao PDR have contributed in providing the intellectual underpinnings and knowledge work to support regional investments in the Lao PDR; for example, in terms of road engineering, sustainable tourism development, and subregional tourism marketing. Activities and budgets of the regional TA projects, however, are not allocated by country and it is not possible to analyze which countries have benefited, and to what extent, from each TA. The discussion of the implementation of the GMS program, therefore, does not include the regional TA program.

In many cases, the sources of finance for ADB were special funds, notably the Japan Special Fund.

C. Greater Mekong Subregion Projects in the Lao People's Democratic Republic

- 14. **Not all GMS projects in the Lao PDR have strong regional elements.** The projects that have feasibility studies covering more than one country have the strongest regional rationale. Appendix 3 shows the extent to which regional elements are analyzed in the RRP, and where available, the project completion report (PCR) and project performance evaluation report (PPER). Appendix 4 has a brief discussion of the regionality of each GMS project in the Lao PDR.
- 15. The improvement of **road transport** infrastructure constitutes the core of the GMS program. In the Lao PDR, four projects to rehabilitate major highways have been completed, while a fifth one is under implementation. Together, they constitute 23% of the number of projects in the Lao PDR, and 30% in value.⁸ In **energy**, four GMS projects are in the Lao PDR only (18%), with a total value of \$1.38 billion (56% in value of all approved GMS projects in the Lao PDR).⁹ The nine transport and energy projects combined therefore constitute 41% of the GMS projects in the Lao PDR and 85% in value. Three energy projects are to build hydropower plants, and one concerns transmission lines.
- 16. In **tourism**, there are three GMS projects in the Lao PDR (14% of the number of GMS projects) with a combined value of \$69 million (3% of the total). The projects have focused on relatively small-scale infrastructure investments, with an emphasis on sustainable tourism; and on subregional coordination, planning, and standards. In **agriculture**, there are also three projects in the Lao PDR, with a combined value of \$112 million (4.5% of the total). Two projects cover three countries, including the Lao PDR, while the remaining third project is in the Lao PDR only. In **urban development**, two projects cover the Lao PDR, focusing on investments in towns along economic corridors to improve their competitiveness. In **human resources development** (health and education), support has mainly been through TA projects, the exception being projects focusing on cross-border infectious diseases. There are no GMS investment projects in education, but four are in health (19% of the number of projects). Finally, in **environment**, one relatively large project (1.5% of the total) covers Cambodia, the Lao PDR, and Viet Nam.

III. PLANNING AND IMPLEMENTATION: THE GREATER MEKONG SUBREGION PROGRAM

17. The governance arrangements of the GMS program at the national level determine to what extent a country can benefit from regional programs. Regional projects and arrangements open possibilities and provide opportunities, but national policies, capacities, and implementation arrangements determine the success of regional projects from a national perspective.¹⁰ Regional governance arrangements can never be a substitute for national governance arrangements.

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⁸ A further five projects (one of which is completed) have important road rehabilitation and upgrading elements, mainly rural and access roads.

Excluding Nam Ngum 3.

¹⁰ This applies to all (sub-) regional and international arrangements and projects, including, for example, the Association of Southeast Asian Nations (ASEAN) and the World Trade Organization.

A. The Lao People's Democratic Republic Five-Year Plans and the Greater Mekong Subregion

- 18. At the sector and project level, the GMS program is fully aligned with the successive national socioeconomic development plans (NSEDPs). The NSEDP is a sector-based plan driven by projects and activities. Since the start of the GMS program, there have been six NSEDPs. Only the last three are publicly available. The NSEDP is the government's key document to plan, coordinate, and implement its development activities. Traditionally, the NSEDPs have focused on targets to be achieved and inputs needed. The latest (8th) NSEDP is the first step in the direction of outcome-based planning, which will allow for an eventual linking of the plan with the budget. Projects in the NSEDP are proposed by line ministries, based on their own strategies and plans. GMS projects are discussed and prioritized during the relevant working groups and forums (WGF) and coordinated by the Ministry of Planning and Investment (MPI) for inclusion in GMS action plans, annual plans, and the NSEDP.
- 19. The NSEDP would benefit from a strategic analysis of the role of the Lao PDR in the GMS. In the last three NSEDPs, the term "GMS" appears 4, 3, and 17 times, respectively. Most of those mentions refer to sector or project-specific discussions, with other mentions made in the context of international cooperation. There is little in terms of analyzing the role of the Lao PDR in the GMS from a strategic perspective, nor is there much articulation of what the Lao PDR would or could get out of GMS participation and investments. As a result, the potential opportunities and challenges of the GMS program are not fully considered from a national perspective.

B. Coordination of the Greater Mekong Subregion Program

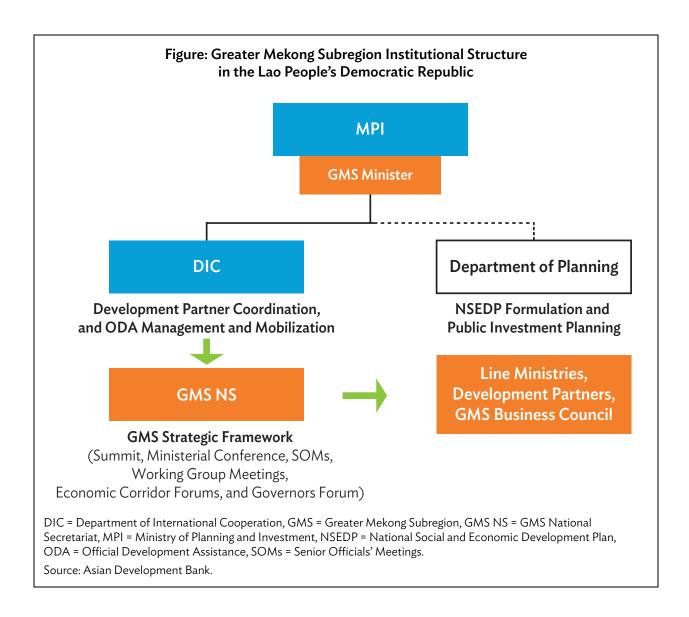
20. The institutional structure of the GMS has evolved over the years and has become increasingly more complex. In the first decade of the GMS program (1992-2002), the institutional arrangements were simple, pragmatic, and flexible (ADB 2016e). From 2002 to 2012, participating countries significantly expanded the GMS institutional architecture, by adding a Leaders' Summit in 2002; broadening sectoral coverage; expanding membership to include the Guangxi Zhuang Autonomous Region of the PRC; and including the Economic Corridors Forum (ECF), Governors Forum, GMS Business Forum (subsequently renamed the GMS Business Council), Development Partners' Meeting, new sectoral level ministerial meetings, and new WGFs. The second GMS Strategic Framework, 2012-2022 maintains the same institutional arrangements but calls for streamlining of various WGFs and a better focus of their activities. A key feature of the GMS has been an activity-based and results-oriented approach to the institutional mechanisms, which has allowed the arrangements to evolve in a flexible manner. The GMS Secretariat is managed by ADB in Manila and serves the general and sectoral bodies in the GMS institutional framework, including the Summit, Ministerial Conference, Senior Officials' Meeting (SOM) and WGFs, and ECF. Each GMS country has a national coordinator acting as focal point for all GMS-related activities.

The 6th NSEDP (2006–2010), the 7th NSEDP (2011–2015), and the 8th NSEDP (2016–2020). Only the executive summary is available in English for the 7th NSEDP.

The implementation of the NSEDP is governed by an annual planning and reporting cycle, during which line agencies report on progress and the next year's implementation plan.

¹³ ADB-financed GMS projects have gone through the country programming process of ADB as aligned with the NSEDP priorities. Prior to formal financing approval, these projects will have gone through in-depth technical, financial, economic, and due diligence assessments in accordance with ADB's project cycle.

21. In the Lao PDR, coordination of the GMS Program is the responsibility of the Ministry of Planning and Investment. The Minister of MPI is the signing minister. In the Department of International Cooperation (DIC), six staff have responsibility for the GMS. They are tasked with coordinating the line ministries and other agencies for all GMS-related meetings, including Summits, Ministerial Conferences, SOMs, working group meetings, ECF, and Governors Forum. The national coordinator is responsible for coordinating with development partners and the GMS Business Council. The national coordinator also oversees the coordination and implementation of the GMS Strategic Framework in the Lao PDR. In the MPI, the Department of Planning is responsible for the national planning process, including the 5-year NSEDP, while the DIC is responsible for development partner coordination and financing. That means that planning and coordination of GMS activities can easily be aligned to national priorities (Figure 1).



Prior to 2016, the coordination of the GMS Program was in the hands of various institutions, while in the first decade of the GMS, coordination was with the National Planning Commission.

The Director General of DIC is the GMS National Coordinator while the Deputy Director General oversees day-to-day activities. They are supported by four technical staff.

C. Project Planning and Implementation

- 22. Planning and implementation of GMS projects follow the same approach as national projects. This makes sense as GMS projects are implemented as national projects and make use of the existing national project planning and implementation arrangements. Projects are the responsibility of line agencies. Therefore, GMS projects, like nationally initiated projects, are grounded in sound sector knowledge and experience. What has generally been lacking in the national planning system are cross-sectoral planning and coordination to ensure specific development outcomes. An exception to this is in nutrition, where in recent years there has been more effective coordination between agriculture, education, and health to deal with the malnutrition crisis.
- 23. The general lack of intersectoral coordination prevents the Lao PDR from maximizing the potential benefits from GMS projects. GMS-initiated projects have strong regional dimensions, but are locally implemented. That means that there are good opportunities to ensure that GMS projects and national projects are coordinated to attain stated development outcomes. The fact that GMS projects are generally conceived and planned as input- or output-oriented activities does not help. It would be helpful if there was an additional planning activity in the Lao PDR to ensure that proposed GMS projects develop stated outcomes, and identify which other GMS or national projects would also contribute to those outcomes. The fact that the Lao PDR is gradually moving to an outcome-based planning system would help in this regard.
- 24. The absence of a monitoring and evaluation (M&E) system focusing on measuring national benefits of GMS projects makes it difficult to assess the benefits of the GMS program. It is difficult to follow and evaluate what the benefits of GMS projects are for the Lao PDR, as monitoring currently relies on project-specific indicators, which sometimes do not consider a wider or regional development perspective. Such an M&E system would use the outcome-based approach, which has been introduced in the NSEDP. Careful monitoring of the national development indicators for GMS programs will allow for the identification of gaps and weaknesses in policies, institutions, and capacities, enabling the government to put activities and actions in place to ensure full benefits from GMS projects.
- 25. An increased focus on national benefits from the GMS program, therefore, starts with localizing the GMS 3Cs. As discussed, there is a need for better coordination of planning and implementation of GMS programs and projects at the national and provincial levels. There is also a need for more concentrated efforts to focus on GMS projects from the national perspective, including M&E. Finally, in the context of the GMS, the uniqueness of the Lao culture needs to be amplified and preserved. This leads to the following 3Cs for the Lao PDR:
 - (i) Strengthen **coordination** between the GMS and the Lao programs, between line ministries and the MPI, and between central and provincial governments.
 - (ii) Promote **concentration** of resources and efforts. To maximize the benefits derived from GMS projects, resources need to be focused on complementary projects and policies and on GMS-specific M&E systems. In the case of economic corridors, such concentration also needs to be geographic.
 - (iii) Emphasize culture by highlighting and preserving the uniqueness of the Lao culture in the GMS context. This will ensure that the Lao PDR retains its comparative advantage within the GMS, benefiting especially tourism, but possibly also other sectors that may become more prominent in the region, including environment, carbon sequestering, and human resource development.

IV. ECONOMIC CORRIDORS IN THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

A. Importance of Economic Corridors in the Lao People's Democratic Republic

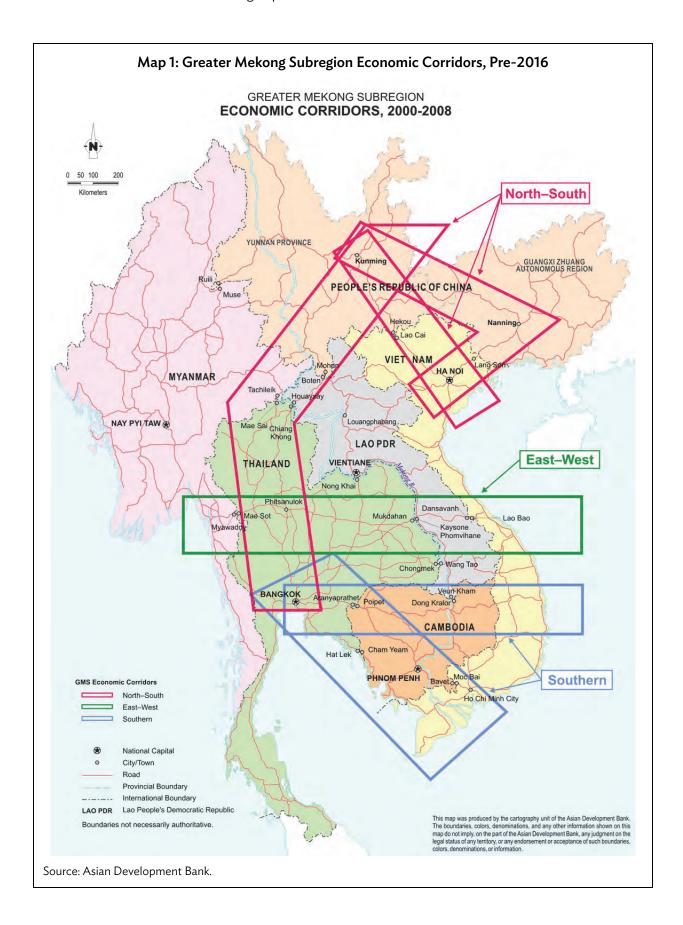
- 26. The Lao PDR, landlocked and at the heart of the GMS, is central to the development of economic corridors. Yet, the lack of major centers of economic activity and a difficult topography in the East and to the North mean that this key role has not yet been fully realized. Initially, the program included the East–West Economic Corridor (EWEC), the North–South Economic Corridor (NSEC), and the Southern Economic Corridor (SEC). The first two are partially located in the Lao PDR. The NSEC has three major "branches" or alignments, while the EWEC has one. The literature also recognizes the SEC Intercorridor Link, which links the NSEC and the SEC, in the Lao PDR. The EWEC and the NSEC in the Lao PDR have been almost completely developed as transport corridors (Map 1).¹⁷
- 27. The existing GMS corridors that cross the Lao PDR have only a modest presence in the country. The EWEC is about 1,481 kilometers (km) long, but only 14% of the length is in the Lao PDR. The NSEC branch that runs through the Lao PDR is 1,434 km with only 12% within the Lao PDR. In a report prepared for the 21st Ministerial Conference held in December 2016 (ADB 2016d), new economic corridors were proposed, including new branches of existing corridors in the Lao PDR. These include three new branches of the NSEC including one running North to South (Boten-Luang Prabang-Vientiane-Udon Thani-Bangkok); and two running East to West (Vientiane-Pakxan-Vinh and Udon Thani-Thakhek-Vung Anh). In addition, the SEC will have a new branch, running from Kaysone Phomvihan (as a node connecting with the EWEC) through Pakse down to Strung Treng in Cambodia, where it connects with the remainder of the SEC (Map 2).
- 28. The concept of the GMS Economic Corridors was first proposed in 1998 and endorsed by the 8th GMS Ministerial Meeting as a flagship program. The literature recognizes various models of economic corridor development, but there is no standard model. One highlighted by Banomyong (2008) distinguishes four stages of corridor development: (i) transport; (ii) multimodal; (iii) logistics; and (iv) economic. Brunner concludes that economic corridors are best defined by their characteristics and it is through the measurement of those characteristics that economic corridor performance can be determined and monitored (Brunner 2013). That means that when examining economic corridors, they need to be looked at individually, considering each economic corridor's defining characteristic.¹⁸
- 29. The GMS corridors are an important instrument to promote economic development of the subregion. The first step in this, the development of transport corridors, has proven to be essential for the subregion, encouraging the GMS to be linked into regional and global production and value chains. The literature is clear on the benefits of cross-border transport corridors. The further evolvement into fully fledged economic corridors also promises to bring substantial benefits. In this section, we will investigate to what extent the Lao PDR has benefited from the two transport corridors that have already been completed, what it would take to develop these further into economic corridors, and what lessons can be learned for future GMS corridors in the Lao PDR.

¹⁶ The Southern Economic Corridor currently has little relevance to the Lao PDR and is excluded from the analysis.

Appendix 5 has a brief discussion of the characteristics of economic corridors.

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This report focuses mainly on the existing two corridors that include the Lao PDR. The recommendations, however, apply to all new (sub-)corridors as approved by the Ministerial Conference in 2016 (ADB 2016d).





B. Institutional Arrangements

- 30. Since first being introduced in 2008, the ECF has become an annual fixture on the GMS Program calendar (ADB 2016e). The annual ECF has ministerial-level participation and initially served its purpose well. The comparative advantage of the ECF is its flexibility in being a discussion forum rather than a formal decision-making meeting at the ministerial level. The ECF helps, firstly, to maintain the GMS Program's activities-based and results-oriented approach; and secondly, to facilitate knowledge sharing among GMS countries, development partners, private sector representatives, and governors. The ministers of all GMS countries¹⁹ are expected to attend two ministerial events per year: the GMS Ministerial Conference and the ECF. Consequently, GMS ministers sometimes assign lower-level officials to attend the ECF, which ultimately defeats the original purpose of the ECF to be a ministerial meeting. The frequency of the ECF has also impacted its ability to deliver a high-quality agenda of interests to all parties—participating governments, development partners, and private sector representatives—that is distinct from the agenda of the GMS Ministerial Conference (ADB 2016e, p. 10). This situation impacts disproportionally on the Government of the Lao PDR, which is struggling with capacity constraints.
- 31. As a "transit nation" at the heart of the GMS, the Lao PDR could use the ECF to table issues of national or domestic interests. The ECF as a discussion forum with an emphasis on knowledge sharing is the right vehicle for the Lao PDR to work in cooperation with the other member states to determine (i) the economic and other benefits of the GMS corridors in the Lao PDR; (ii) the actions and investments needed to optimize the benefits for the Lao PDR; and (iii) the design of a corridor-specific monitoring system that will help identify the benefits that the Lao PDR derives from the GMS corridors. The Government of the Lao PDR could, therefore, obtain national benefits from the ECF, thereby creating a better return for the time and effort invested in ministerial-level participation.

C. East-West Economic Corridor

- 32. The EWEC is a transport corridor that broadly connects Da Nang in Viet Nam with Yangon port in Myanmar. In the Lao PDR, the EWEC runs along National Road No. 9, connecting Dansavanh with Kaysone Phomvihan. In Viet Nam, the EWEC connects with the Eastern Corridor (with the node at Dong Ha and connecting to Ha Noi), while in Thailand the EWEC connects with the NSEC (with the node at Phitsanulok connecting to Bangkok). The port of Da Nang can accommodate sea-going vessels, but is not yet a deep-sea port. Most of the EWEC main roads have been upgraded over the last decades. The stretch of the EWEC located within Myanmar will be upgraded with international financial assistance.
- 33. The EWEC vision is to create an economic corridor that will stimulate the type of economic growth to reduce poverty and raise the standards of living in the areas covered by the corridor (ADB 2010b). The strategic goals of the EWEC are to (i) empower the private sector to promote sustained private sector-led economic growth; (ii) alleviate poverty and ensure equitable distribution of the benefits of growth; (iii) ensure environmental sustainability; and (iv) complete infrastructural improvements needed for the economic transformation of the corridor.
- 34. The strategy identifies five priority sectors. The priority sectors of infrastructure, trade and investment, agriculture and agroindustry, tourism, and social and environmental were selected based

Except for the PRC

The government plans to start the upgrading to deep-sea port in 2017.

on the following criteria: (i) contribution to gross regional domestic product; (ii) contribution to employment; (iii) generation of foreign exchange; (iv) contribution to rural development; (v) potential for economic growth; and (vi) potential for cross-border collaboration.

- 35. There are a limited number of donor-supported interventions to support wider corridor development in the Lao PDR. These include the development of tourism infrastructure, agriculture infrastructure, and towns development along the EWEC. As these projects are at the early stages of implementation, their impact and contribution to corridor development cannot be assessed yet. The ADB-supported project to improve sanitary and phytosanitary handling is designed to stimulate trade in agriculture products; however, it is also too early to observe a measurable impact.
- 36. Evaluation of EWEC performance in terms of its impact on cross-border economic activity remains challenging because of data limitations. The strategy paper from 2010 (ADB 2010b, p. 9) discusses achievements in developing the EWEC, and concludes that "The major infrastructure components of EWEC have now been completed. In the transformation of the East–West transport corridor into an economic corridor, the major accomplishments of the initial strategy [....] relate to those that have been covered by the Cross-Border Trade Agreement (CBTA), the GMS tourism sector strategy, as well as the GMS Business Forum (GMS-BF). Only about one-sixth of the policy, project, program, and institutional initiatives have been implemented to date, and roughly another one-sixth have been either partially implemented or are in the process of being implemented."
- 37. The impact of the EWEC on Savannakhet Province has been positive, albeit some districts have benefited more than others. A study (Lord 2009) evaluates information from expenditure and consumption surveys, relating to the impact of the EWEC on social and economic aspects of households in Savannakhet. He concludes that the peripheral areas surrounding the EWEC have substantially benefited from improvements in the feeder road system, even if the central districts gave benefited more. The study shows that infrastructure development has been effective in directly improving household well-being and indirectly contributing to human endowments of those households by enhancing their consumption of education and health services. The results also indicate that infrastructure developments could have been better allocated among districts to produce a more equitable distribution of their effects on living standards.

D. North-South Economic Corridor

- 38. Prior to the new configuration of the corridors, the NSEC consisted of three major routes along the north-south axis of the GMS connecting major population and economic centers in the northern and central parts of the subregion, namely, (i) the Kunming-Chiang Rai-Bangkok via the Lao PDR or Myanmar route (also referred to as the "Western Subcorridor"); (ii) the Kunming-Ha Noi-Hai Phong route (also referred to as the "Central Subcorridor"); and (iii) the Nanning-Ha Noi via the Youyi Pass or Fangcheng-Dongxiang-Mong Cai route (also referred to as the "Eastern Subcorridor"). Like the EWEC, the NSEC was identified at the 8th GMS Ministerial Meeting as a flagship program. A Strategy and Action Plan (SAP) for the NSEC was published in 2010 (ADB 2010c). As shown in Map 2, the new configuration of the NSEC includes eight subcorridors, four of which are in the Lao PDR. Of the four, two consist of existing transport corridors (Boten to Houaxay and Boten through Luangprabang to Vientiane, and continuing to Udon Thani).
- 39. The NSEC is a natural economic corridor and strategically located, linking the more developed and industrialized economies of the PRC and Thailand. The SAP explains that the NSEC serves as the main land route for trade between the PRC's Yunnan Province and Thailand, and provides an important land link opening sea access to landlocked Yunnan Province. It is also a direct

trade conduit between southern PRC and northern Viet Nam. With the recent new configuration, the key role of Myanmar as the bridge between GMS and the Association of Southeast Asian Nations (ASEAN) and India has been recognized. The NSEC is well positioned to serve as a gateway for ASEAN–PRC trade, which is expected to expand rapidly with the implementation of the free trade agreement between the PRC and ASEAN.

- 40. The role of the Lao PDR in the NSEC is seen in the SAP as that of complementarity. The SAP mentions rubber cultivation in Luang Namtha Province in the northern Lao PDR under contract with PRC entrepreneurs as a good example of cross-border complementarity. This arrangement takes advantage of lower labor costs and land availability on one side of the border, and more advanced entrepreneurship and technology, and greater availability of capital and management skills, on the other. The SAP mentions similar arrangements between NSEC areas of the Lao PDR and Thailand involving sugarcane and fruits. Although agriculture is prominent in all the northern provinces of the NSEC, there are complementarities that could be pursued due to differences in climatic and soil conditions, land availability, and application of technology.
- 41. **The objectives of the NSEC development are to** (i) ensure that NSEC development is economically, socially, and environmentally sustainable; (ii) enhance the competitiveness of the corridor by reducing the cost of transport and of doing business, and facilitating the start-up and operation of business ventures in the corridor; and (iii) make the most of underlying comparative advantages and complementarities among the NSEC components, specifically by promoting the NSEC areas as tourist and investment destinations and production bases.²¹ These lead to the following strategic priorities:
 - (i) mainstream measures to deal with social and environmental concerns in the NSEC development;
 - (ii) strengthen physical infrastructure and facilities needed for the integration of economic activities in the corridor;
 - (iii) facilitate cross-border transport and trade;
 - (iv) promote and facilitate investment in agriculture, agroindustry, natural resource-based industries, manufacturing, tourism, and logistics; and development of industries in the corridor and surrounding areas;
 - (v) address human resource constraints in the public and private sectors; and
 - (vi) establish and enhance institutional mechanisms for planning, coordinating, and implementing the NSEC initiatives, and for expanding public-private partnership.
- 42. It is too early to draw evidence-based conclusions on the impact of the NSEC on the Lao PDR. Initial anecdotal evidence is mixed. The development of the transport corridor has stimulated transit traffic (both freight and tourism) through the Lao PDR. The Lao PDR, however, does not appear to benefit much of this transit traffic. In addition, farming has seen a marked development along the corridor, with contract farming (rubber, bananas for example) being popular. Also, smallholder farming and small agribusinesses have benefited from improved road access. On the down side, contract farming reportedly has led to monoculture and food poverty or insecurity in some areas. Furthermore, transit traffic can be expected to generate considerable air pollution and an increase in traffic accidents.

²¹ The longer-term goal is to reduce income disparities, increase employment opportunities, generate higher income and improve the living conditions of people in the corridor and surrounding areas.

E. The Role of Special Economic Zones

- 43. Special and specific economic zones (SEZs) have long been promoted but recently some manufacturing has started to emerge. There are 12 SEZs with about 200 registered business units at varied stages of development across the country, namely, services (e.g., entertainment), industry (manufacturing), and commerce.²² Most businesses are foreign-owned and relocated to the Lao PDR from neighboring countries, due to relatively lower wages, government incentives, and perceived political stability. SEZs employ more than 11,000 workers, about 60% of whom are foreign workers. In recent years, SEZs have attracted several multinational companies that established assembly and equipment parts facilities. This has shown that the Lao PDR can participate in regional and global value chains.
- 44. The GMS literature emphasizes the special role that SEZs in border areas can play in the development of economic corridors.²³ In the Lao PDR, along the EWEC it is the Savan–Seno SEZ (established 2003); and along the NSEC it is the SEZ in Boten (re-established in 2012). The Savan–Seno SEZ along the EWEC has the potential to stimulate economic development along the corridor. Around 65 companies have invested in industry, services, logistics, and trade. A more recent development is the establishment of a dry-port in the zone, which makes container shipment more efficient and cheaper and has created the opportunity to develop logistics centers. These dry-ports promise to make the Lao PDR more attractive as a logistics hub, in recognition of its strategic location. This development has not been recognized in the CBTA, which was ratified by the Lao PDR in 1999. The CBTA is not yet fully functional as not all the implementing memorandums of understanding have been signed. The one-stop border inspection issue especially needs to be revisited to allow for inspections to take place in dry ports or logistics centers.
- 45. **SEZs have good potential as growth nodes and incubators of good practice**, as evidenced by the global literature on SEZs, experience in GMS countries, as well as evidence presented in ADB (2016f). The empirical evidence also shows that there is great variance in SEZs' performance, and that it can be difficult to isolate the value-added of SEZs (i.e., to compare their impact with what would have happened in their absence). Border SEZs can have added impact by improving integration along international supply chains, although maximization of such benefits requires collaboration of authorities on both sides of the border. Finally, it is difficult to determine how to assess an SEZ's positive and negative impacts; successful SEZs evolve over many years, their outcomes change with the evolution, and the ultimate measure of success will often be that the SEZ ceases to be special, as its good practices become standard practice across the country.
- 46. The principal Lao SEZ (Savan–Seno) is by and large an export-processing zone with limited technology transfer, skill upgrading, and local industry development. However, it is still too early to determine whether the Lao PDR SEZs can move beyond simple export processing. Border SEZs can provide additional benefits. Borders imply economic discontinuities. Coordination across border SEZs can help integration into global value chains, especially when wages or other input costs or characteristics differ substantially on either side of the border. Such coordination is facilitated by good hard infrastructure, e.g., bridges when the border is a river; and soft infrastructure, e.g., simple border-crossing procedures.

²³ See for example, ADB (2016f) and ADB (2010c, p. 71).

See Appendix 6.

47. Border SEZs can be especially useful in combining different sources of comparative advantage that may be present on the two sides of the border but have been stymied by the existence of the border. To take advantage of such complementarities, border crossing must be simplified and the costs of international trade across borders minimized. In most border SEZs in GMS corridors, emphasis has been placed on the development of border areas and less on developing intracountry connectivity. Feeder roads that link border SEZs and other parts of the countries are poor, especially in the Lao PDR, Myanmar, and Cambodia, so effectively the corridor is from the SEZ to the nearest port, rather than the SEZ contributing to development of the national economy or the entire corridor. Cross-border collaboration could be improved in most cases. Often, for border SEZs, there are no coordinated actions between the two countries. Policy coordination is needed to maximize benefits on both sides of the border.

F. Assessments of Economic Corridors

- 48. **The EWEC and the NSEC are only transport corridors at present.** The NSEC is closer to being a logistics corridor but lacks the full implementation of the CBTA. The EWEC is only a transport corridor from the Lao PDR point of view. The transformation from transport corridor to full-fledged economic corridor is not a linear process, and one that takes decades to evolve.
- 49. The EWEC and the NSEC have positive impacts for the population along the corridors, while in some cases negative impacts have been mitigated through special projects. However, apart from traffic counts and limited trade registration, there is no monitoring system in place to measure local development impacts of transport and economic corridor development. Furthermore, negative externalities, like increased vehicle pollution, are not considered in the economic evaluations nor monitored.
- 50. The development of GMS corridors has a strong focus on regional connectivity and trade promotion. In the case of the Lao PDR, several projects have tried to complement and stimulate development along the EWEC, while the strategic action plans have recognized potential negative impacts from corridor development. The latter have resulted in several projects to assist in mitigation, such as a series of communicable disease control projects, and the GMS biodiversity project. There has been little, however, in the way of focused and concerted efforts to ensure inclusive and equitable development along the corridors.
- 51. **Development of GMS economic corridors is a necessary condition** for accelerated and coordinated development along the corridor alignments, but are not sufficient. National governments must create an enabling environment that allows international corridors to fully benefit the people along the corridor. This is not automatic.
- 52. Border SEZs have the potential to be an incubator of good practices and become nodes in global value chains. To realize that potential, close policy dialogue coordination between the two countries is needed and the nodes need to be effectively linked to the wider domestic economies.

G. The Way Forward

(i) Making GMS corridors work better for the Lao PDR requires concentrated and concerted action by the Government of the Lao PDR with support from development partners

53. The existing two corridors have laid the groundwork for economic development in their areas. In the case of EWEC, the private sector has started to contribute through investments in the Savan–Seno SEZ while several projects such as promotion of agriculture, tourism and transport and trade facilitation supported by ADB in the long term will contribute to economic development. A combination of focused policies and actions are needed to speed up development and ensure that corridor development is inclusive and equitable. A long-term vision and strategy is needed.

(ii) Measures and actions that reinforce or complement recommended GMS actions need to be instituted to take full advantage of economic corridors

54. There is an opportunity here to link corridor development with area development as articulated in the 8th NSEDP (MPI 2016, p. 106): "The development in the regions and local territories should be [...] based on the potential and special characteristics of each area and each province. Establish the districts and areas that have advantageous potential and capability of accessing regional development, as powerful models for the surrounding districts and areas. [...] focus on appropriate investment to push economic development in the areas that [...] lag behind, by enhancing development conditions. Strengthen [...] each area's potential to prepare positions for economic take-off by strengthening the relationships between areas, international economic development and foreign market demand. Concentrate on [...] the potential of each region and area, to promote [...] agricultural production areas, processing industrial production areas, tourism areas, economic areas and residential areas; ameliorate basic infrastructure within a regional and international integration orientation [...]; and improve the investment environment to make it suitable to the actual situation in order to promote business enterprise and employment." This points to the possibility of GMS corridors within the Lao PDR being an opportunity for targeted area development.

(iii) Strengthen the current model for corridor governance and delivery mechanisms

55. The GMS corridors are governed by the ECF and national focal points. In the Lao PDR, the national focal point is based on the MPI and is charged with coordinating all corridor activities with the line agencies and local governments. Implementation of corridor activities is in the hands of line agencies with the support of local governments. This model does not ensure that all the elements necessary to make corridors work for the Lao PDR are in place. To make corridor planning and investment more effective, special task forces with time-bound work schedules and tenure for specific economic corridor development programs, projects, or issues can be considered at the initial stage, which may lead to the establishment of a special agency for each corridor in the long run, when institutional capacities are sufficient. This is one way to implement the government's area development concept. Corridor planning requires a better coordination among central, provincial, and district government agencies. It is also critical, however to include other stakeholders in the corridor dialogue, representing the private sector and civil society, at all those levels. Corridor planners should consider plans and priorities from sectors concerned, through a well-designed process of information sharing and coordination.

(iv) Find the optimal mix of hard-soft elements that optimizes corridor competitiveness

56. GMS corridor development has focused on a judicious mix of hard and soft elements, delivered through loan and grant financing and TA (Nogales 2014). However, such a focus has not

been seen at the national level. Discussing the agriculture sector, which is highly relevant for the Lao PDR, Nogales concludes that corridor interventions targeting the agricultural sector should combine improvements to physical infrastructure (farm-to-market roads, irrigation systems, collection points, market centers, agroindustrial plants, and warehouses); policy and regulations; human and institutional capacity; and strategic agribusiness elements (e.g., farmer aggregation, farmer-market linkages, and access to finance) as essential enablers for inclusive transformational growth.

(v) Ensure the provision of an adequate business environment

57. Corridor programs cannot function properly without the right kind of legislation to govern and regulate efficiently enterprises and grant the rights to use and develop assets, property and natural resources in an inclusive, sustainable manner. The general business environment must be conducive, especially for small and medium enterprises, to ensure an inclusive business development. Over the last decade, the Lao PDR has made some progress in improving the business environment, as seen for example in the Doing Business ranking, but there is some way to go before key elements of a conducive business environment are in place. The establishment of SEZs offers the opportunity to provide an attractive environment, especially for foreign investors. This should be taken a step further, and such a better environment, with the necessary safeguards, should be offered along the whole corridor.

V. CONCLUSIONS AND RECOMMENDATIONS

- 58. The Lao PDR has been an integral part of the GMS program from the start. On the one hand, the GMS Program has made good use of the key geographic location of the Lao PDR in the subregion. On the other hand, the Lao PDR has benefited from substantial investments in infrastructure supplemented by capacity building support, which may not have been possible, or not to the same extent, without the GMS Program. In addition, the GMS Program has proactively supported the opening of the Lao economy, improved connectivity, and increased the sense of community in the subregion.
- 59. From the Lao PDR national perspective, the benefits from the GMS program could be further enhanced through a more focused approach to planning and implementation. The Lao PDR has a system in place to ensure that GMS projects are a priority in the national planning system. From the GMS perspective, the subregional and/or national benefits of a project are evaluated and assessed on their own merits. However, little effort seems to be expended to ensure that policies and actions are in place to maximize the benefits for the Lao PDR and for the impacted population. It appears that there is an underlying assumption that benefits of GMS projects will automatically materialize, which is not the case.
- 60. The recommendations for the GMS Program and for the Economic Corridors are discussed separately, except for M&E systems that are discussed as a common issue. For the GMS Program, recommendations are under the headings of Vision, Strategy, Projects and M&E; while for the Economic Corridors, recommendations are under Vision and Strategy, Governance, Transport and Trade, and M&E. Appendix 7 has an initial outline terms of reference for a potential TA to help formulate a more detailed plan for the implementation of these proposed actions.

Recommendation 1: GMS Program, Vision: Localize the GMS 3Cs to better identify and maximize the benefits of the GMS program for the Lao PDR

61. The benefits of the GMS program for the Lao PDR could be further enhanced by localizing the GMS 3Cs. In addition to the present 3Cs of connectivity, competitiveness, and community,

the Lao PDR's 3Cs could include **coordination**, **concentration**, and **culture**. Coordination refers to coordination between the GMS and the Lao PDR programs, between ministries and the MPI, and between central and provincial governments. Concentration refers to consolidation of resources and efforts. To maximize the benefits derived from GMS projects, resources need to be focused on complementary projects and policies and on GMS-specific M&E systems. In the case of economic corridors, such concentration also needs to be geographic. Culture refers to highlighting and preserving the uniqueness of the Lao PDR culture in the GMS context.

Recommendation 2: GMS Program, Strategy: Integrate the GMS Program in the Lao PDR planning process in a more strategic and effective manner

62. The next NSEDP would be considerably strengthened if it can include an analysis of the role of the GMS program in the Lao PDR, and how the government can maximize the benefits of the regional approach at the national level. These could include specific policies, institutional arrangements, complementary projects, and capacity development initiatives.

Recommendation 3: GMS Program, Projects: Assess and evaluate proposed GMS projects from the Lao PDR national point of view

63. The planning and implementation of GMS projects are fully aligned with the Lao PDR planning systems. While this ensures maximum efficiency, and avoids duplication of resource use, it also results in a scattered and uncoordinated approach with a lack of synergy between projects and an absence of clarity of outcomes to be achieved. Assessing GMS projects, and including them in the national planning system on an outcome-based planning basis will better ensure maximum benefits from GMS projects. In addition to the standard economic (and where applicable financial) analyses, projects need to have national impacts, outcomes, and outputs defined, which will enable the government to assess local impacts and better synergies with other national programs and projects.

Recommendation 4: Economic Corridors, Vision and Strategy: Develop a long-term vision and strategy on the role of economic corridors in the development of the Lao PDR

64. Making GMS corridors work better for the Lao PDR requires focused and concerted action by the Government of the Lao PDR with support from its development partners. The focus in the 8th NSEDP on area development provides an excellent handle for this type of action. The existing two main corridors located in the Lao PDR have laid the groundwork for economic development in their respective areas. In the case of EWEC, the private sector has started to contribute through investments in the Savan–Seno SEZ while several projects supported by ADB will in the long term contribute to economic development. A combination of focused policies and actions are needed to speed up development and ensure that it is inclusive and equitable. A long-term vision and strategy are needed. This could initially be developed on a stand-alone basis and then be integrated into the next NSEDP. The vision and strategy would focus on the national and provincial benefits to be obtained from economic corridors and the policies and actions that would be needed to optimize those benefits while minimizing the negative impacts and externalities.

Recommendation 5: Economic Corridors, Governance: Make better use of the ECF

65. As a "transit nation" at the heart of the GMS, the Lao PDR should use the ECF to table issues of national or domestic interests. The ECF as a discussion forum with an emphasis on knowledge sharing is the right vehicle for the Lao PDR to work in cooperation with the other member states to determine (i) the economic and other benefits of the GMS corridors in the Lao PDR; (ii) the

actions and investments needed to optimize the benefits for the Lao PDR; and (iii) the design of a corridor-specific monitoring system that will help identify the benefits that the Lao PDR derives from the GMS corridors. The Government of the Lao PDR could, therefore, obtain national benefits from the ECF, thereby creating a better return for the time and effort invested for ministerial level participation.

Recommendation 6: Economic Corridors, Governance: Establish a taskforce for each corridor at the central level

- 66. The development of GMS corridors has largely been driven by individual projects focusing on GMS-level benefits of increased transport and trade opportunities. For the Lao PDR to be able to optimize economic corridor development for national and local benefits, they should be seen as geographic entities that need coordinated planning and actions to effectively act as drivers of inclusive development. Each economic corridor also needs to be treated on its own merits, as each corridor has different characteristics.
- 67. To make corridor planning and investment more effective, special task forces with time-bound work schedules and tenure for specific economic corridor development programs, projects, or issues can be considered at the initial stage, which may lead to the establishment of a special agency for each corridor in the long run. Such task forces would be mandated with developing and coordinating strategic action plans for economic corridor development, and be responsible for coordinating and supervising implementation. Such task forces would have representation in all three levels of government along the identified corridor, plus representatives of the private sector and the community. The establishment of "corridor units" under the MPI could be considered to keep costs and bureaucracy down. It will be important to provide such units with sufficient authority to bring together senior level officials from various offices and governments, including, on occasion, ministers, vice-ministers, and provincial governors. Where relevant, the corridor units would coordinate closely with SEZ management along the corridor.

Recommendation 7: Economic Corridors, Governance: Give each corridor a Lao-centric name

- 68. Each GMS corridor running through the Lao PDR must be considered on its own merits. Every corridor has its own strengths and weaknesses and development efforts should recognize this. The new system of GMS Economic Corridors, approved in December 2016 (ADB 2016d), should have a country-centric corridor nomenclature to clarify their economic and social impacts geographically,²⁴ for example:
 - (i) the Lao Boten-Houaxay Economic Corridor,
 - (ii) the Lao East-West Economic Corridor,
 - (iii) the Lao EWEC-Pakxe-Veun Kham Economic Corridor,
 - (iv) the Lao Boten-Luang Prabang-Vientiane Economic Corridor,
 - (v) the Vientiane-Pakxan-Nam Phao Economic Corridor, and
 - (vi) the Thakhek-Na Phad Economic Corridor.

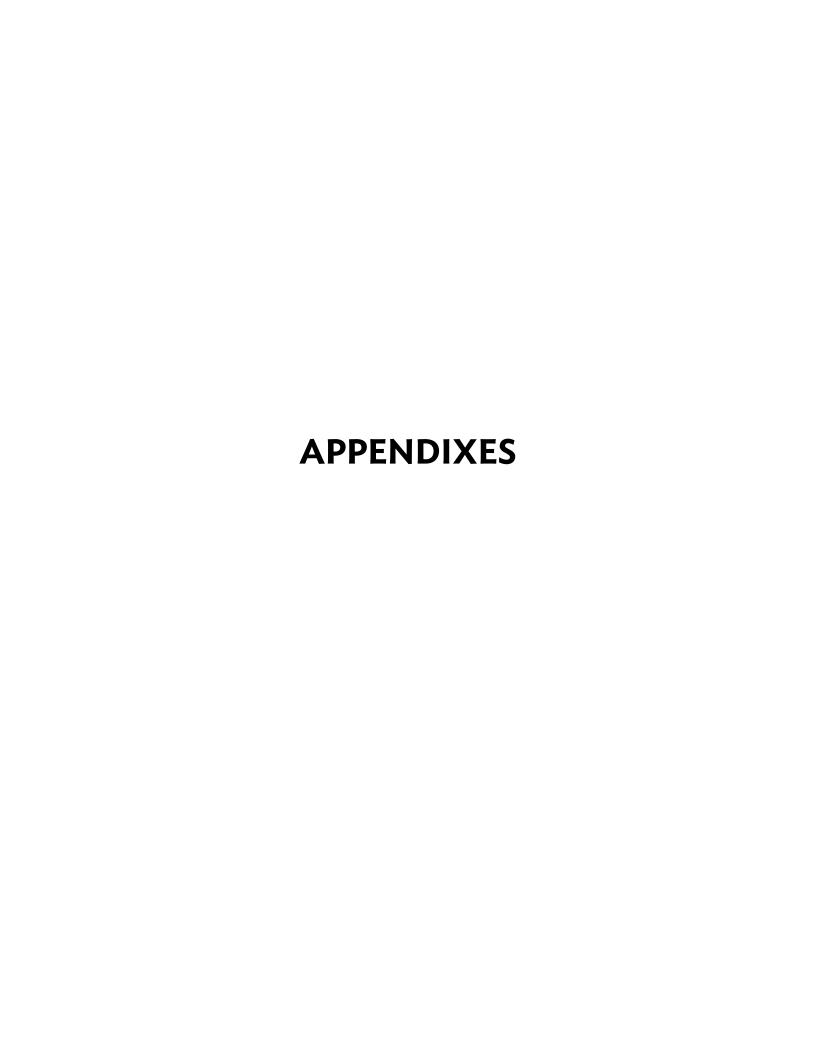
²⁴ The names listed are purely descriptive. Shorter and "marketing-friendly" names should be considered.

Recommendation 8: Economic Corridors, Transport and Trade: Incorporate inland ports in cross-border transport agreements

69. The establishment of "inland ports" to enable the provision of logistics services is a recent development and makes optimal use of the strategic position of the Lao PDR and the existing and planned transport corridors. The development of the inland ports requires close coordination between governments, SEZ authorities, and the private sector. An important issue in this regard is that the current CBTA, with its emphasis on one-stop border inspections, does not consider inland ports. The establishment of inland ports can be supported by revisiting the CBTA to identify ways in which inland ports could be accommodated.

Recommendation 9: GMS Program and Economic Corridors: Strengthen existing monitoring and evaluation systems

- 70. Currently, it is very difficult to assess the impacts of GMS projects in the Lao PDR. As Appendix 4 shows, cross-border economic benefits are not always studied when evaluating a proposed regional project. There is no M&E system in place to enable an informed discussion on what the impacts of proposed projects are. Most GMS projects that are funded by development partners have their own M&E systems, which are not always integrated into the national M&E systems. Initially, a GMS-Lao PDR M&E system can be simple, using existing indicators, and be further developed over time. The importance of such an M&E system is that it focuses on measuring the local impacts of GMS projects, and reports them in a systematic and centralized manner.
- 71. The development of economic corridors in the Lao PDR must be closely monitored and timely action taken. For each corridor, a set of agreed indicators needs to be developed and closely monitored on a regular basis. This will allow for close monitoring of inputs, actions, outcomes, and impacts, while corrective and timely action can be taken. These monitoring systems would be developed jointly by the Lao Statistics Bureau and the respective corridor authorities, and become part of the Lao information system.



Appendix 1: Studies Analyzed

- Asian Development Bank (ADB). n.d. GMS: Transport and Trade Facilitation Action Program. Manila.
- ----. 1999. Impact Evaluation Study: ADB's Program of Subregional Economic Cooperation in the Greater Mekong Subregion. Manila.
- ----. 2006a. Final Report: GMS Transport Sector Strategy Study. Manila.
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- ----. 2007b. The Greater Mekong Subregion. Development Effectiveness Brief. Manila.
- ----. 2009a. Road Map for Energy Cooperation in the GMS, 2009–2015. Manila.
- ----. 2009b. Build It and They will Come: Lessons from the Northern Economic Corridor for Mitigating HIV and Other Diseases. Manila.
- ----. 2010a. Development Effectiveness of Regional Cooperation and Integration Initiatives Asian Development Fund (ADF). Paper prepared for the ADF X Midterm Review Meeting. Manila. 18–19 November.
- ----. 2010b. Toward Sustainable and Balanced Development: Strategy and Action Plan for the Greater Mekong Subregion East–West Economic Corridor. Manila.
- ----. 2010c. Toward Sustainable and Balanced Development: Strategy and Action Plan for the Greater Mekong Subregion North–South Economic Corridor. Manila.
- ----. 2010d. Transport and Trade Facilitation in the GMS: Issues and Proposed Program of Actions. Manila. Draft prepared for consultation.
- ----. 2011. The Greater Mekong Subregion Economic Cooperation Program Strategic Framework, 2012–2022. Manila.
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- ----. 2013a. Completion Report: Greater Mekong Subregion—Mekong Tourism Development Project (Cambodia, the Lao People's Democratic Republic, and Viet Nam). Manila.
- ----. 2013b. Greater Mekong Subregion: Mekong Tourism Development Project (Cambodia, the Lao People's Democratic Republic, and Viet Nam). Manila.
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- ----. 2014b. Case Study: Ancient Trade Route Delivers New Opportunities to Greater Mekong Subregion.

 Manila.
- ----. 2014c. Economic Corridor Development for Inclusive Asian Regional Integration: Modelling Approach to Economic Corridors. Manila.
- ----. 2014d. Greater Mekong Subregion: Northern Economic Corridor Project in the Lao People's Democratic Republic. Manila.
- ----. 2015a. Case Study: Tourism Boom Fuels Business Opportunities in Mekong Subregion. Manila.

- ----. 2015b. Greater Mekong Subregion Urban Development Strategic Framework, 2015–2022. Manila.
- ----. 2015c. Initial Review of the GMS Transport Sector Strategy, 2006–2015. Manila.
- ----. 2015d. Performance Evaluation Report: GMS—Northern Economic Corridor Project. Manila.
- ----. 2015e. Performance Evaluation Report: Regional Communicable Diseases Control Project. Manila.
- ----. 2015f. Revisiting the GMS Economic Corridor Strategies and Action Plans. Discussion paper prepared for the 7th Economic Corridors Forum. Kunming, Yunnan Province, People's Republic of China. 11 June 2015.
- ----. 2016a. *Greater Mekong Subregion Statistics on Growth, Infrastructure, and Trade.* 2nd ed. Prepared for the Eighth Economic Corridors Forum. Phnom Penh.
- ----. 2016b. Lao People's Democratic Republic—Country Partnership Strategy Final Review Validation, 2012–2016. Manila.
- ----. 2016c. Mid-Term Review of the GMS Strategic Framework, 2012–2022: A Concept Note. Manila.
- ----. 2016d. Review of Configuration of the Greater Mekong Subregion Economic Corridors. Paper prepared for the 21st GMS Ministerial Meeting. Chiang Rai. 30 November-1 December.
- ----. 2016e. Study on Strengthening the Greater Mekong Subregion Program's Institutional Framework.

 Manila.
- ----. 2016f. The Role of Special Economic Zones in Improving Effectiveness of GMS Economic Corridors. Manila.
- ----. 2016g. Urban Development in the Greater Mekong Subregion. Manila.
- ----. 2016h. Validation Report: Northern GMS Transport Improvement Project. Manila.
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- ----. 2006b. Performance Evaluation Report: Champassak Road Improvement Project. Manila: ADB.

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- ----. 2008c. Sector Assistance Program Evaluation: Energy Sector in the Greater Mekong Subregion.

 Manila: ADB.
- ----. 2008d. Sector Assistance Program Evaluation: Transport and Trade Facilitation in the Greater Mekong Subregion—Time to Shift Gears. Manila: ADB.
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Appendix 2: List of Greater Mekong Subregion Projects by Country

						FINA	ANCING	(\$ million)	
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
1503	Cambodia	Siem Reap Airport	12-Dec-96	17.00	15.00	2.00			TRA
1659	Cambodia	Phnom Penh-Ho Chi Minh City Highway	15-Dec-98	52.70	40.00	12.70			TRA
1945	Cambodia	GMS: Cambodia Road Improvement	26-Nov-02	77.50	50.00	17.50	10.00	OPEC Fund	TRA
1969	Cambodia	GMS: Mekong Tourism Development	12-Dec-02	20.70	15.60	5.10			IND
2052	Cambodia	Cambodia: GMS Transmission Project	16-Dec-03	95.00	44.30	23.70	27.00	IDA (\$16 million) and Nordic Development Fund (\$11 million)	ENE
0025	Cambodia	Regional Communicable Diseases Control	21-Nov-05	11.17	9.00	1.90	0.27	WHO	HLT
2261	Cambodia	Second Power Transmission and Distribution	04-Oct-06	52.36	20.00	10.06	22.30	JBIC	ENE
2288	Cambodia	GMS Rehabilitation of the Railway in Cambodia	13-Dec-06	73.00	42.00	15.20	15.80	OPEC (\$13 million) and Government of Malaysia (\$2.8 million)	TRA
2373	Cambodia	GMS Southern Coastal Corridor	28-Nov-07	10.70	7.00	3.70	-		TRA
0096	Cambodia	GMS Southern Coastal Corridor	28-Nov-07	8.00	0.00	0.00	8.00	Australia	TRA
2539	Cambodia	GMS: Cambodia Northwest Provincial Road Improvement (ADF)	24-Aug-09	47.89	16.26	6.05	25.58	Government of the Republic of Korea (KEXIM)	TRA
2602/ 0187	Cambodia	GMS Rehabilitation of the Railway in Cambodia (Supplementary)	15-Dec-09	68.60	42.00	5.10	21.50	AusAid	TRA
G0231	Cambodia	Second Greater Mekong Subregion Regional Communicable Diseases Control Project	22-Nov-10	11.00	10.00	1.00			HLT
G0241	Cambodia	GMS Biodiversity Conservation Corridor	10-Dec-10	20.90	19.00	1.40	0.50	Beneficiaries (in kind)	ANR
L2873	Cambodia	Trade Facilitation: Improved Sanitary and Phytosanitary Handling in Greater Mekong Subregion Trade Project	26-Jun-12	11.41	11.00	0.41			MUL/IND
L2970	Cambodia	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (CAM)	12-Dec-12	42.00	35.00	3.00	4.00	SCF	ANR
G0330	Cambodia	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project- Piggybacked to L2970	12-Dec-12	5.80			5.80	SCF	ANR
L2983	Cambodia	GMS Corridor Towns Development Project	10-Dec-12	54.77	37.00	6.87	10.90	SCF/UEIF (\$5 million loan, \$5.9 million grant)	MUL/WUS

Continued		1		ı		FINA	ANCING	(\$ million)	
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
3194	Cambodia	GMS Tourism Infrastructure for Inclusive Growth	24-Nov-14	18.77	18.00	0.77			IND
G0426	Cambodia	GMS Biodiversity Conservation Corridors Project (additional financing)	13-Mar-15	7.40			7.40	SCF (PPCR)	ANR
G0448	Cambodia	Second GMS Communicable Disease Control Project (additional financing)	26-Oct-15	4.20		0.20	4.00	RMCDT (Malaria Trust)	HLT
L3314	Cambodia	Second GMS Corridor Towns Development Project	13-Nov-15	38.10	33.00	5.10			WUS
0467/ 0466/ 8300/ 8299	Cambodia	Rural Roads Improvement II (Additional Financing)	08-Dec-15	74.48		6.63	67.85	AFD (40), SCF- SREP (7), Government of Australia (11.85), SCF (9)	TRA
3442	Cambodia	Provincial Roads Improvement Project- Additional Financing	18-Oct-16	6.00	6.00				TRA
3464	Cambodia	Greater Mekong Subregion Health Security Project	22-Nov-16	22.80	21.00	1.80			HLT
L3310/ 8294	Myanmar	GMS East-West Economic Corridor Eindu to Kawkareik Road Improvement Project	10-Nov-15	121.80	100.00	1.80	20.00	AIF	TRA
3310/ 8294	Myanmar	GMS East-West Economic Corridor Eindu to Kawkareik Road Improvement Project (additional financing)	15-Nov-16	284.88			284.88	JICA	TRA
3466	Myanmar	Greater Mekong Subregion Health Security Project	22-Nov-16	12.80	12.00	0.80			HLT
1325	PRC	Yunnan Expressway	29-Sep-94	461.40	150.00	311.40			TRA
1427	PRC	Fangcheng Port Project	19-Jan-96	135.00	52.00	83.00			TRA
1691	PRC	Southern Yunnan Road Development	24-Jun-99	770.30	250.00	520.30			TRA
1851	PRC	Guangxi Roads Development	09-Oct-01	552.70	150.00	194.80	207.90	EIB (\$50 million) and China Development Bank (\$157.9 million)	TRA
2014	PRC	Western Yunnan Roads Development	28-Oct-03	585.00	250.00	174.10	160.90	AFD (\$38 million) and Kunming City Commercial Bank (\$122.9 million)	TRA
2094	PRC	Guangxi Roads Development II	16-Sep-04	726.00	200.00	254.60	271.40	China Development Bank	TRA
2116	PRC	Dali-Lijang Railway Project (Yunnan Province)	02-Dec-04	548.00	180.00	328.00	40.00	AFD	TRA
2345	PRC	Western Guangxi Roads Development Project	14-Aug-07	1,570.00	300.00	720.00	550.00	CBC/MOC	TRA
2448	PRC	Central Yunnan Roads Development	25-Sep-08	510.10	200.00	98.60	211.50	Industrial and Commercial Bank of China	TRA

Continued						FINA	ANCING ((\$ million)	
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
2657	PRC	Guangxi Southwestern Cities Development Project	26-Jul-10	299.03	150.00	73.48	75.55	Domestic banks	WUS
2709	PRC	Yunnan Integrated Road Network Development	02-Dec-10	1,753.00	250.00	519.70	983.30	Domestic banks	TRA
L3074	PRC	Yunnan Sustainable Road Maintenance Project	02-Dec-13	232.40	80.00	152.40			TRA
3501/ 3508	PRC	Guangxi Regional Cooperation and Integration Promotion Investment Program (MFF, Tranche 1)	12-Dec-16	280.00	130.00	150.00			IND
2608	Thailand	GMS: Highway Expansion (OCR)	15-Dec-09	179.40	77.10	102.30			TRA
1354	Viet Nam	Saigon Port	02-Mar-95	40.00	30.00	10.00			TRA
1487	Viet Nam	Second Road Improvement	21-Sep-96	213.40	120.00	53.00	40.40	JBIC	TRA
1660	Viet Nam	Phnom Penh-Ho Chi Minh City Highway	15-Dec-98	144.80	100.00	44.80			TRA
1728	Viet Nam	East-West Corridor Project	20-Dec-99	97.00	25.00	72.00	285.00	IBRD (\$15 million); JBIC (\$180 million); JICA (\$65 million); THA (\$25 million)	TRA
1971	Viet Nam	GMS: Mekong Tourism Development	12-Dec-02	12.20	8.50	3.70			IND
G0027	Viet Nam	GMS-VIE: Regional Communicable Diseases Control	21-Nov-05	20.00	15.00	4.55	0.45	WHO	HLT
L2222	Viet Nam	GMS Kunming-Haiphong Transport Corridor: Noi Bai-Lao Cai Highway Technical Assistance	19-Dec-05	8.00	6.00	2.00			TRA
L2302	Viet Nam	GMS Kunming-Haiphong Transport Corridor: Yen Vien-Lao Cai Railway Upgrading Project	19-Dec-06	160.00	60.00	22.50	77.50	AFD (\$40 million)/ DGTPE (\$37.5 million)	TRA
L2372	Viet Nam	GMS Southern Coastal Corridor	28-Nov-07	183.20	75.00	58.20	50.00	Korea EDCF (\$50 million)	TRA
G0095	Viet Nam	GMS Southern Coastal Corridor	28-Nov-07	25.50	0.00	0.00	25.50	Australia	TRA
L2391	Viet Nam	Greater Mekong Subregion: Kunming-Hai Phong Transport Corridor—Noi Bai-Lao Cai Highway Project (OCR)	14-Dec-07	1,016.00	896.00	120.00	-	VEC	TRA
L2392	Viet Nam	Greater Mekong Subregion: Kunming-Hai Phong Transport Corridor—Noi Bai-Lao Cai Highway Project (ADF)	14-Dec-07	200.00	200.00	0.00	-		TRA
L2457	Viet Nam	Greater Mekong Subregion: Sustainable Tourism Development (ADF)	15-Oct-08	11.11	10.00	1.11	-		IND

Continued						FINA	ANCING (million)	
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
L2460	Viet Nam	GMS: Ha Noi-Lang Son, GMS: Ha Long-Mong Cai, and Ben Luc-Long Thanh Expressways Technical Assistance (ADF)	23-Oct-08	30.80	26.00	4.80	-	VEC	TRA
L2372	Viet Nam	GMS: Southern Coastal Corridor (Supplementary)	21-Feb-10	70.00			70.00	KEXIM	TRA
L2699	Viet Nam	Second Greater Mekong Subregion Regional Communicable Diseases Control Project	22-Nov-10	30.00	27.00	3.00			HLT
L2703	Viet Nam	Second Northern GMS Transport Network Improvement	25-Nov-10	97.40	75.00	22.40			TRA
L2730	Viet Nam	GMS Ben Luc-Long Thanh Expressway Project (MFF = \$636 million) PFR 1	22-Dec-10	627.70	350.00	277.70			TRA
L2721	Viet Nam	GMS Biodiversity Conservation Corridor	10-Dec-10	34.07	30.00	2.85	1.22	Beneficiaries (in kind)	ANR
L2930	Viet Nam	Greater Mekong Subregion Capacity Building for HIV/AIDS Prevention Project	30-Oct-12	16.33	15.00	1.33			HLT
L2937	Viet Nam	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (LAO/VIE) (SF)	06-Nov-12	58.47	45.00	13.47			ANR
G0317	Viet Nam	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (LAO/VIE) (SF)	06-Nov-12	5.89		0.00	5.89	AusAID	ANR
L2944	Viet Nam	Trade Facilitation: Improved Sanitary and Phytosanitary Handling in Greater Mekong Subregion Trade Project (SF)	20-Nov-12	11.72	11.00	0.72	-		IND
L2969	Viet Nam	GMS Corridor Towns Development Project (SF)	12-Dec-12	147.20	130.00	16.20	1.00	UEIF	WUS
L3013	Viet Nam	Central Mekong Delta Region Connectivity Project	05-Aug-13	860.00	410.00	56.00	394.00	Australia (134), KEXIM (260)	TRA
L2988	Viet Nam	Greater Mekong Subregion Southern Coastal Corridor Project—Additional Financing	11-Feb-13	39.53	25.00	2.10	12.43	AusAID	TRA
L2730	Viet Nam	Greater Mekong Subregion Ben Luc-Long Thanh Expressway Project— Tranche 1	19-Aug-13	181.45			181.45	JICA	TRA
3165	Viet Nam	GMS Tourism Infrastructure for Inclusive Growth	26-Sep-14	55.08	50.00	5.08			IND
3208	Viet Nam	GMS Kunming-Haiphong Transport Corridor: Noi Bai-Lao Cai Highway (additional financing)	03-Dec-14	182.00	147.00	35.00			TRA

Continued		1	T	ı		FINA	ANCING ((\$ million)	
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
G0433	Viet Nam	GMS Biodiversity Conservation Corridors Project (additional financing)	24-Jun-15	3.79			3.79	GEF	ANR
G0450	Viet Nam	Second GMS Communicable Disease Control Project (additional financing)	26-Oct-15	2.75		0.25	2.50	RMCDT (Malaria Trust)	HLT
L3353	Viet Nam	Second GMS Corridor Towns Development Project	01-Dec-15	121.67	100.00	21.67			WUS
L3317	Viet Nam	Second Northern GMS Transport Corridor (additional financing)	16-Nov-15	77.85	71.13	6.72			TRA
0483	Viet Nam	GMS Flood and Drought Risk Management and Mitigation (additional)	15-Jan-16	1.80			1.80	IDRMF	ANR
3391	Viet Nam	GMS Ben Luc–Long Thanh Expressway PFR 2 (MFF Facility: \$636 million)	20-May-16	639.82	286.00	48.30	305.52	JICA	TRA
3467	Viet Nam	Greater Mekong Subregion Health Security Project	22-Nov-16	84.00	80.00	4.00			HLT
3499	Viet Nam	Support to Border Areas Development	08-Dec-16	122.11	106.51	15.60			TRA
L1329	Lao PDR	Theun Hinboun Hydropower	08-Nov-94	240.50	60.00	14.50	166.00		ENE
L1369	Lao PDR	Champassak Road Improvement	31-Aug-95	130.10	48.00	12.10	70.00	JICA	TRA
L1456	Lao PDR	Nam Leuk Hydropower Development	10-Sep-96	112.60	52.00	22.10	38.50	JBIC	ENE
L1727	Lao PDR	East-West Corridor Project	20-Dec-99	345.00	32.00	28.00	285.00	IBRD (\$15 million); JBIC (\$180 million); JICA (\$65 million); THA (\$25 million)	TRA
L1970	Lao PDR	GMS: Mekong Tourism Development	12-Dec-02	14.20	10.90	3.30			IND
L1989	Lao PDR	GMS: Northern Economic Corridor	20-Dec-02	95.79	30.00	7.29	58.50	Governments of the PRC (\$30 million) and Thailand (\$28.5 million)	TRA
L2162	Lao PDR	Nam Theun 2 Hydroelectric Project	04-Apr-05	958.50	20.00	0.00	938.50	AFD, PROPARCO, NIB, Thai Exim Bank and consortium of commercial banks. Other government equity contributors also include IDA, EIB and AFD. A nonsovereign investment facility of \$50 million financed from ADB OCR funds was also granted to Nam Theun 2 Power Co. Ltd.	ENE
G0026	Lao PDR	GMS-LAO: Regional Communicable Diseases Control	21-Nov-05	7.50	6.00	1.32	0.18	WHO	HLT

Continued				1		FIN	ANCING ((\$ million)	
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
G0082	Lao PDR	GMS-LAO: Northern GMS Transport Network Improvement	27-Sep-07	88.50	27.00	13.60	47.90	OPEC Fund (\$11 million), AusAID (\$14.5 million), Korea EDCF (\$22.4 million)	TRA
G0117	Lao PDR	Greater Mekong Subregion: Sustainable Tourism Development	15-Oct-08	10.87	10.00	0.87	0.00	ADF Grant	IND
G0195	Lao PDR	GMS-LAO: GMS Northern Power Transmission (ADF)	26-Jan-10	65.32	20.00	7.44	37.88	KEXIM	ENE
G0082	Lao PDR	Northern Greater Mekong Subregion Transport Network Improvement Project (Supplementary) (ADF)	26-Apr-10	27.00	27.00				TRA
G0232	Lao PDR	Second Greater Mekong Subregion Regional Communicable Diseases Control Project (ADF)	22-Nov-10	13.00	12.00	1.00			HLT
G0234	Lao PDR	Second Northern GMS Transport Network Improvement (ADF)	25-Nov-10	42.30	20.00	10.30	12.00	OFID	TRA
G0242	Lao PDR	GMS Biodiversity Conservation Corridor (ADF)	10-Dec-10	21.80	20.00	1.38	0.42	Beneficiaries (in kind)	ANR
L2818/ L2819	Lao PDR	Greater Mekong Subregion Nam Ngum 3 Hydropower Project	03-Nov-11	1,155.95	115.12	0.03	1,040.8	Equity contributors include Axia Power Holdings, Ratchaburi Electricity & Lao Holding State Enterprises. A nonsovereign investment facility of \$345 million financed from ADB OCR funds was also granted to Nam Ngum 3. Debt financing from Thai Commercial Banks is expected.	ENE
G0296	Lao PDR	Trade Facilitation: Improved Sanitary and Phytosanitary Handling in Greater Mekong Subregion Trade Project	26-Jun-12	11.00	11.00				MUL/IND
L2874	Lao PDR	Trade Facilitation: Improved Sanitary and Phytosanitary Handling in Greater Mekong Subregion Trade Project	26-Jun-12	3.46	3.00	0.46			MUL/IND
G0312	Lao PDR	Greater Mekong Subregion Capacity Building for HIV/AIDS Prevention Project	31-Oct-12	5.57	5.00	0.57	0.00		HLT
L2931	Lao PDR	Greater Mekong Subregion East-West Economic Corridor Towns Development Project (SF)	06-Nov-12	33.498	26.60	6.26	0.638	Urban Environmental Infrastructure Fund- UFPF Multi	WUS

Continued						FIN	ANCING ((\$ million)]
Loan/ Grant No.	Country	Project Name	Date Approved	Total Project Cost (\$ million)	ADB	Gov't		Co-financing	Sector
G0313	Lao PDR	Greater Mekong Subregion East-West Economic Corridor Towns Development Project (SF)	06-Nov-12	14.23	14.23	0.00	0.00		WUS
L2936	Lao PDR	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (LAO/VIE) (SF)	06-Nov-12	24.59	24.00	0.59			ANR
G0316	Lao PDR	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (LAO/VIE) (SF)	06-Nov-12	12.50	12.50	0.00	0.00		ANR
L3024	Lao PDR	Greater Mekong Subregion East-West Economic Corridor Agriculture Infrastructure Project	20-Sep-13	60.60	60.00	0.60			WUS
3156	Lao PDR	GMS Tourism Infrastructure for Inclusive Growth	08-Sep-14	43.57	40.00	3.57			IND
G0449	Lao PDR	Second GMS Communicable Disease Control Project (additional financing)	26-Oct-15	3.15		0.15	3.00	RMCDT (Malaria Trust)	HLT
L3315/ 8296	Lao PDR	Second GMS Corridor Towns Development Project	13-Nov-15	52.00	37.00	5.00	10.00	AIF	WUS
0234	Lao PDR	Second Northern GMS Road Network Improvement Project— Additional Financing	11-Oct-16	9.00			9.00	OFID	TRA
0488	Lao PDR	GMS Biodiversity Conservation Corridor— Additional Financing	08-Nov-16	12.84			12.84	SCF (FIP)	ANR
3465	Lao PDR	Greater Mekong Subregion Health Security Project	22-Nov-16	12.60	12.00	0.60			HLT

ADB = Asian Development Bank, AFD = Agence Française de Développement, AIF = ASEAN Infrastructure Fund, ANR = agriculture, natural resource, and rural development, CBC = China Bank of Communications, DGTPE = Treasury and Economic Policy General Directorate of the French Ministry of Finance, EDCF = Economic Development Cooperation Fund, EIB = European Investment Bank, ENE = energy, FIP = Forest Investment Program, GEF = Global Environment Facility, HLT = health, IBRD = International Bank for Reconstruction and Development, IDA = International Development Association, IDRMF = Integrated Disaster Risk Management Fund, IND = industry and trade, JBIC = Japan Bank for International Cooperation, JICA = Japan International Cooperation Agency, KEXIM = Export-Import Bank of Korea, Lao PDR = Lao People's Democratic Republic, MFF = multitranche financing facility, MOC = Ministry of Communications, MUL = multisector, OCR = Ordinary Capital Resources, OFID = OPEC Fund for International Development, OPEC = Organization of the Petroleum Exporting Countries, PFR = Periodic Financing Request, PPCR = Pilot Program for Climate Resilience, PRC = People's Republic of China, RMCDT = Regional Malaria and Other Communicable Disease Threats Trust Fund, SCF = Strategic Climate Fund, THA = Thailand, TRA = transport, UEIF = Urban Environmental Infrastructure Fund, UFPF = Urban Financing Partnership Facility, VEC = Vietnam Expressway Corporation, WHO = World Health Organization, WUS = water and other urban infrastructure and services.

Appendix 3: Summary of Regional Characteristics of Greater Mekong Subregion Projects in the Lao People's Democratic Republic

Number	Short Name	Regionality	RI	RP	PCR	PP	ER	Main Project Focus	Cross-Border Components
		Project covers more than one country?	GMS context in RRP?	EE includes CB components?	Impact analysis includes CB?	GMS context?	CB impacts included in EE?		
L1329	Theun Hinboun	N	N	N	N	N	N	Export earnings	Power Purchase Agreement, transmission lines
L1369	Champassak Road	N	N (but mentions transit connections)	N	N	Y (has appendix on the GMS corridor concept)	N	Improved road access between CAM and THAI for transit and local traffic Support to national road program Improved trade and tourism (PPER)	6.9 kilometer link to CAM border missing
L1456	Nam Leuk	N	N	N	N	N	N	National power sectorExport earnings	None. Project connected to existing exporting facilities
L1727	EWEC	Y LAO, VIE	Y	Y	Y	Y	Y	Economic growth and poverty reduction Connection of northeast Thailand with VIE ports	Support for CBTA border facilities
L1970	Tourism	Y LAO, CAM, VIE	Y	N	N	n/a	n/a	Sustainable tourism Tourism infrastructure Subregional cooperation GMS as a unified tourism destination	Strengthening subregional cooperation for sustainable tourism
L2162	Nam Theun 2	N	N	Y	n/a	n/a	n/a	National electricity developmentElectricity exports	Transmission line to Thai grid
G0026	Regional CDC	Y LAO, CAM, VIE	Y	Y	Y	n/a	n/a	Capacity development Surveillance and response Subregional coordination	Subregional coordination
G0082	Northern GMS transport	N	Y	N	N			Upgrading Route 4Rural access roads	Upgraded Thai border crossing and bridge financed by Thailand
G0117	Tourism	Y LAO, VIE	Y	N	n/a	n/a	n/a	Demonstration projects for sustainable tourism Economic (tourism) corridor development	Subregional coordination and standardization
G0195	Northern Power	N	Y	N	n/a	n/a	n/a	Transmission lines Rural electrification	Transmission connection to Thai grid

Continued

Number	Short Name	Regionality	RF	RP	PCR	PP	PER	Main Project Focus	Cross-Border Components
		Project covers more than one country?	GMS context in RRP?	EE includes CB components?	Impact analysis includes CB?	GMS context?	CB impacts included in EE?		
G0232	Second CDC	Y LAO, CAM, VIE	Y	N	n/a	n/a	n/a	Capacity development Surveillance and response Subregional coordination	Subregional coordination
G0234	2nd Northern Transport	Y LAO, VIE	Y	N	n/a	n/a	n/a	Road upgradingTravel times and costsRoad safety	Northeastern corridor
G0242	Biodiversity	LAO, CAM, VIE	Y	N	n/a	n/a	n/a	Local forest management Rural water supply Livelihoods and small infrastructure	Biodiversity planning
G0296	Trade facilitation	LAO, CAM (VIE separate)	Y (Incl ASEAN context)	Y	n/a	n/a	n/a	Enhanced SPS management capacity Improved regional cooperation and harmonization	Trade
G0312	HIV/AIDS	LAO, VIE	Υ	N	n/a	n/a	n/a	Capacity buildingOutreachPlanning	Regional coordination
L2931	Corridor Towns	N	Y	N	n/a	n/a	n/a	Urban infrastructure investments Planning of other investment	EWEC
L2936	GMS Flood	LAO, VIE (CAM separate)	Y	N	n/a	n/a	n/a	Enhanced data and information Flood control infrastructure Capacity for community DRM	Regional data sharing
L3024	EWEC Agriculture	N	Y	N	n/a	n/a	n/a	Agriculture infrastructure	EWEC
L3165	Tourism Infra	N	Y	N	n/a	n/a	n/a	Tourism infrastructure in four provinces	Regional tourism standards
L3315	Second Corridor Towns	N	Y	N	n/a	n/a	n/a	Integrated urban development along economic corridors	Regional competitiveness
L3465	GMS Health	LAO, CAM, MYA, VIE	Y	N	n/a	n/a	n/a	Regional cooperation in CDC National disease surveillance Laboratory services	Regional coordination

ADB = Asian Development Bank, ASEAN = Association of Southeast Asian Nations, CAM = Cambodia, CB = cross border, CBTA = Cross Border Transportation Agreement, CDC = communicable disease control, DRM = disaster risk management, EE = economic evaluation, EWEC = East West Economic Corridor, GMS = Greater Mekong Subregion, LAO = Lao People's Democratic Republic, MYA = Myanmar, N = No, n/a = not applicable, PCR = project completion report, PPER = project performance evaluation report, RRP = report and recommendation of the President, SPS = sanitary and phytosanitary standards, VIE = Viet Nam, Y = Yes.

 $Source: A sian\ Development\ Bank.$

Appendix 4: The Lao People's Democratic Republic Projects by Sector

1. The projects officially listed as Greater Mekong Subregion (GMS) projects do not all have strong regional elements. The projects that had feasibility studies covering more than one country have the strongest regional rationale. The purpose of this appendix is to look at each project and determine the regionality context in the report and recommendation of the President (RRP), and where available, the project completion report (PCR) and the project performance evaluation report (PPER).

(i) Transport

- 2. The improvement of road transport infrastructure constitutes the core of the GMS program. In the Lao People's Democratic Republic (Lao PDR), four projects to rehabilitate major highways have been completed, while a fifth one is under implementation. Together, they constitute 24% of the number of projects in the Lao PDR, and 30% in value. A further five projects (one of which is completed) have important road rehabilitation and upgrading elements built in, mainly encompassing rural and access roads.
- 3. The Champassak Road Improvement Project covers the Lao PDR. The RRP for this early GMS project does not discuss the GMS context (although cross-border connections are mentioned). The road between the Thai border and Cambodia has been upgraded, except for the last 7 kilometers, clearly reducing the regional benefits of the investment. The economic evaluation in the RRP does not consider cross-border benefits, while the economic evaluation in the PCR and the PPER did not consider these either. However, the PPER does mention the GMS context and has an appendix on the GMS corridor context.
- 4. The Northern Economic Corridor Project covers the Lao PDR. This project is unique as the financing was provided by the Asian Development Bank (ADB) and the People's Republic of China (PRC) and Thai governments, providing loans of one-third each. The RRP, PCR, and PPER strongly consider the GMS context, and in all three documents, the economic evaluation considers the subregional benefits.
- 5. **The East–West Economic Corridor Project covers the Lao PDR and Viet Nam.** It is the first GMS project implemented in more than one country. The RRP mentions the GMS context. The RRP, PCR, and PPER have economic evaluations that consider cross-border benefits.
- 6. The Northern GMS Transport Network Improvement Project covers the Lao PDR. In the RRP, the GMS context is presented, but the economic evaluation did not consider cross-border benefits, neither did the PCR.
- 7. **The Second Northern GMS Transport Project covers the Lao PDR and Viet Nam.** The RRP presents the project in the GMS context (the Northeast Economic Corridor) but the economic evaluation does not consider cross-border benefits.

(ii) Energy

8. There are four GMS energy projects in the Lao PDR (19%), with a total value of \$1.38 billion (55% of all GMS project in the Lao PDR). The nine transport and energy projects combined, therefore, constituted 43% of the GMS projects in the Lao PDR; and 85% in value. Three energy projects will build hydropower plants, and one concerns transmission lines. All four projects are the Lao PDR-only projects.

- 9. The Theun Hinboun Hydropower Project is the first approved GMS project. The RRP, PCR, and PPER do not mention the GMS context nor does the economic evaluation take cross-border benefits into account. The stated objective of the project is to generate export earnings, and the project includes transmission lines to connect to the Thai grid.
- 10. The Nam Leuk Hydropower Development Project is to develop the national power sector and generate export earnings. The RRP, PCR, and PPER do not mention the GMS context nor does the economic evaluation take cross-border benefits into account. The project has no cross-border component as it connects to existing exporting facilities.
- 11. The Nam Theun 2 Hydroelectric Project is to export electricity to Thailand and includes a transmission line connecting to the Thai grid. The RRP does not mention the GMS context but the economic evaluation does consider cross-border benefits. A small portion of the power generated is sold to the domestic grid.

(iii) Tourism

- 12. There are three GMS tourism projects in the Lao PDR (14% of the number of GMS projects) with a combined value of \$69 million (3% of the total). The projects have focused on relatively small-scale infrastructure investments with emphasis on sustainable tourism; and on subregional coordination, planning, and standards.
- 13. The GMS Mekong Tourism Development Project has the first RRP covering more than one country and includes Cambodia, the Lao PDR, and Viet Nam. The RRP discusses the GMS as a unified tourism destination and focuses on building infrastructure for sustainable tourism. The economic evaluation in the RRP and the PCR do not consider cross-border benefits but only focus on local tourism impacts, including poverty reduction.
- 14. The GMS Sustainable Tourism Development Project covers the Lao PDR and Viet Nam and continues from the first tourism project. The RRP discusses tourism corridor development in the GMS strategic context, but the economic evaluation in the RRP does not consider cross-border benefits. Supported activities include subregional coordination and standardization.
- 15. The GMS Tourism Infrastructure for Inclusive Growth Project covers the Lao PDR only. The RRP discusses the project, which builds infrastructure in four provinces, in the context of the GMS Tourism Sector Strategy, 2016–2025; and promotes regional tourism standards. The economic evaluation in the RRP does not consider cross-border benefits.

(iv) Agriculture

16. The Trade Facilitation: Improved Sanitary and Phytosanitary Handling in the GMS Trade Project covers Cambodia, the Lao PDR, and Viet Nam.¹ The RRP discusses the GMS subregional context and the ASEAN context. The economic evaluation considers cross-border benefits.

17. The GMS Flood and Drought Risk Management Project covers Cambodia, the Lao PDR, and Viet Nam. The first RRP contains the Lao PDR and Viet Nam, while the second RRP presents the Cambodia project. The RRP discusses the project in the GMS context but does not include cross-border benefits in the economic evaluation.

Because of timing issues, the RRP only covers Cambodia and the Lao PDR. The Viet Nam component is in a separate RRP.

18. The GMS East-West Economic Corridor Agriculture Infrastructure Project is the only project focusing on agriculture and covers the Lao PDR. The project invests in agriculture infrastructure along the East-West Economic Corridor (EWEC). The RRP discusses the subregional context and the role of economic corridors but does not include cross-border benefits in the economic evaluation.

(v) Urban Development

19. The GMS East–West Economic Corridor Towns Project covers the Lao PDR. The project focuses on urban infrastructure investments in three towns along the EWEC and supports the planning of other investments. The RRP discusses the project in the GMS context and the development of economic corridors. There is no consideration of cross-border benefits in the economic evaluation.

(vi) Human Resources Development

- 20. Human resources development in the GMS (health and education) has mainly been through technical assistance, except for projects focusing on cross-border infectious diseases. There are no GMS investment projects in education, but four are in health (19%).
- 21. The first and second regional Communicable Diseases Projects cover Cambodia, the Lao PDR, and Viet Nam. They invest in capacity development, surveillance, and response in border regions, and promote subregional coordination. The RRPs present the GMS context, and the RRPs and the PCR (in the case of the first project) include cross-border benefits in the economic evaluation.
- 22. The GMS Capacity Building for HIV/AIDS Prevention Project builds on the experiences gained in the first two regional communicable diseases projects. The project covers the Lao PDR and Viet Nam. It invests in capacity development, surveillance, and response in border regions and promotes subregional coordination. The RRP presents the project in the GMS context, but does not include cross-border benefits in the economic evaluation.
- 23. The GMS Health Security Project is implemented in Cambodia, the Lao PDR, Myanmar, and Viet Nam. It is the first project where the RRP covers four countries. The focus is on regional cooperation in communicable diseases control, national disease surveillance and laboratory services. The RRP analyses the GMS context, but does not include cross border benefits in the economic evaluation.

(vii) Environment

24. The GMS Biodiversity Conservation Corridor Project covers Cambodia, the Lao PDR, and Viet Nam. The project focuses on biodiversity corridors across the three countries and invests in local forest management, rural water supply and livelihoods, and small infrastructure. The RRP discusses the project in the GMS context, but does not include cross-border benefits in the economic evaluation.

Appendix 5: Characteristics of Economic Corridors

- 1. The concept of the GMS Economic Corridors was first proposed in 1998 and endorsed by the 8th GMS Ministerial Meeting as a flagship program. In 1999, the Asian Development Bank approved funding for the East–West Corridor project. The RRP¹ states: "The economic corridor concept borrows from the regional growth triangle paradigm which are economic zones spread over relatively large but well defined, geographically adjacent areas in which differences in the factor endowments of three or more countries are exploited so as to promote growth, external trade, and direct investment An economic corridor consists of several elements: a defined location; physical infrastructure, including a transport system around which economic activities can be clustered; economic activities; and software (foreign investment regulations, incentives, institutions, etc.)".
- 2. An economic corridor is the last stage in an evolution process that starts with a transport corridor. The literature recognizes various models of economic corridor development. One highlighted by Banomyong (2008) distinguishes four stages of corridor development: (i) transport, (ii) multimodal, (iii) logistics, and (iv) economic. As Guina (2010) explains, these stages are not necessarily sequential and may overlap, especially because national conditions along an international corridor may differ. The literature also considers the development of transport infrastructure and services as a necessary, but not sufficient, condition for economic corridor development.
- 3. Perdiguero (2016) distinguishes five steps in the development of economic corridors. The first step is the transport corridor, through development of physical infrastructure. The second is the trade facilitation corridor, with cross-border transport operations and efficient border formalities. The third step is the logistics corridor, with broader trade facilitation (behind-the-border) and developed cross-border logistics services. Fourth is the urban development corridor, with improved economic infrastructure and enhanced capacities of corridor towns for public-private partnerships. And finally, the economic corridor, with increased private investment and well-developed production chains.
- 4. Nogales (2016) distinguishes the analytical and policy dimensions of economic corridors. The analytical dimension reinforces the idea that corridors are linear clusters of land uses that interact with each other such that the whole is greater than the sum of its parts. The policy dimension interprets corridors as policy and spatial planning instruments. Nogales concludes that economic corridors have become popular for four reasons. Firstly, corridors are "smart" tools for integrated territorial planning combining transport services with boosting key sectors. Second, economic corridor programs encompass a set of coordinated actions that ensure a critical mass of investments. Third, corridors are conducive to generating multi-stakeholder alliances for development, with the participation of local and central authorities, private sector, and development partners. Fourth, there is a symbiotic relationship between economic corridors and trading blocs in that it enriches strategic thinking about how to spur inclusive and sustainable growth.
- 5. There is no standard definition of the concept of economic corridor. Brunner (2013, p. 1) explains that the literature does not reveal a standard picture of what economic corridors are. "It is possible to distil characteristics of economic corridors that are more commonly accepted in the literature and in a sample of case studies. We can then speak of an emerging and fluid concept of what economic corridors are. Economic corridors connect economic agents along a defined geography.

ADB. 1999. Report and Recommendation of the President to the Board of Directors: GMS: East–West Corridor Project. Manila. p. 5.

They provide connection between economic nodes or hubs, usually centered on urban landscapes, in which large amount of economic resources and actors are concentrated. They link the supply and demand sides of markets".

- 6. The GMS Strategic Framework, 2012–2022 has a strong focus on economic corridors, and, as the strategy explains, presents a deviation from earlier strategies in "recognizing the important interlinkages across sectors while being very focused on relatively fewer high-profile initiatives. For each corridor, there is a need for carefully planned investments aimed at strengthening urban development, upgrading logistics, improving the network of feeder and rural roads, and developing other transport modes." The strategic framework is anchored in the corridor development approach, which provides a spatial focus on urban sector development. The framework expands the GMS Program from conventional infrastructure to multisector investments designed to foster economic corridor development, involving cross-sector linkages, better consideration of regional economic development, and stronger stakeholder involvement.
- 7. A key focus of corridor development in the GMS Strategic Framework is the Cross-Border Transport Agreement (CBTA), which was signed in 1999, but has not yet been fully implemented. The CBTA is envisaged to ease administrative bottlenecks on border-crossing points in the economic corridors to reduce time and cost of trade. The focal areas of the CBTA are (i) facilitation of border crossing formalities covering single window and single stop customs inspection, and coordinating of hours of operation; (ii) facilitation of cross-border movement of people covering multi-entry visa and recognition of driver license; (iii) facilitation of cross-border movement of goods covering regional transit regime; (iv) exchange of traffic rights; and (v) establishment of requirements for admittance of road vehicles.
- 8. The strategic action plan for the North-South Economic Corridor states that development of economic corridors is complex and long (ADB 2010b): "An economic corridor is not simply a connection between point A and point B. The movement of people and goods can begin and end anywhere between points A and B. The impact of an economic corridor also goes beyond the main route or "line." It extends to the areas whose access to major economic centers could be strengthened by connecting these points.
- 9. Brunner (2013) concludes that economic corridors are best defined by their characteristics, the measurement of which can determine and monitor the performance of an economic corridor. This means that when examining economic corridors, each has to be looked at individually, considering its defining characteristics.

Appendix 6: List of Special Economic Zones in the Lao People's Democratic Republic

No.	SEZ Name	Location	Туре	Established (Upgraded)
1	Savan-Seno	Savannakhet Province	Industrial	2003
2	Boten	Luang Namtha Province	Trade and Logistics	2003 (2012)
3	Golden Triangle	Bokeo Province	Tourism and Urban	2007 (2014)
4	VITA Park	Vientiane Capital	Industrial	2009 (2010)
5	Phoukyo	Khammuan Province	Industrial	2011
6	Savsettha	Vientiane Capital	Industrial	2010 (2011)
7	Thatluang	Vientiane Capital	Tourism and Urban	2011
8	Long Thanh	Vientiane Capital	Tourism and Urban	2008 (2012)
9	Dongphosv	Vientiane Capital	Trade and Logistics	2009 (2012)
10	Thakhek	Khammuan Province	Trade and Logistics	2012
11	Champasak	Champasak Province	Industrial	2015
12	Luang Prabang	Luang Prabang Province	Tourism and Urban	2016

SEZ = special economic zone.

Note: Map of SEZs is available in Ministry of Planning and Investment. 2018. Special Economic Zone (SEZ).

http://www.investlaos.gov.la/index.php/where-to-invest/special-economic-zone.

Source: SEZ Promotion and Management Office, Ministry of Planning and Investment.

Appendix 7: The Lao People's Democratic Republic and the Greater Mekong Subregion: Study on a Strategic Approach Outline Terms of Reference

Introduction

1. The Lao People's Democratic Republic (Lao PDR) is a founding member of the Greater Mekong Subregion (GMS) Program, and has benefited substantially from investments, receiving external financing amount of \$3.5 billion as of end of 2016. A study conducted in 2017 (Frielink 2017) concluded that the Lao PDR could increase the benefits it gets from the GMS Program, including those from the GMS Economic Corridors, by pursuing a more strategic and focused approach to planning and implementation. The Lao PDR has a system in place to ensure that (investment) projects that are approved as GMS projects are a priority in the national planning. From the GMS perspective, the subregional and/or national benefits of a project are evaluated and assessed on their own merits. However, little effort seems to be expended to ensure that policies and actions are in place to maximize the benefits for the Lao PDR and for the impacted population. It appears that there is an underlying assumption that benefits of GMS projects will automatically materialize, which is not the case.

Scope of Work

2. The proposed study would consist of two major parts: one focusing on the GMS Program, and the other focusing on Economic Corridors. The study would cover the following topics:

(i) GMS Program

- Formulation of the localization of the GMS 3Cs. In consultation with the relevant offices, propose the 3Cs for the Lao PDR, namely, coordination, concentration, and culture, and provide a rationale and description of these.
- Integration of the GMS Program in the National Socio Economic Development Plan. Analyze the role of the GMS Program in the Lao PDR and identify how the government can maximize the benefits of the regional approach at the national level. These could include specific policies, institutional arrangements, complementary projects, and capacity development initiatives. The analysis would be the basis for integration of the GMS Program in future NSEDPs.
- Methodology for national planning of GMS projects. The study will develop a methodology to assess the costs and benefits of ongoing and proposed GMS projects from a national and local point of view. Assessing GMS projects, and including them in the national planning system on an outcome-based planning basis, will better ensure maximum benefits from GMS projects. In addition to the standard economic (and where applicable financial) analyses, projects need to have national impacts, outcomes, and outputs defined, which will enable the government to assess local impacts and create better synergies with other national programs and projects. The methodology will include the outline of a monitoring and evaluation system to enable better assessment of impacts in the future. The system should be simple and based as much as possible on existing data sets.

(ii) Economic Corridors

- Formulation of a Vision and Strategy. Making GMS corridors work better for the Lao PDR requires focused and concerted action by the Government of the Lao PDR with support from the development partners. The focus in the 8th NSEP on area development provides an excellent handle for this type of action. The existing two main corridors have laid the groundwork for economic development in their respective areas. A combination of focused policies and actions are needed to speed up development and ensure that it is inclusive and equitable. A long-term vision and strategy are needed, which would focus on the national and provincial benefits to be obtained from economic corridors and the policies and actions that would be needed to optimize those benefits while minimizing the negative impacts and externalities.
- Explore corridor agencies. The study would explore the possibility of having an agency responsible for each corridor. In consultation with the relevant offices, this would be explored, including proposed mandates and terms of reference, for consideration by the government. The study would also explore a Lao-centric naming convention for the corridors.
- Monitoring of economic corridors. The development of economic corridors in the Lao PDR must be
 closely monitored and timely action taken. For each corridor, a set of agreed upon indicators needs
 to be developed and closely monitored on a regular basis. This will allow for close monitoring of
 inputs, actions, outcomes, and impacts, while corrective and timely action can be taken. A study
 will outline a monitoring and evaluation system to enable better assessment of impacts in the
 future. The proposed system should be simple and based as much as possible on existing data sets.

Increasing Benefits Through Economic Corridor Development in the Lao People's Democratic Republic

Special economic zones play an important role in the development of the Greater Mekong Subregion (GMS) which is home to 328 million people. The Lao People's Democratic Republic (Lao PDR) shares borders with the other five GMS countries. However, it is not always clear to what extent the Lao PDR has benefited from the GMS program.

This study identifies opportunities for the Lao PDR to increase the benefits it derives from GMS projects, particularly economic corridors. It emphasizes that regional governance arrangements can never be a substitute for national governance arrangements. Instead, national policies, capacities, and implementation arrangements will determine how the Lao PDR can maximize the potential benefits from GMS projects.

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ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to a large share of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.