

Lao PDR Development Report 2010

Natural Resource Management for Sustainable Development

BACKGROUND PAPER

Governance of Natural Resource Management in Lao PDR: A Value Chain Perspective

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Abbreviations and Acronyms

ADB	Asian Development Bank
DEPD	Department of Energy Promotion and Development (MEM)
DESIA	Department of Environmental and Social Impact Assessment (WREA)
DIP	Department of Investment Promotion (MPI)
DGEO	Department of Geology (MEM)
DOE	Department of Energy (MEM)
DOM	Department of Mines (MEM)
DPI	Department of Planning and Investment (MPI provincial arms)
EDL	Électricité du Laos
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
GOL	Government of Lao PDR
IPP	Independent Power Producer
JICA	Japanese International Cooperation Agency
LEnS	Lao Environment and Social Project
LHSE	Lao Holding State Enterprise
LXML	Lane Xang Mining Company Limited
MEM	Ministry of Energy and Mines
MOF	Ministry of Finance
MPI	Ministry of Planning and Investment
NPSH	National Policy on Environmental and Social Sustainability in Hydropower Development
NRM	Natural Resource Management
NT2	Nam Theun 2
PBM	Phu Bia Mining
PIM	Public Investment Management
PIP	Public Investment Plan
PFM	Public Financial Management
PFMSP	Public Financial Management Support Program
PPA	Power Purchasing Agreement
RMA	Revenue Management Arrangements (NT2)
SAO	State Audit Organization
SOE	State-Owned Enterprise
WREA	Water Resources and Environment Administration

Summary

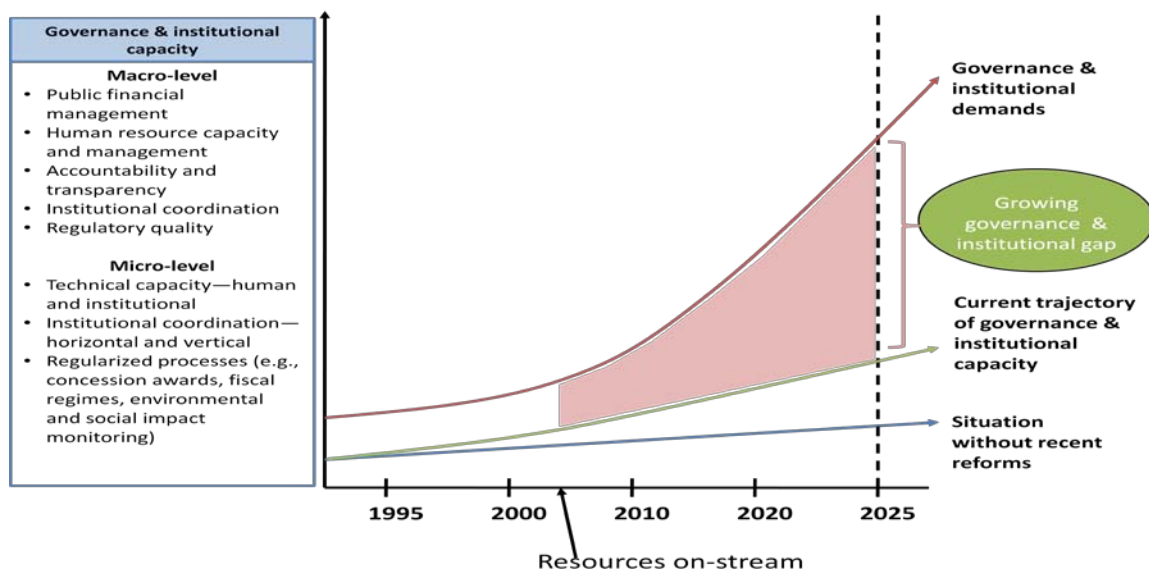
Lao PDR has promising mineral reserves for commercial production and tremendous hydropower potential from abundant water resources. Having embarked upon the process of tapping these natural resources, the Lao economy is well-positioned to generate a great deal of growth and development through its mining and hydropower sectors. The country's ability to succeed will depend, as the experience of other resource-rich developing nations has shown, on the quality of policy-making and implementation, as well as sector governance.

The aim of this background report is to offer a set of comprehensive insights on the governance and institutional arrangements of the mining and hydropower sectors in Lao PDR. The methodology employed is a natural resource management value chain diagnostic—that analyzes each key step in the process of extracting, taxing, and benefiting from natural resources. Through this lens, we highlight Lao PDR's institutional strengths in mining and hydro management and identify potential opportunities for further improving natural resource governance, emphasizing administrative capacity-building and processes for enhancing transparency and accountability.

Key messages

Experience from resource-rich developed and developing countries across the world, from Canada to Mongolia, indicates that the quality of existing institutions and governance is key in ensuring that resource wealth turns into a blessing for economic development, instead of a curse. Lao PDR's existing governance institutions—general as well as mining and hydro sector-specific—have undergone promising improvements over the past few years. Yet as the impact of natural resource exploitation on the Lao economy is poised to grow dramatically, the governance gap remains a crucial challenge that will increase over time if the government does not take strategic and continued action to enhance governance and institutional capacity (Figure 1).

Figure 1: The governance and institutional gap facing Lao PDR as the natural resource sector grows



Lao PDR faces a large gap in governance and institutional quality for sound natural resource management that will continue to grow as a major challenge as resource exploitation increases. Over the past five years, GOL has made important advances in general public sector governance institutional quality—for example, strengthening its public financial management system and improving internal oversight mechanisms—yet it continues to face weaknesses in accountability, regulatory quality, and government effectiveness. Similarly, while the GOL has taken important steps in enhancing mining and hydro sector management, key institutional challenges remain and will grow as resource exploitation surges in Lao PDR. This ***governance gap*** remains a crucial challenge that will increase over time if the government does not take strategic and continued action to enhance governance and institutional capacity. It is important to recognize up front that the governance gap is not simply related to policies and institutions at the national level, but—given the extent of administrative decentralization in Lao PDR—is also about the distributed implementation and monitoring capacity of local government in the areas where projects are developed.

Institutional development must be aligned with the challenges of natural resource sector management in two crucial ways. The first is the national portfolio-level question of whether a country is ***doing the right projects*** and the second the project-level concern of whether a country is ***doing the projects right***. The GOL must be aware of both these dimensions as it attempts to close the governance gap, and this report is intended to assist the GOL with the necessary analysis and recommendations.

The national portfolio-level governance challenge, or doing the right projects, is a central strategic issue facing a country with rich natural wealth. The GOL must determine how it can undertake resource exploitation in a deliberate manner, paying particularly careful attention to ensuring that exploitation does not proceed faster than the government's ability to manage the resource sectors. Lao PDR still lacks, for the most part, a systematic, overarching governing regime for natural resource management. As the resource sectors continue to grow, and cumulative impacts and smaller investments proliferate, a project-by-project approach to governance will be both inefficient and insufficient. A more strategic approach requires, in the first instance, the ability to select the right projects in the context of the government's National Socio-Economic Development Plan and institutional capacity—which requires an overarching policy framework and complementary specific sector development policies. The analysis presents a brief overview of the how Lao PDR is positioned on national portfolio-level governance and strategic challenges in natural resource management, laying out some key issues for the GOL to consider.

Definitions:

Doing the right projects is about developing the optimal national portfolio of projects. This includes: (i) ensuring that this portfolio is aligned with the National Socio-Economic Development Strategy and the needs of other sectors; (ii) aligning the total number of projects with the capacity available to oversee them effectively; (iii) prioritizing across projects to pursue those which offer the best net returns from a economic, social, environmental and financial perspective; and (iv) identifying the trade-offs associated with land and water use by the projects. Such choices would usually require a clear policy framework and sector strategy.

Doing the projects right is about establishing the optimal governance arrangements over the natural resource management process, spanning the legal and contractual arrangements for project development; implementation, monitoring and oversight of projects; and the collection and use of revenues from these projects.

The project-level governance challenge, or doing the projects right, in turn, requires concerted attention to the process of natural resource management itself, in order to implement the GOL's strategic vision. We utilize a value chain diagnostic that assesses the current governance arrangements in place for natural resource project management, including: (i) the legal and contractual frameworks around project development; (ii) the GOL's role in project implementation, monitoring, and oversight; (iii) revenue collection from projects; and (iv) the mechanisms through which these revenues are channeled into investments in sustainable development.

This report examines the current governance arrangements and institutional capacities in natural resource management relating to both portfolio level and project level challenges. On the basis of the diagnosis, the report offers a series of recommendations for the GOL to consider as mechanisms for improving natural resource management, with an emphasis on: (i) strategic oversight and coordination of institutional arrangements and capacities; (ii) enhancing transparency as a principle of NRM; and (iii) standardizing the NRM process to increase predictability and efficiency.

NATURAL RESOURCES AND GOVERNANCE

This section draws the linkages between the natural resource sector and governance and institutional arrangements. First, it briefly characterizes the mining and hydropower sectors in Lao PDR. Second, it makes the case for why governance matters in the natural resource sector, with an overview of the political economy literature on the subject. Third, it provides an assessment of the macro governance and institutional landscape in Lao PDR as it pertains to mining and hydro management.

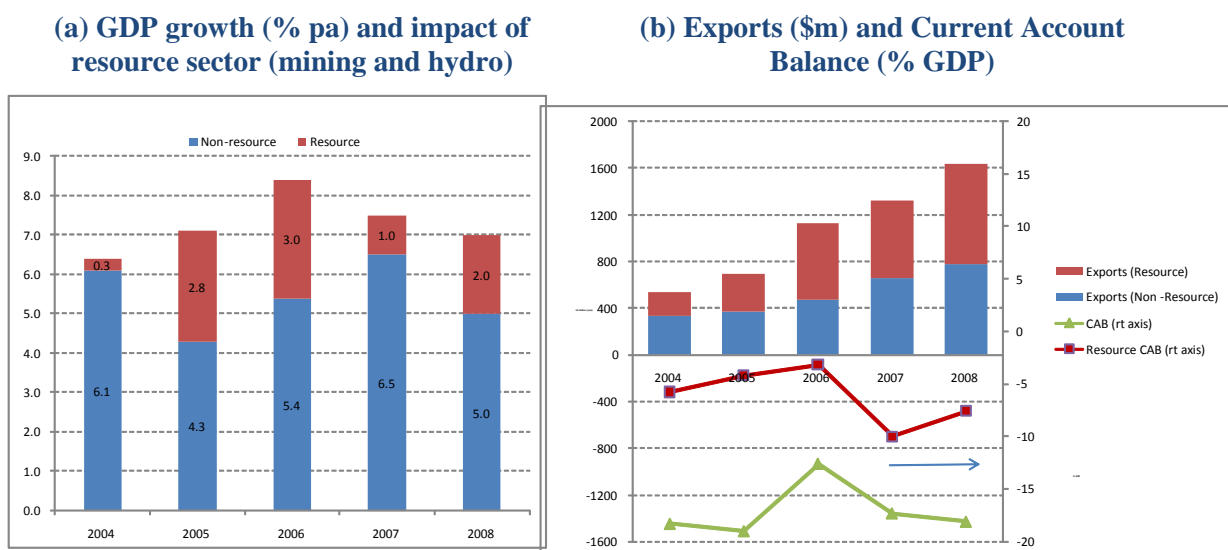
The Natural Resource Sector in Lao PDR

Lao PDR has been slowly developing a small fraction of its hydropower potential for over three decades. Current government policy is to accelerate the pace of this development markedly—making a push with bigger hydro concessions such as Nam Theun 2—and fiscal receipts from the sector are projected to climb from just under \$20 million today to over \$200 million by 2016. By contrast, industrial mining in the country has enjoyed a more recent and dramatic startup this decade. Mineral production—driven particularly by two mid-size copper and gold sites, Sepon and Phu Bia, which together make up over 90 percent of total production value of the Lao mining industry—increased from approximately US\$8 million in 2002 to over US\$600 million in 2007 and 2008. Total government revenues from taxes and fees in the mining sector exceeded \$120 million in 2007 and \$90 million in 2008, adding over 20 percent to total non-grant revenues.¹

Large mining and hydropower projects, through both direct and indirect effects on economic activity, have been key contributors to the country's solid growth record of 7.5 percent per annum over the most recent five-year period, 2004-08 (Figure 2a), particularly when global copper prices were at their height in 2005-06.

¹ Figures extrapolated from World Bank (2009a), Economic Assessment of the Future of the Lao Mining Sector: Background Paper for Country Economic Memorandum, draft June 2009.

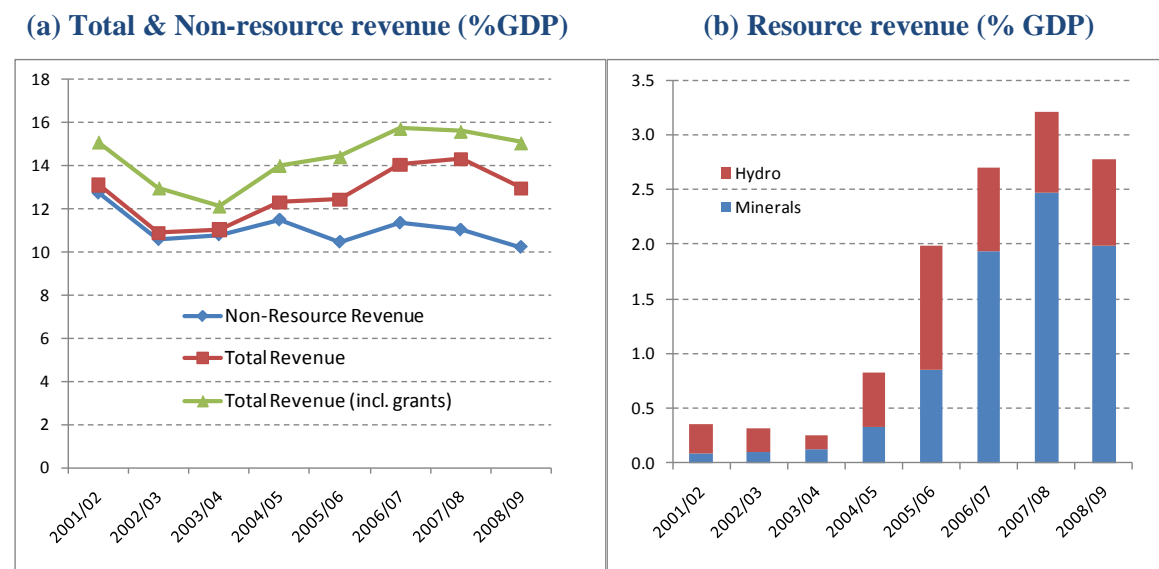
Figure 2.



Source: IMF and World Bank staff estimates in the Lao PDR Public Expenditure Review 2009 (DRAFT)

Natural resource production rose from 3.5 percent of GDP in 2002 to 7.5 percent in 2007, contributing one-fifth of economic growth in that period. During the same period, total exports grew at an average annual rate of 25 percent, with resource-based exports rising by 34 percent. This fast-growing export activity meant that by 2008 the share of hydro and mineral exports had increased to over 50 percent of total export earnings (Figure 2b).

Figure 3.



Source: IMF and World Bank Staff estimates.

Government revenues from mining and hydropower include royalties, corporate (profit) tax, and dividends (since the state usually holds an equity stake). Thus the coming on-stream of large mining and hydropower operations—combined with the boom in copper and gold prices—strengthened the government's revenue situation from 2004 onwards. Fiscal revenues from

natural resources have risen from 3 percent of total revenues in 2001 to almost 18 percent in 2008.² Indeed, the bulk of the increase in the government revenue to GDP ratio in this period came from mineral and hydro resource revenues (Figure 3), which increased from 0.7 percent of GDP to 2.7 percent. The main increase in resource revenues stemmed from increased production and a price boom in both copper and gold exports. Commodity price declines of over 50 percent from their peak in 2008 mean that both direct and indirect benefits to the country will drop in the short term, yet revenue flows to the government will remain substantial.

The mining industry in Lao PDR is segmented into three groups that operate, for the most part, independently of each other:³

- i. Domestic operators—private as well as military- and state-owned—active in small-scale and artisanal mining. These operators often have very little experience in mining but have branched out from other successful enterprises in, for example, construction or timber.
- ii. Regional companies—from China, Vietnam, and other ASEAN countries, often supported by bilateral government investment promotion policies. These companies tend to target exploitation of confirmed deposits requiring minimal capital investment usually over one to two years.
- iii. A handful of international mine operators, including both small and mid-size companies from Australia, Europe, and North America and regional companies that have already gained a foothold in the construction and hydropower sectors. Two major internationally operated mines currently dominate the sector—the Phu Kham site operated by Phu Bia Mining and the Sepon mine operated by Lane Xang Minerals Limited.⁴ Their combined production value exceeded US\$600 million in 2008, representing over 90 percent of the Lao mining industry’s total production value.

Between 1993 and mid-2009, around 150 active licenses were issued to foreign operators and numerous local investors operating small mines, mostly for exploration rather than production. Recent mineral price volatility has introduced great uncertainty over plans to develop new mines or expand existing ones; commodity price volatility and the global credit crisis forced both Lane Xang Minerals and Phu Bia Mining to suspend their planned expansion activities.⁵ World Bank estimates suggest that 2009 will mark the peak in mineral production volume, to be followed by at least 2 years of slowly declining production. Low to high case scenarios project that, depending on prices and production development, fiscal receipts from copper could range from \$66.5 million to \$244 million per annum (relative to total non-grant revenues of around \$800 million in FY2007/08).⁶

In the hydropower sector, Lao PDR currently has 682 MW of installed generation capacity and nine projects totaling 2,254 MW under construction (including the 1,088 MW Nam Theun 2). Seventeen additional projects in the pipeline (including the 1,800 MW Hongsa coal-

² Figures from World Bank (2009c), Fiscal Sustainability Analysis of the Revenues From Mineral Extraction: Background Paper for Country Economic Memorandum, draft September 2009.

³ World Bank (2009a).

⁴ Lane Xang Minerals Ltd changed ownership in June 2009 when the Chinese company Minmetals acquired most of the Australian company OZ Minerals’ assets, including the Sepon operations. The direct parent company of Lane Xang Minerals Ltd is the newly established Minerals and Metals Group (MMG), an Australian registered company (with Minmetals as the main investor). Phu Bia Mining, owned by Pan Australian, is also expected to partner with a Chinese investor, Guangdong Rising Assets.

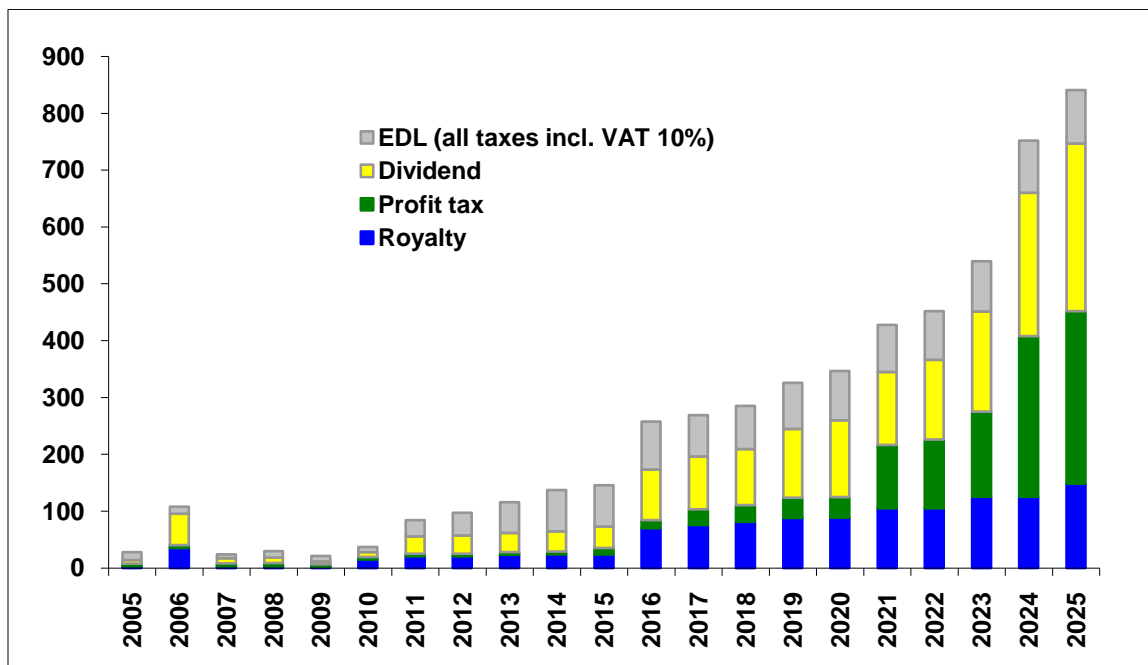
⁵ The corporate acquisitions described above are, however, expected to lead to a renewal of parts of the abandoned expansion plans.

⁶ World Bank (2009a).

fired power plant) have completed feasibility studies and are projected to add a further 6,373 MW of installed capacity by 2020, according to the latest sector development plan. Finally, some forty other hydropower projects, with Memoranda of Understanding (MOUs) signed with various developers, are at different stages of consultation and feasibility study.⁷ In comparison to some of the early large-scale hydropower development which involved significant investment from international financial institutions, the trend in the current pipeline is towards investments from neighboring countries.

In sum, Lao PDR is expected to see greater than tenfold growth in hydropower generation within the next decade alone. Revenues of just under US\$20 million from the power sector in 2008 are thus projected to increase tenfold by 2016 and even more steeply after that, to over US\$800 million by 2025, as profit tax holidays elapse and dividends increase (see Figure 4). Around 90 percent of capacity under construction is geared toward export, mostly to Thailand and Vietnam, and the Government continues to sign MOUs with these countries for hydropower export.

Figure 4: Projections of GOL Revenue from the Power Sector (US\$m), 2005-2025



Source: World Bank staff estimates

In addition to the large scale natural resource development mentioned here, artisanal mining also occurs in Lao PDR, as well as the development of small-scale, or pico, hydropower projects. For the most part, these aspects of natural resource extraction are governed distinctly—pico hydro projects are not subject to the same concession award or regulation process as the larger developments and artisanal mining is, for the most part, ungoverned—and their implications for sector governance are limited. They are hence not discussed in this background paper.

⁷ Latest data on hydropower development are taken from World Bank (2009d), Lao PDR Hydropower and Mining Technical Assistance Capacity Building Project, Project Appraisal Document.

Why Does Governance Matter in the Natural Resource Sector?

Developing countries rich in natural resources suffer from a peculiar paradox. Although natural wealth offers great opportunities for poor and fragile nations to improve their lot, many fail to translate these riches into salutary economic and sociopolitical development outcomes—a condition colloquially known as the “resource curse.”⁸ Contemporary political economy research suggests that whether a country falls prey to the resource curse depends on a number of structural and economic factors. The cumulative body of quantitative analyses of resource-rich developing countries indicates that the quality of existing institutions is perhaps the key factor that mediates a resource rich country’s economic outcomes.

Governance and institutional capacity affects the impact of natural resources on growth and development in two different ways. First, the quality of policy-making and implementation in the natural resource sectors will be conditioned by governance and institutional quality—encompassing the mandates and implementation capacity of individual agencies, as well as the overall governance and regulatory framework. From this viewpoint, the quality of institutions and the government’s ability to make policy effectively, minimizing discretion and rent-seeking, affects outcomes in the natural resource sector much as with other development outcomes.⁹ In addition, because natural resources generate revenue windfalls, governments can be tempted to make policy decisions with adverse long-term consequences. Excessive public spending appears to be a key sign of economic mismanagement in the wake of natural resource booms.¹⁰

Second, extraction of natural resources might actually induce a deterioration in governance. One line of logic is that dependence on natural resource wealth limits other forms of government revenue generation, such as tax collection. This, in turn, can lead to a decline in administrative and institutional capacity building, particularly as the core tax-accountability linkage between state and society is weakened.¹¹ Additionally, resource wealth might adversely impact governance quality by provoking more intense political or bureaucratic battles between powerful interest groups for control over natural resource rents and the state institutions responsible for collecting and distributing them.¹² However, the empirical evidence suggests that there is not always a negative relationship between natural resource abundance and governance and growth.¹³

⁸ A seminal empirical statement of the resource curse can be found in Sachs and Warner (1995); the authors demonstrate that states with greater wealth from natural resources grow more slowly than those that are resource-poor.

⁹ Robinson et al (2006) have modeled a country with weak institutional controls where a resource boom creates incentives for politicians who want to stay in power to spend resource windfalls on public programs and employment. Mehlum et al (2006) suggest that in countries with “producer-friendly” institutions a natural resource boom attracts resources into productive activity, whereas countries with “grabber-friendly” institutions see a shift into unproductive rent-seeking. Empirically, they find that the negative impact of natural resources on growth steadily falls as institutional quality increases until a point at which institutional quality becomes sufficiently high for the natural resource effect to become positive.

¹⁰ Studying natural resource boom episodes in the 1970s and 1980s, Gelb (1988) concluded that “the most important recommendation to emerge from this study is that spending levels should have been adjusted to sharp rises in income levels more cautiously than they actually were.”

¹¹ Karl (1997) articulates this as the core logic of the “petro-state” and Moore (2004) further explains the link between fiscal sources and accountability.

¹² This is known as the “voracity effect”, and has been modeled by Tornell and Lane (1999).

¹³ Sala-i-Martin and Subramanian (2003) find, in a study on Nigeria, that natural resource abundance has its principal effect on growth via its impact on institutional quality. On the other hand, Collier and Goderis (2007), using panel data, do not find statistically significant evidence that natural resources directly worsen governance or institutional quality.

In sum, the development of a large or dominant natural resource sector harbors a number of risks, both economic and governance-related. The fact that the Lao hydro and mining sectors are still relatively new and the mining sector is likely to grow relatively gradually may moderate these risks to some degree. Furthermore, Lao PDR's fiscal dependence on resources is not as extreme as oil-rich low-income countries, which, on average, have oil revenues of around 50 percent of total revenues and 20 percent of GDP. As contemporary research on the resource curse has pointed out, the particular risks a country faces are driven on the one hand by the nature and combination of natural resources and on the other hand by pre-existing governance and institutional conditions.¹⁴

Lao PDR's natural resources include minerals and hydropower, on which we focus in this paper. Minerals are a diffuse form of natural resources, with production spread by locality and ownership, in contrast to point-source or concentrated sources such as major oil fields. Hydropower is a renewable natural resource and is less subject to economic volatility than oil or mining, which are affected by major international commodity price swings, as evidenced by the recent boom-bust cycle. Both sets of resources carry with them major social and environmental risks—projects often require resettlement or create other social impacts, and can have negative effects on eco-systems. Furthermore, similar to (perhaps even more so than in) major mining projects, hydropower generation is highly capital intensive and, in a low-income country, can thus be undertaken only with influxes of external capital that are massive relative to the domestic economy. Managing these capital inflows soundly and with a view to long-run, sustainable development is extremely challenging and requires considerable institutional and governance capacity and effectiveness.

Governance in Lao PDR

Lao PDR's pre-existing governance structures have both strengths and weaknesses. The country is situated in a propitious 'neighborhood' of economies with high growth potential and in which elites generally have a strong developmental orientation, albeit with varying systems of government. Lao PDR is a relatively stable one-party, socialist political system, where—withstanding the market reforms initiated under the New Economic Mechanism in 1986—the state continues to be involved in a great deal of economic activity. Although traditional political networks remain very powerful, the authority of the Lao People's Revolutionary Party (LPRP) tends to be institutionalized rather than heavily personalistic.

Yet, while Lao PDR compares favorably with other developing countries in East Asia and the Pacific or other resource-rich developing countries in terms of political stability, it underperforms its regional and resource-rich comparators on other key governance dimensions (see Figures 5a and 5b). Significant areas of overall weakness include accountability and regulatory quality, although the single-party political system with strongly centralized accountability appears to have evolved somewhat in recent years. In particular, the role of the 100-plus member National Assembly in policy-making continues to strengthen, and the State Audit Office has been expanded and now reports to the National Assembly rather than Government.

¹⁴ See Vatansever and Gillies (2009) for an excellent, state-of-the-art overview of the literature on the political economy of natural resource management as it relates to the value chain.

Figure 5a: Governance in Lao PDR in comparison to East Asia Pacific average (2008)

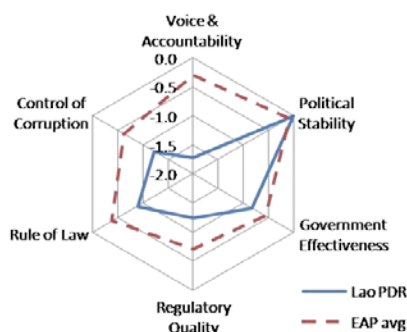
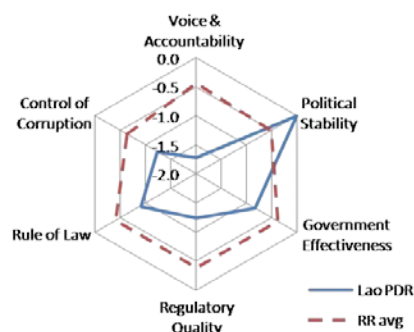


Figure 5b: Governance in Lao PDR in comparison to other resource-rich developing countries average (2008)



Source: World Governance Indicators, World Bank Institute¹⁵

Government effectiveness and the rule of law are also challenges for Lao PDR. Governance and public administration reforms were introduced to support economic reforms, yet administrative capacity and efficiency remain a major constraint in both central and line ministries—with the mining and energy sector offering no exception (as this report will detail). Anecdotal evidence suggests that corruption—in both its major forms of state capture and administrative rent-seeking—is common and increasingly problematic, but a lack of public opinion or enterprise surveys has hampered meaningful assessment of the issue. Government is aware of the challenge of corruption, and is taking a range of steps to address it. Legal reform has been pursued with a view to establishing the rule of law more firmly and numerous new laws have been enacted; but these remain little understood and, consequently, poorly and inconsistently implemented.¹⁶ On the plus side—even as it continues to face weaknesses in accountability, regulatory quality, and government effectiveness—GOL has made important advances over the past five years in strengthening its public financial management system and improving internal oversight mechanisms, thus improving general public sector governance institutional quality.

Beyond the broader governance apparatus discussed immediately above, resource-rich countries require a set of ‘good enough’ sector-specific or project-level governance arrangements¹⁷—in order to manage natural resource exploitation and build upon the sector to achieve sustained, diversified, and equitable growth. In this respect, while the GOL has taken important steps in enhancing mining and hydro sector management, key institutional challenges remain and will grow as resource exploitation surges in Lao PDR.

¹⁵ Data available at: <http://info.worldbank.org/governance/wgi/index.asp>; also see Kaufmann, Kraay, Mastruzzi (2009). The six governance indicators shown are aggregated from a series of underlying indices and scored from -2.5 to 2.5 for each country in the dataset. These data should be treated with caution but provide a reasonable ‘at-a-glance’ snapshot of a country’s governance context in comparative perspective.

¹⁶ See Stuart-Fox (2004) for a deeper discussion of legal reforms, along with an analysis of the evolving politics of reform in Lao PDR.

¹⁷ The concept of ‘good enough governance’ is an attempt to move away from ‘first best’ reform dictums for low-income countries. It refers to contextually grounded and feasible governance arrangements that achieve a *de minimus* degree of quality sufficient to enable a country to fulfill its developmental goals. For the original articulation of this concept and a full definition, see Grindle (2004) and Grindle (2007).

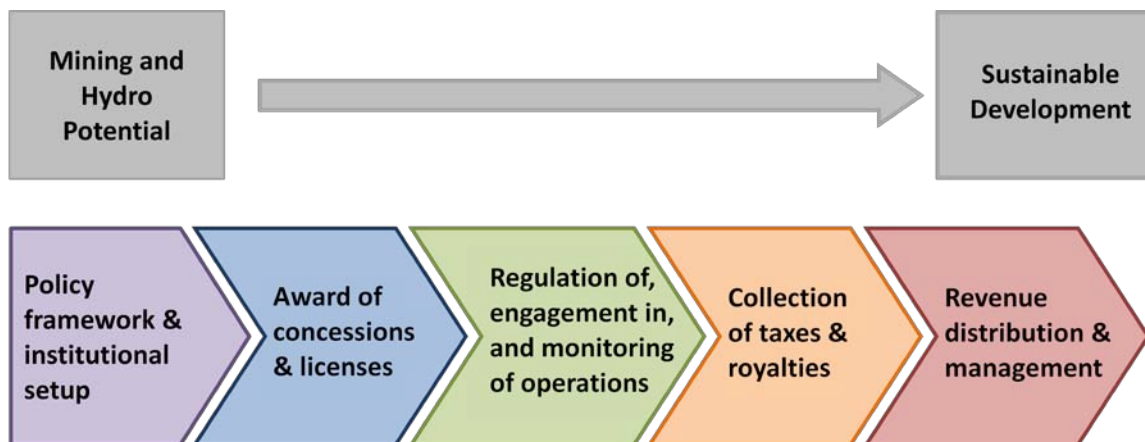
In short, the impact of natural resources on the Lao economy is poised to grow dramatically over the next two decades—and this growth comes with a heightened need for good governance arrangements. This ***governance gap*** remains a crucial challenge that will increase over time if the government does not take strategic and continued action to enhance governance and institutional capacity (Figure 1 above). Two major objectives are embedded in any country’s governance of its natural resources. The first is the national portfolio-level question of whether a country is ***doing the right projects*** and the second the project-level concern of whether a country is ***doing the projects right***.

The GOL must be aware of both these dimensions as it attempts to close the governance gap, and this report is intended to assist the GOL with the necessary analysis and recommendations. The next section addresses these issues through the ‘value chain’ approach.

ANALYZING NRM GOVERNANCE: A VALUE CHAIN APPROACH

The World Bank has recently elaborated, along with other development partners, a “value chain” approach to diagnosing the institutional and governance challenges in the natural resource sector.¹⁸ This value chain, depicted in Figure 6, has been adapted slightly to ensure its relevance to the Lao context, in particular to address some of the broader institutional setup, ‘portfolio management,’ and prioritization challenges.

Figure 6: The Natural Resource Management Value Chain



This integrated approach to better understanding the governance of the NRM sector, encompasses the institutional arrangements across the full range of the value chain: (i) national portfolio-level policy and institutional setup; (ii) awards of contracts and licenses; (iii) regulation of, engagement in, and monitoring of operations; (iv) collection of taxes and royalties; (v) revenue distribution and management.¹⁹ The World Bank has adopted this approach with the primary objective of prescribing an integrated sequence of feasible policy remedies and reforms to address the resource curse. Good practice institutional and governance arrangements at each step of the value chain can be summarized as follows in Figure 7.

¹⁸ For a thorough description of the approach and its components, see Alba (2009).

¹⁹ Often a fifth link in the value chain is included, which addresses the implementation of sustainable development projects and policy. In this report, we fold this concern into the five links mentioned where possible, but focus on these links to retain the emphasis on the interaction of natural resource revenues with governance and institutional quality.

Figure 7: Natural Resource Management Value Chain Framework²⁰

Value Chain Stage	Good Practice Institutional and Governance Arrangements
<i>Policy framework and institutional setup</i>	<ul style="list-style-type: none"> • Overarching policy framework that clarifies national objectives and the principles through which government will manage the natural resource sectors • Sector strategies that help prioritize investments and guide upstream trade-offs across projects, as well as address the management of cumulative impacts • Clearly defined roles and responsibilities of the key government actors involved in the regulation and management of the natural resource sectors
<i>Award of concessions and licenses</i>	<ul style="list-style-type: none"> • Clear legal and regulatory framework that gives private developers clear expectations and enables government departments to know whether the law is being enforced • Transparent and non-discretionary procedures—along with well-defined institutional responsibilities—for awarding concessions and licenses and negotiating fiscal regimes • Sufficient technical capacity in all key agencies involved in concession awards
<i>Regulation of, engagement in, and monitoring of operations</i>	<ul style="list-style-type: none"> • Clearly defined responsibilities so that central and local level government agencies are aware of their mandates and are able to coordinate • Separation of roles (e.g., implementation vs. monitoring) where government entities are engaged in projects as owners or implementers • Sufficient capacity for monitoring regulatory compliance • Community development and environmental monitoring and remediation programs in affected communities or areas
<i>Collection of taxes and royalties</i>	<ul style="list-style-type: none"> • Transparent and non-discretionary fiscal regime for concessions, preventing leakage and empowering government vis-à-vis the private sector by encouraging competition on the terms of the deal • Adequate administrative and audit capacity of revenue collection agencies • Adherence to internationally accepted accounting and reporting standards
<i>Revenue management and distribution</i>	<ul style="list-style-type: none"> • Appropriate macroeconomic policy responses to mitigate negative consequences from exchange rate appreciation • Transparent savings decisions to smooth public expenditure in the face of commodity price volatility and accumulate assets as finite resources are extracted • Strong public financial management and procurement systems • Judicious allocation of public expenditures—e.g., within a medium-term expenditure framework, aligned within a national development strategy • Adequate scrutiny, appraisal, and audit of public investment decisions

Contextually grounded, this set of good practice governance and institutional arrangements forms the backbone of a diagnostic framework for governance in the natural resource sector that we apply to minerals and hydropower exploitation in Lao PDR. The remainder of this report proceeds along the NRM value chain, moving from upstream to downstream issues and focusing on key governance dimensions of the five pillars of the value chain: (i) national portfolio-level policy and institutional set-up; (ii) the legal, regulatory, and institutional framework surrounding the granting of mining and hydropower licenses and concessions; (iii) oversight of, engagement in, and monitoring of resource exploitation; (iv) the

²⁰ This exposition of the natural resource management value chain framework draws heavily on Alba (2009).

collection and management of revenues from the resource sectors; and (v) some aspects of expenditure management, with a focus on public investment management as a crucial step in translating resource wealth into sustainable development.²¹ [Issues pertaining to fiscal regimes are also addressed in the Fiscal Regimes background paper; and those on macroeconomic policy and savings decisions in the Fiscal Policy Options background paper.]

For each of the five links in the value chain, we use the framework above to characterize the institutional and governance arrangements that frame policy and management in both the mining and hydropower sectors in Lao PDR. At each step of the value chain, we attempt to cover the full hierarchy of choices available to the government, ranging from initial decisions about sectoral strategy, the definition of the government's role or its overall level of involvement, and—within that context—technical steps that may be taken to maximize efficiency and strengthen development outcomes. Often the contrast between the two sectors is particularly illuminating, given that the hydropower sector is relatively more established. We focus particularly on issues of transparency, disclosure, and coordination across the multiple government agencies involved, including between the central and provincial levels. We provide an assessment of strengths and challenges; and we identify opportunities for practical measures to enhance governance and institutional quality, with an emphasis on administrative capacity-building and collaboration, and processes for enhancing transparency and disclosure, particularly through standardization of NRM practices.

Policy Framework and Institutional Setup

Cross-country experience demonstrates that the main factors determining the success of resource-rich countries are inherently related to the overall governance framework and the political economy of resource rent extraction and distribution. In other words, managing the resource paradox is inherently a governance challenge—the quality, transparency, predictability, and accountability of policy-making processes, public institutions, the legal and regulatory climate, and sector governance are major determinants of how successfully countries can turn the resource curse into a blessing.

The central strategic challenge facing a country with rich natural wealth is how to undertake resource exploitation in a deliberate manner, with particularly careful attention to ensuring that exploitation does not proceed faster than the government's ability to manage the resource sectors. In Lao PDR, to date, some of the most prominent projects in the country—Sefon, Phu Bia, Nam Theun 2, and Theun Hinboun—are relatively well-managed and governed. But these good practice institutional arrangements emerge from the fact that each project has essentially created its own governance and regulatory environment; in some cases relying heavily on donor assistance and, in others, on the international companies operating the projects.

Key Challenges and Opportunities for Improvement

Lao PDR still lacks, for the most part, a systematic national portfolio-level governing regime for natural resource management. As the sector continues to grow, and smaller investments proliferate, a project-by-project approach to governance will be both inefficient and insufficient. A more strategic approach requires, in the first instance, the ability to select the right projects in the context of the government's institutional capacity. Doing the right projects thus requires three inter-related layers of governance:

²¹ Revenue management and distribution are not discussed in depth, but the report delves into some detail on public investment planning as a key dimension of the fifth step in the value chain.

- ***Recommendation: The GOL requires an overarching policy framework for development of both the mining and hydropower sectors.*** This issue is discussed further in the sector background reports to the LDR; and has been the subject of ongoing dialogue between the GOL and its development partners. The National Policy on Sustainable Hydropower, developed in 2005, is good start on an overarching policy framework for hydropower, although it requires updating, and greater clarity on how it will actually be implemented—MEM is already working on this. More broadly, now is an opportune time for the GOL to review, update, strengthen, and endorse its policy and sector development frameworks for the natural resource sectors.

- ***Recommendation: In turn, the GOL should aim to articulate specific sector development strategies.*** The starting point for sector strategy is the National Socio-Economic Development Plan (NSEDPlan), which, by its nature, will offer broad directions and priorities. Yet sector strategy is required to help interpret the best way to implement this plan in the specific sectors. Sector strategy should enable GOL to take a deliberate approach to deciding how many projects and of what sort it will agree to have developed and in what sequence. This strategy, in turn, must be conditioned on careful attention to assumptions about domestic and international context—including commodity price cycles, regional energy supply and demand, fiscal projections, integrated river-basin management, a strategic approach to managing Independent Power Producers, and interdependence between the exploitation of some minerals and other industrial or economic consequences. These issues are discussed further in the Fiscal Sustainability background paper and in the Mining Sector background report.

- ***Recommendation: The GOL must pay concerted attention to the process of natural resource management*** in order to enable coordinated implementation of these overarching policies and sector strategies, establish the key principles through which projects will be approved and managed (see below), and target institutional capacity building. In this respect, we propose three major dimensions of emphasis:
 - *Transparency as a principle of NRM.* This would involve providing more information within government, to industry, and to the public about how decisions are made about developing projects and exploiting resources, as well as emphasizing transparency across the steps of the value chain. As a result, relevant parties—including the National Assembly and affected communities, for instance—would be able to play a more systematic and constructive role in natural resource exploitation and management decisions, as well as hold project implementers to account. In addition, greater knowledge of the details of concession arrangements would enhance the ability of government agencies to play their appointed roles in NRM.
 - *Standardization of NRM processes.* This would yield a greater degree of predictability—creating a better climate for potential investors; and provide a practical approach for easing the constraints of scarce capacity—or, in other words, increase the efficiency of NRM by reducing arbitrary or discretionary steps. It would also strengthen the hand of government in relation to the private sector by reducing the areas where private interests are able to negotiate special arrangements.
 - *Strengthening institutional capacity and inter-agency governmental coordination.* This could be achieved, for example, by systematically involving all relevant actors in the concession-granting process, with clear roles and accountabilities for each; ensuring clear mandates, tools and resources for inspection and monitoring; and aligning sufficient resources with the capacity demands of both national and local government.

Award of Concessions and Licenses

Legal and Regulatory Framework

The legal frameworks for the mining and energy sectors, respectively, pose interesting counterpoints to each other. Both legal frameworks must conform to the Law on the Promotion of Foreign Investment, which governs the procedures for foreign investors to apply for investment licenses in either sector.²² Most importantly, it is this law that designates the Ministry of Planning and Investment (MPI) and its Department of Investment Promotion (DIP)²³ as the ‘one stop service’ for all foreign investment applications and the subsequent management of foreign investment in Lao PDR, and directs DIP to manage the process of coordination with relevant sectors and local authorities.²⁴

The legal and regulatory framework governing hydropower development has remained relatively consistent, with the key piece of legislation being the 1997 Law on Electricity (revised in late 2008).²⁵ This law determines a regime for the production and distribution of electricity, with an emphasis on hydropower, and administration of the sector. It lays out clearly which government agencies must approve hydropower projects, based on their size in terms of electricity generation. In addition, it outlines the procedures for obtaining concessions to operate electricity projects in the country and the rights and duties of government agencies responsible for electricity sector administration and inspection.²⁶

The legal framework governing the mining sector has, in comparison, been relatively unstable over the past decade—a factor contributing to a lack of clarity in institutional mandates and procedures in the sector.²⁷ The Ministry of Energy and Mines (MEM) led a process of revising the Minerals Law in 2008, incorporating technical assistance from the World Bank and a series of consultations with key stakeholders, including mining companies. The National

²² Law on the Promotion of Foreign Investment, No. 73/PO, promulgated 22 October 2004.

[**Note:** At the time of writing, a revised Law on Investment Promotion had been drafted, covering both foreign and domestic investment. This law had not yet been promulgated, however; the discussion here relies on the 2004 version. The new draft maintains MPI’s central role in issuing investment concessions.]

²³ The Department for Investment Promotion (DIP) is identified in the Foreign Investment Law as the Committee for the Promotion and Management of Investment (CPMI) and was more recently known as the Department for Domestic and Foreign Investment (DDFI).

²⁴ Law on the Promotion of Foreign Investment: Chapter 5 (Articles 19-20) and Chapter 6 (Articles 21-22, 24).

²⁵ Law on Electricity, No. 34/PO, promulgated 31 May 1997; revised December 2008. Other important elements in the legal framework include the Law on Water and Water Resources, No. 126/PO, promulgated 2 November 1996; and the National Policy on Environmental and Social Sustainability of the Hydropower Sector (NPSH) in Lao PDR, No. 561/CPI, signed 7 June 2005. The latter aims to capitalize on the environmental and social sustainability efforts initiated under Nam Theun 2 by adapting and tailoring those principles to all large hydropower projects.

²⁶ See particularly Article 12-16 and Chapter 10. The responsibilities laid out for the former Ministry of Industry and Handicrafts are now pursued by the Ministry of Energy and Mines, one of its successor agencies.

²⁷ The 2003 Lao PDR Mining Sector Review and 2006 Mining Sector Development Plan (especially the Final Report on Institutions and Capacity) provide an in-depth assessment of the quality of institutional arrangements for the award and monitoring of contracts and licensing, along with recommendations for reform. The Government of Lao PDR has taken a number of steps to strengthen sector governance and institutional quality, most recently drafting a new Mineral Law (2008). The forthcoming World Bank Hydropower-Mining Technical Assistance Project (see World Bank 2009d) aims to further strengthen the capacities of relevant sector agencies in order to enhance the planning, management, and oversight of natural resource development and operation.

Assembly adopted the revised Minerals Law in December 2008; it was promulgated five months later in March 2010, with a number of sticking points appearing to have delayed its formal promulgation. In particular, in the context of falling mineral prices and correspondingly lower revenues, it was reported to us that a shift in the government mindset occurred in early 2009; in short, the government wished to increase its take from the mining sector by increasing all fiscal terms, including royalties, taxes, etc. This uncertainty around the terms of the fiscal regime—along with an apparent rethinking of other reforms in the revised law, indicated by the National Assembly’s unusual step to make comments on the law after Government submission²⁸—appears to have delayed the law’s promulgation.

Officials consulted confirmed the basic parameters for current fiscal terms for the mining sector—royalties are set at 2-5 percent of production (revenues), profit tax at 20-35 percent, and the government equity stake at around 10 percent. Yet, in practice, a great deal of discretion exists in the negotiation of these and other fiscal terms, including tax holidays, the manner in which the government pays for its equity stake, etc. The World Bank and other development partners, along with industry stakeholders consulted during the revisions process, had strongly encouraged the inclusion of a standardized fiscal regime in the revised Minerals Law. This was discussed and deliberated at length, but the final draft for National Assembly approval did not include such a provision. Officials consulted cited the importance of retaining flexibility in fiscal terms in order to faithfully implement the Government’s investment promotion policies. It appears that the GOL wishes to retain its discretionary power to negotiate fiscal terms on a case-by-case basis.

An Evolving Institutional Environment for Natural Resource Management

The Government of Lao PDR (GOL) has recently undertaken a series of institutional reforms, a number of which impact upstream management of the natural resources sector. For the most part, these reforms have streamlined and improved sector management. As another consequence, however, the institutional environment around natural resources has been fluid and a number of key agencies are relatively new to implementing complex mandates.

Ministry of Energy and Mines (MEM): Established in 2007 during the GOL’s reform of the industry and natural resource sectors. Core technical departments of MEM—the Departments of Mines (DOM), Geology (DGEO), Electricity (DOE), and Electricity Promotion and Development (DEPD)—were formerly configured as the Department of Geology and Mining and the Department of Electricity within the Ministry of Industry and Handicraft (MIH). [Other MIH departments were merged with those in the Ministry of Commerce into the new Ministry of Industry and Commerce.]

Water Resources and Environment Administration (WREA): Established in June 2007 as a merger of the three environmental entities within the former Science Technology and Environmental Agency (STEA), the Department of Meteorology and Hydrology of the Ministry of Agriculture and Forestry, and other entities within the Prime Minister’s Office. It comprises the Cabinet, Department of Environment, Department of Meteorology and Hydrology, the Lao National Mekong Commission Secretariat, Water Resource and Environment Research Institute, and the newly formed Department of Environmental and Social Impact Assessment (DESIA) and Department of Water Resources.

Department of Investment Promotion (DIP): Key agency within Ministry of Planning and Investment (MPI). Was recently known as the Department for Domestic and Foreign Investment (DDFI) and, prior to that (as identified in the Foreign Investment Law) as the Committee for the Promotion and Management of Investment (CPMI). [MPI was previously known as the Committee for Planning and

²⁸ More than one interviewee observed that the National Assembly’s active stance was being pushed by provincial governors and that advice on the proposed legislation was likely being sought from China and Vietnam on technical matters the National Assembly felt ill-equipped to consider.

Investment and prior to that the State Economic Council.]

The legal and institutional frameworks adequately cover the full spectrum of natural resource management. Nevertheless, due to the fluid and nascent institutional environment described here, implementation and effectiveness have been particularly hindered by two factors: (1) unclear institutional mandates and poor coordination across the multiple agencies involved in NRM; and (2) the relatively limited capacity of both MEM and WREA on the crucial inspection and monitoring front. Increased clarity on agency mandates, improved coordination, and targeted capacity building are thus critical to enable these and other agencies to perform their newly clarified functions and responsibilities.

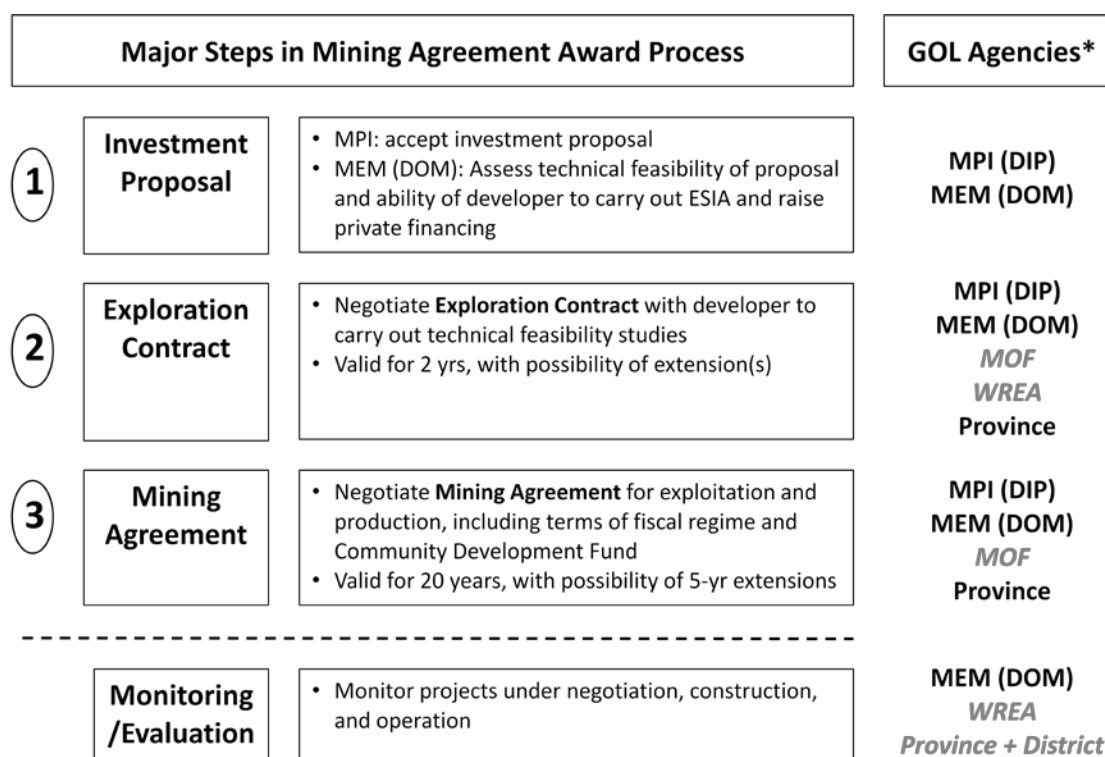
Concession Awards Process

In Lao PDR, the Department of Investment Promotion (DIP) in the Ministry of Planning and Investment (MPI) is the lead agency in the negotiation and granting of mining agreements and hydropower concessions, meaning that it coordinates all dialogue with the developer and is responsible for bringing other relevant government agencies to the table in coming to a decision. MPI plays this role as part of its ‘one-stop service’ responsibility mandated in the Law on the Promotion of Foreign Investment. This practice diverges from international good practice, where the sector line ministry—which would be the Ministry of Energy and Mines (MEM) in the Lao case—usually plays the role of lead agency, since it has the requisite technical knowledge to manage the sector. The revised Minerals Law raises the profile and power of MEM somewhat—but the extent to which this will be true in practice depends for the most part on how the Law’s implementation guidelines and decrees will be written.

As a matter of course in deliberating investment applications and then moving through the various stages before granting of mining agreements or hydropower concessions, MPI convenes working groups comprising technical staff from other key agencies—including particularly MEM, the Ministry of Finance (MOF), the Water Resources and Environment Administration (WREA), and the relevant provincial authorities. The two processes are roughly parallel, but the following two charts and brief descriptions sketch the key steps in the granting of mining agreements and hydropower concessions, indicating which government agencies play a role at each step.

In the mining sector (see Figure 8), the Mining Concession Management Division (MCMD) plays the key technical role on behalf of the Department of Mines (DOM) in the first key step, that of assessing the technical feasibility of an **investment proposal** or application. The MCMD prepares a report on behalf of the DOM, summarizing its evaluation. The final decision on the application is, however, made by the Minister of Energy and Mines upon review of DOM comments. MCMD and DOM officials stated that the Minister, who is privy to Cabinet policy wishes and information, may have a differing view and ask the DOM to revise and resubmit the proposal as necessary. This is the first step, therefore, at which political decisions enter the formal process. Upon MEM’s technical response on the investment application MPI convenes a meeting to discuss the investment proposal, inviting MEM and other concerned agencies such as MOF and the relevant provincial administration. MPI then sends the proposal to the Government Cabinet, which meets once monthly to review all investment projects (including those in non-resource sectors).

Figure 8: Major Steps in Mining Agreement Award Process



* GOL agencies with responsibilities at each step. Those with a secondary role are listed in gray italics.

Note: A more detailed rendering of the multiple steps involved in the mining agreement award and project implementation process is available in the World Bank's 2006 Mining Sector Development Plan, especially the report on Institutions and Capacity.

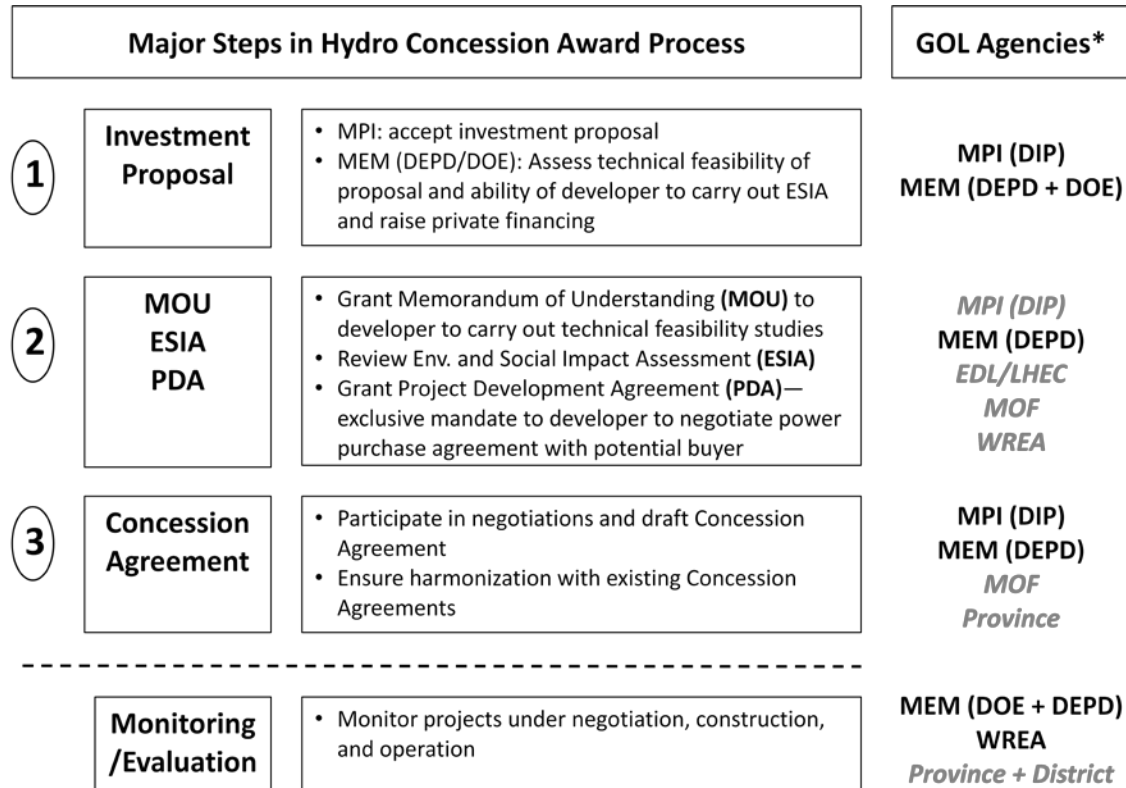
If Government approval is granted, MPI holds another working group meeting with all relevant agencies to discuss the terms of the agreement. This is often the stage as which MOF becomes involved, with either the Fiscal Policy Department or the State Asset Management Department entering discussions about fiscal terms. The relevant provincial administration also becomes heavily involved at this stage, particularly in discussing the Community Development Funds provided by developers to local authorities, and WREA is included to ensure environmental issues are covered. MPI then invites the investor to negotiate its **Exploration Contract**, which includes reference to fiscal terms for the future. The exploration contract is valid for 2 years, with extensions possible; during this phase, DOM inspects operations annually.

When the exploration period draws to a close and the company is ready to negotiate its **Mining Agreement**, MPI again convenes relevant Government agencies to finalize the fiscal terms of the agreement along with terms on environmental and social safeguards and community development funds. Officials indicated that the Government's position was to achieve at least a 30 percent take for the state, through whatever combination of royalties, taxes, and dividends makes this possible; more recently there have been voices within the Government pushing for an overall take of 40-50 percent. Investors have expressed concerns about their security of tenure in the transition from the exploration to the exploitation or mining phase. To date, no major investor has lost its rights at this step but this concern was a major impetus to the private sector's interest in revision of the Minerals Law.

National Assembly approval must be sought for the final Mining Agreement, which is then valid for 20 years, with 5-year extensions available. Once the mine is operational and

producing minerals for export, the DOM takes the lead responsibility for inspections and monitoring of operations. The provincial administration also takes on a monitoring role, because this is the government agent to which public complaints are made.

Figure 9: Major Steps in Hydro Concession Award Process



* GOL agencies with responsibilities at each step. Those with a secondary role are listed in gray italics.

Note: A more detailed rendering of the multiple steps involved in the concession award and project implementation process is available at www.poweringprogress.org, the website maintained by the Department of Energy Promotion and Development (MEM).

In the hydropower sector (see Figure 9), two departments play twin technical roles on behalf of MEM: the Department of Energy Promotion and Development (DEPD) is responsible for overseeing private investment initiatives and hydropower project development, while the Department of Electricity (DOE) plays a more strategic and technical role, doing sector planning as well as examining technical feasibility studies and project designs. DOE and DEPD together review **investment proposals** for their technical feasibility and the ability of the developer to raise the necessary financing, and give their judgments to the Minister. As with the mining sector, the Minister may reflect political decisions back for revision and then the application goes to the Cabinet for approval.

Next, a **Memorandum of Understanding (MOU)** is granted to the developer in order to carry out technical feasibility studies, which can often be costly and therefore require some assurance that development can proceed if the feasibility studies are satisfactory. WREA becomes involved here in reviewing environmental impact assessments (EIAs). This step is followed by the granting of a **Project Development Agreement (PDA)**, which gives an

exclusive mandate to the developer to negotiate with power buyers.²⁹ It is at this stage that the benefit to the Lao government is defined.³⁰

Finally, the DEPD acts as a ‘spearhead’ on **Concession Agreement** negotiations, usually taking the lead in forming and subsequently heading a taskforce comprising representatives from other line ministries (including MOF, MPI, and WREA, and sometimes the Ministry of Justice for major agreements that have implications for Lao law). The fiscal terms are negotiated at this point, based on an assessment of the benefit stream to the country. DEPD attempts to ensure that each concession agreement is harmonized with others, with necessary project-related modifications. National Assembly approval must be sought for the final Concession Agreement. DOE and WREA both play important inspections and monitoring roles once the project is operational. As with the mining sector, the provincial administration also takes on a monitoring role.

As outlined above, the Department of Mines (DOM) and Departments of Electricity and Energy Promotion and Development (DOE and DEPD) take the lead roles on behalf of MEM in their respective sectors. They play roughly parallel roles; on the whole, due to GOL’s longer experience in hydropower, the agencies in that sector are relatively more systematically organized and have higher administrative capacity – although with a permanent staff of around 30, DEPD capacity remains well short of what hydropower sector development currently requires. The Department of Mines, by its staff’s own telling, suffers from a significant lack of capacity.³¹ In both sectors, government working groups appear to be convened in a relatively *ad hoc* manner, although since DEPD takes the lead for the hydro sector there is likely more consistency. Across ministries, views differed as to how systematically these working groups are convened—MEM officials were satisfied that the working groups for the most part included the same individuals, with the necessary technical capacity; MOF officials felt that their participation was rather more *ad hoc*. Information-sharing during this complex process is currently paper-based, which means that relatively little systematic learning or direct comparisons take place across successive investment proposals.

The processes outlined above are the formal mechanisms through which concession awards are granted. In practice, however, as reported to us by officials in both the mining and hydropower sectors, numerous concessions—certainly those of any major significance—are decided in at higher political levels. A number of interviewees observed that, in reality, very senior officials make the decisions on the basis of strategic considerations and other negotiations. Fulfilling their technical mandates, DOM and DEPD play the lead roles in drafting mining and hydropower concession agreements. Once the drafts are prepared, they are reported on to Cabinet, chaired by the Prime Minister and attended by the Ministers of Energy and Mines, Finance, etc. The Director-General of DOM or DEPD reports on the negotiation and its results and discussion is opened. Cabinet often directs *renegotiation* of certain terms, and the process is

²⁹ Very small (pico) hydro projects—e.g., developments of 2MW or less to electrify rural areas—go through a less onerous process for a concession agreement (CA), skipping, if the developer agrees, the PDA and going straight from MOU to CA.

³⁰ At this step on major projects, significant pre-concession work is often undertaken, such as the construction of roads, diversion tunnels, and worker housing. These activities can have considerable impact and it is very unclear who is responsible for monitoring them.

³¹ One senior official estimated that the department needs about 100 technical staff. At the time of discussion it had only 38 staff; most of these were inexperienced, only 12 having more than 3 years of experience. This capacity gap was cited as the major obstacle to a number of suggested reforms including, for example, the transition to a best practice first-come, first-served license application process (endorsed by the World Bank).

opened up again—multiple back and forths between the drafting department and Cabinet are not unusual. Finally, once the government’s package with the developer has been agreed, the Minister of Planning and Investment is notified to sign the Concession Agreement. Frequently, to date, agreements have specified several sets of terms that are outside Lao law;³² in these cases, National Assembly approval must be sought.

As described above, there are, loosely, three types of companies operating natural resource concessions in the country—a handful of major international companies, increasing numbers of regional players, and small-scale local companies. Each of these segments of the industry experiences a qualitatively different process regarding concession agreements, regulation and monitoring, and other dealings with government. For example, the quality of the supporting documentation provided for a concession application is often much lower for applications by regional and local companies in comparison to international operators.

Key Challenges and Opportunities for Improvement

The legal and institutional framework for awarding mining agreements and hydropower concessions is still weak and fluid, in turn leading to often unclear and overlapping agency mandates and a lack of systematic attention to technical capacity. In order to be able to secure the best possible deals for itself when negotiating mining and hydropower concessions, GOL should work to clarify the legal and regulatory framework and institute more systematic and transparent award processes.

- **Recommendation: Improve the legal framework of the sector by implementing coherent sector regulatory decrees.** Now that the new Minerals Law has been promulgated, a key next step is to issue comprehensive regulatory guidelines for implementation of the law. Such guidelines should, in particular, establish clear roles for the core government agencies involved in the concession awards process. [Further suggestions for such an approach are covered in the project appraisal document for the Lao Mining Sector Technical Assistance Project.³³]
- **Recommendation: Enhance mechanisms for systematic agency coordination and strategic, comprehensive capacity-building.** International good practice in the natural resource sectors generally positions the technical line ministry as the lead agency for dealing with sector investors. GOL has recently decided, in the context of discussions around minerals and investment legislation, that MPI should retain its lead role in handling investment proposals. Nevertheless, it would be desirable, in particular, to enhance the mechanisms for technical consultations with MEM, MOF, and other relevant government agencies.
 - *Standardize and enhance the technical roles of MEM and MOF and other relevant government agencies (e.g., WREA) in the concession award process.* This step would significantly improve administrative efficiency, the quality and standardization of technical input, and inter-agency coordination and information-sharing.
 - *Institute an inter-ministerial technical committee responsible for preparing technical assessments to Cabinet for the negotiation and award of mining and hydro concessions.* This committee should be chaired by the MPI representative and comprise consistent, high-quality technical representation from MEM (Departments of Mines and Electricity),

³² Senior officials at MEM explained that Lao law was in some areas too underdeveloped to be satisfactory to major international developers; hence some Lao legal provisions had to be waived in order to conclude the negotiations.

³³ World Bank (2009d).

MOF (Fiscal, Tax, and State Asset Management departments), and WREA (Department of Environmental and Social Impact Assessment).

- *Put in place a technical team on mining and hydro issues at MPI's Department of Investment Promotion (DIP), with targeted capacity-building on investment appraisal and cost-benefit analysis.* Building such a team will enable systematic learning and synchronized process over multiple mining and hydro concession agreements, and facilitate decision-making on sector development priorities by providing the systematic analysis necessary for a strategic approach.

Although it is certainly appropriate for GOL to take a strategic approach to the sector, political decisions enter the concession award process in an ad hoc manner. The multiple layers of political involvement in the concession awards process are, at a minimum, cumbersome, as they increase the demands upon and transaction costs for already over-stretched government agencies. Worse, however, discretionary high-level political involvement also brings with it the possibility that politically connected individuals and their networks are capturing lucrative investment projects and securing preferential deals that benefit an elite few instead of the country at large. Finally—for reasons of political sensitivity and bargaining power vis-à-vis developers—concession agreements are often not shared across government agencies, making it difficult, if not impossible, for all departments to perform their roles.

- ***Recommendation: Standardize the concession contract and fiscal terms below a certain investment threshold.*** It is important to recognize the value of the government playing a strategic role in the sector. This role could become more effective, however, if the procedures described above could be streamlined significantly, leading to gains in administrative efficiency and increased transparency across government departments, which would enable more consistent and effective implementation on the part of GOL.
 - *Standardize the concession process and core of concession agreement structure, including a basic fiscal regime,* making additions to this core as particular project conditions require. This would eliminate the need to negotiate separate contracts for each and every concession agreement, significantly enhancing effectiveness.
 - *Share full concession agreements internally within GOL* to enable government agencies to perform their necessary roles during the concession award process, as well as for monitoring and enforcement purposes (covered in greater detail in the next section).
 - *Ensure predictability and transparency of regulatory environment,* including rapid dissemination of regulatory amendments, to enable government agencies to perform their roles and encourage quality investors.

Regulation of, Engagement in, and Monitoring of Operations

During the implementation of large mining and hydropower projects in Lao PDR, the government is involved in regulation and monitoring. In some projects, moreover, the government is also an investor and, for many projects, is involved in some aspects of implementation.

Government Role as Investor

In the hydropower sector it is common practice for the government to be part of the ownership structure of the project. This may range from 100 percent ownership—Électricité du Laos (EDL), the state electricity utility, has a 100 percent stake in several small domestic hydropower plants—to a much smaller stake in larger or export-oriented projects—EDL owns 20 percent of the 150MW Houay Ho project and 60 percent of the 210MW Theun Hinboun project. Historically, EDL was the vehicle for these investments, but the Lao Holding State Enterprise

(LHSE) was created in 2005 as a vehicle for the Government's stake in the 1080MW Nam Theun 2 project. It is increasingly being used as the Government's investment vehicle for future projects. GOL has also recently exercised its right to acquire a 10 percent stake in Phu Bia Mining Ltd., which operates the Phu Kham gold and copper mine.

The fiscal and technical pros and cons of government investing directly in natural resource projects are discussed elsewhere in the Lao Development Report. From a governance perspective, the key issue is to avoid potential conflicts of interest associated with, for example, being both the buyer and seller of electricity, or being both the implementer and monitor of a project. Creating institutional firewalls between these functions is a good starting point, and in this respect the creation of the LHSE as an investment vehicle—a 100 percent state-owned enterprise with a board of directors reporting to the Minister of Finance—is a useful way of minimizing conflicts of interest.

Government Role as Implementer

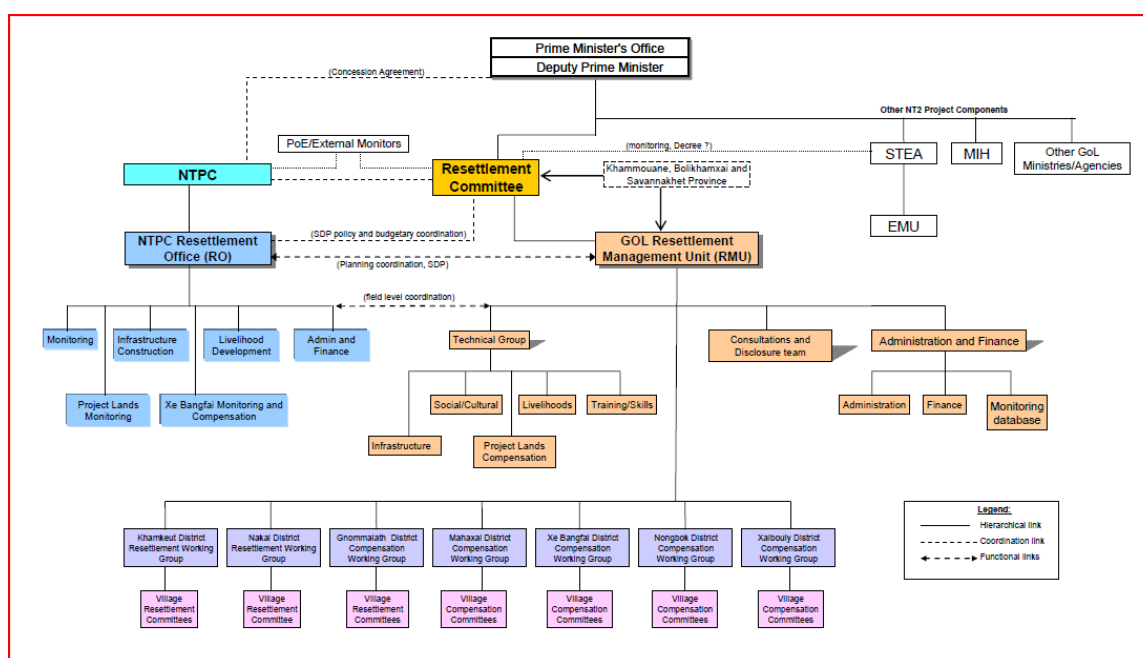
There are a number of ways in which government may play a role as a direct implementer or implementation partner in a hydropower or mining project. Some projects might require complimentary key infrastructure (for example, EDL might be responsible for building electrical sub-stations or connecting the local grid to a hydropower project's transmission lines), but almost all projects will rely on local government to play a lead role in project resettlement, community outreach, and service delivery programs.

International and domestic experience shows that hydropower-related resettlement is particularly complex because it often requires the resettlement of entire communities (rather than, for example, the resettlement of specific households to make way for a road), and dams may also significantly affect existing livelihood opportunities (for example, by flooding agricultural areas). Mining will present similar challenges where it has similarly broad spatial impacts on a community. Best practice approaches to resettlement are discussed elsewhere in the Lao Development Report, but it is important to understand here that the institutional coordination issues are complex, the technical and management capacity required is significant, and the costs for government entities involved—both direct and indirect—are not trivial.

Where the project is being developed by a private entity it may well be appropriate for the developer to pay for the full costs associated with resettlement or other required social programs. Nevertheless, given that the lives and livelihoods of people are involved, government entities inevitably and necessarily play a direct role in this process.

By way of example, the organizational chart for the resettlement and social components of the Nam Theun 2 (NT2) project is presented in Figure 10. The chart shows public and private sector actors, three levels of government including seven districts, and a range of permanent structures and temporary project specific entities. It also distinguishes between hierarchical relationships, coordination relationships, and functional linkages. Regardless of whether this is best practice, it illustrates clearly the complexity of the governance and institutional arrangements that may come to play in addressing social issues within a large hydropower project.

Figure 10: Organizational Chart for the Resettlement and Social Components of NT234



The NT2 experience demonstrates that the realities of resettlement, rebuilding sustainable livelihoods, and improving local service delivery necessitates the full ownership and support of numerous actors, and that aligning the efforts of all of these actors is a continuous challenge. It is therefore necessary, more broadly, to create the right institutional setup³⁵—including clear roles and accountabilities—and match project demands with the right level of resources and capacities.

There is often an assumption that these resources and capacities will come from the project itself, and there is anecdotal evidence to suggest that district budgets have sometimes been cut when large projects are entering the district. Although it is appropriate for projects to pay for additional costs at the local level, there are three reasons to be cautious about relying on this approach completely:

1. Local government officials being paid directly by the project may be less willing to perform their full government role—or criticize the project when necessary;
2. The presence of a large project increases the demands on local government officials' time and resources (because of increased economic activity, changing expectations of local populations, influx of new people, additional enforcement needs, etc.) in ways that are indirect and unlikely to be paid for by the project;
3. Large projects will often support investments in local service facilities (such as rural roads, schools, and health centers), and the projects may also make contributions to the sustaining and maintenance costs of the improved services for some period. But, at some point, it will be necessary for local government to pay for these service facilities over the long-term—or else the services will deteriorate, wasting investment and reducing government services.

³⁴ NT2 Social Development Plan Executive Summary, p11, Figure 5. Revised Overall Organizational Chart for the Resettlement and Social Components of the NT2 Project

³⁵ Decree 112 provides for National Steering Committees to be established for projects that create significant impacts (presumably most hydropower and mining projects), as well as a Resettlement and Livelihood Restoration Committee at the provincial level. Standardizing the oversight and coordination structures in this way is a helpful first step.

Models for dealing with these issues do exist, including the use of project revenue-sharing formulae that ensure that a small percentage of project revenues accruing to the national budget are earmarked to flow back to local government for these purposes. Sending the funds back to the local level via the national budget process has two advantages over direct local transfers: it reduces the influence of private developers over local government officials; and it reinforces the accountability of local government officials to provincial and national authorities.³⁶

A gap exists between the limited local government capacities and resources that exist at present and the complex, growing demands of managing effective mitigation and compensation programs for natural resource projects. This gap is currently perhaps one of the key risks to the socially and environmentally sustainable development of hydropower and mining.

Government Role as a Project Monitor

Institutional mandates for regulation and monitoring of mining and hydropower operations are not always clear in Lao PDR. The arrangements for hydropower are somewhat better than for mining, for the most part because of the longer history of the hydropower sector in the country and the consequently stronger monitoring capacity in the Department of Electricity than in the Department of Mines. In both sectors, however, there has been a lack of clarity over central versus provincial government roles in monitoring and evaluation, along with a lack of capacity to play assigned roles even when clear. Instances of good practice monitoring can be seen for large-scale, internationally operated concessions in both sectors; for example, both Sepon Mines and Nam Theun 2 conduct extensive monitoring themselves and the capacity of project-specific government agencies overseeing these projects has been bolstered.

The legal framework for oversight and monitoring of natural resource exploitation is still under development. Key laws include the Environmental Protection Law (dating from 1999),³⁷ the Water and Water Resources Law (1996), the Forestry Law (2007), and the Minerals Law (1997, currently being revised). A new Prime Minister's Decree on Environmental Impact Assessment, promulgated in early 2010, represents a substantial step forward in clarifying the various monitoring arrangements for environmental and social issues. The broad distribution of monitoring responsibilities is summarized in Table 1 below and the brief description that follows.

The complexity and numbers of government agencies involved in monitoring hydropower and mining projects is created by the multi-sectoral nature of project commitments and impacts. This may be important in some respects, but it creates risks of gaps in implementation due to unclear and/or overlapping institutional mandates. MEM—especially through DOM and DOE—is responsible for the technical aspects of concession enforcement, inspection, and monitoring.³⁸ This conforms to good international practice, since it is the technical agency that should be responsible for these roles. Problematic in this

³⁶ Such revenue sharing arrangements are sometimes confused with broader benefit sharing schemes, which are generally targeted at improving outcomes for project-affected communities. The pros and cons of benefit sharing approaches are discussed elsewhere in the Lao Development Report. The revenue sharing motivation discussed here is focused only on equipping local government to better play its role in hydropower and mining development.

³⁷ The Environmental Protection Law has been followed by an Implementing Decree issued in 2002 and, more recently, by Decree 112/PM on Environmental Impact Assessment (16 February 2010).

³⁸ MEM has a Department of Environment and Inspection for mining (currently 10 staff) and a Department of Social and Environmental Management for energy projects (currently 6 staff).

regard, however, is that fact that the full details of concession agreements are sometimes not disclosed to MEM, making enforcement extremely difficult.

Table 1: Institutional Responsibility for Monitoring of Hydropower and Mining Projects

Area	Monitoring Focus	National Responsibility	Local Responsibility
Sector / Technical	Progress against technical project commitments, Concession Agreement, etc.	Primarily MEM for hydropower and mining projects, but also includes others as necessary	MEM has some provincial staff but does not have staff at district level. Varies for other sector ministries.
Environmental	Environmental impacts and mitigation measures	WREA	Provincial departments of WREA, and district departments as they are established. Project specific Environmental Management Units established within WREA for big projects.
Social	Social impacts, mitigation and compensation measures		Primarily provincial responsibility executed by the district governor's office, with particular engagement from district Agriculture and Forestry offices
Revenues	Calculation, transfers, reporting, and use of revenues	Ministry of Finance, State Audit Office, National Assembly	Local Finance officials reporting directly to MOF

Key responsibility for inspection and monitoring environmental and social impacts rests with WREA, as well as with provincial governments for social issues. WREA has staff at the provincial and district levels but many of its staff are new hires, often recent university graduates with little experience. Around 80 percent of WREA's environmental monitoring activities are donor-funded. Some local staff are placed on site at major mining operations (this is the case at Sepon and Phu Bia), but these staff are paid for directly by the companies—potentially compromising the independence of the monitoring process. The creation of WREA reflects some of the progress Government has made over the last five years, as well as the challenges that still remain in moving from single-project good practice to country-wide systems.³⁹

WREA is responsible for reviewing and signing off on Environmental Impact Assessments (EIAs), which must be undertaken by all resource developers.⁴⁰ The requirements and process for EIAs—including the social impact assessments done within them—have been recently clarified by the new EIA decree. Enforcement capacity has historically been weak, but efforts are being made to strengthen this capacity. Older concession agreements do not include EIAs but even more recent mining and hydro concession agreements are generally not public, so the sufficiency of provisions for social and environmental protection is unclear to the outside

³⁹ See Laos Country Report on Environmental Management in the Lao PDR Mining Sector (Sept 2007): <http://www.mekong.es.usyd.edu.au/events/past/conference07/images/papers%20&%20presentations/Phetthip%20Phetsomphou%20paper.pdf>.

⁴⁰ Mining companies in principle need to provide an EIA and an Environmental and Social Management and Mitigation Plan as part of their application for a mining license. EIAs are carried out from the beginning after MOUs are signed.

world. The requirement for increased disclosure of EIAs is addressed in the new decree. Mining companies are responsible for setting aside funds to cover the costs of eventual closure and must report to government on these funds. WREA defines reporting requirements both at regular intervals and When problems occur—for example, WREA has monitored how mines address toxic spills and similar incidents.

Environmental issues are relatively clearly covered within these arrangements—but accountability and responsibility for social issues is more complicated. Social impact assessment is covered by the EIA decree, and WREA is required to take this into consideration before approving an EIA and its associated management plans. Yet, within the Lao system of government, provincial governors are clearly responsible for social issues. Given the multidimensional nature of many of these issues, there is a lack of clear national level accountability for how resettlement, for example, is effectively managed, outside of the project steering committees required under the EIA decree.

Some monitoring responsibilities remain with other line ministries. The Ministry of Agriculture and Forestry has a Protected Areas Unit as well as a Department of Forestry Inspection which may play a role where hydropower or mining projects affect national protected areas or protected forests. Électricité du Laos also reports that it undertakes some social and environmental monitoring and that provincial governments have turned to the company when problems appeared that they were unable to resolve locally.

The Nam Theun 2 project has developed a particularly rigorous oversight and monitoring system that offers some lessons. Project implementation is monitored by the company and its contractors; and by government entities (including the Resettlement Management Unit reporting to the province, and the Environmental Management Unit reporting to WREA) along with their various international advisors (Government Engineers; Dam Safety Review Panel; Panel of Experts on Social and Environmental Issues). Implementation is monitored by the project's financiers (including quarterly site visits by the Lenders' Technical Advisors, regular visits by international financial institutions, and an International Advisory Group reporting to the World Bank President); and by the Independent Monitoring Agencies covering various aspects of the project. The work of these oversight and monitoring bodies is underpinned by a variety of data sources and surveys.

While the project is still under implementation, experience to date suggests:

1. Strong technical expertise is necessary for monitoring, including the analysis of complex data, and building government capacity to do this is important;
2. Collecting good quality data is a significant project cost;
3. External monitoring represents both an opportunity and a cost for project developers; at times it appears that the developers have spent disproportionate amounts of time on dealing with project monitors; and,
4. Ensuring clear and non-overlapping mandates assists with increasing the benefits and reducing the costs of monitoring systems.

The NT2 experience also demonstrates the value of an effective grievance process to both project implementation and monitoring, and that the project's system can be partly embedded in government systems at the local level. The EIA decree outlines broad procedures for grievance mechanisms or “environment and social dispute settlement” mechanisms, and requires that they operate for each project. There is a clear need for a systematic grievance process to be put in place, along with clear organizational mandates for its implementation.

Key Challenges and Opportunities for Improvement

The institutional and capacity gap associated with being engaged in and monitoring the rapidly growing hydropower and mining sectors, represents a key challenge for Lao PDR moving forward. The country has benefited from the practices of major hydropower and mining projects, which have provided an important opportunity for learning about the practicalities of regulating, engaging in, and monitoring these projects. These experiences, along with significant policy and institutional development over the last five years, represent key assets on which to build. But the institutional and capacity demands for sector regulation and monitoring are enormous and will continue to grow. Achieving good enough governance with regards to social and environmental monitoring and oversight is challenging because it can conflict with the goals of other government departments as well as with the interests of private investors—and such issues are clearly apparent in Laos. Nevertheless, some feasible steps forward include the following:

- ***Recommendation: Improve transparency by making details of all Concession Agreements available to all government departments with project-related responsibilities.*** This step will greatly enhance inter-agency collaboration throughout the implementation, monitoring, and enforcement of mining and hydro projects. In addition, the GOL should consider disclosing final EIAs and environmental and social management and mitigation plans to the public (with a particular emphasis on project affected communities). A worthwhile interim step toward enhancing transparency would be to make public old concession agreements.
- ***Recommendation: Match sector capacity and resources to sector needs, utilizing financing formulas for building capacity in domestic agencies and relying upon external advisory services.*** The creation of MEM and WREA were important steps towards developing the capacity required. Considerable investment is now required in developing the capacity of these institutions so that they can meet the scale of the challenges in the future. A key part of this challenge is to find financing formulas, whether funded from the general government budget or through suitable developer-pays mechanisms. As an example, fiscal regime standardization could include a project development levy, set as a percentage of project costs, that would finance Government's costs during project development, implementation and monitoring. Using external advisors (such as Government Monitoring Engineers or international financial or legal experts), financed as part of project development costs, to provide technical inputs and monitoring services to Government has been highly beneficial in some projects in Lao PDR to date, and should become a standard part of project management arrangements in MEM.
- ***Recommendation: Strengthen models for local government engagement with an emphasis on coordination and standardized processes.*** Hydropower and mining development occurs in some of the most remote and poorest areas in Lao PDR, where local government lacks the capacity to implement its full role in managing and monitoring projects, including helping to coordinate across multiple actors. The fact that large-scale hydro and mining projects create significant additional indirect costs for local government, and the need to avoid financial dependence by local government on the project developer both need to be factored into a strengthened model. Learning from current project experiences and developing more standardized models for engaging, financing, and coordinating government engagement in projects at the local level is critical.
- ***Recommendation: Standardize social and environmental monitoring tools and core indicators.*** The EIA decree provides for strengthened monitoring systems by project

developers, government, and external agencies as necessary. Effective monitoring often relies on good data collection around the key parameters of interest; hence standardizing some core indicators would be very helpful—both for monitoring individual projects, and for comparing project performance over time. WREA has already issued national water quality standards, and it would be useful to develop similar standards for other issues. For socioeconomic monitoring, which can be particularly complex, deciding on a core set of indicators and methods (for example, around consumption, assets, access to services, etc.) that could be used by developers and/or local governments would be especially beneficial.

Revenue Management

Good revenue management is one crucial component of reaping developmental benefits from natural resource use. Good international practice in revenue management includes:

- (i) Taxing the natural resource sector—in terms of both tax policies and administration—in a way that maximizes long-run revenues, while ensuring buffers to avoid risks such as excessive revenue volatility;⁴¹
- (ii) Avoiding over-dependence on resource revenues by developing and adequately taxing the non-resource tax base;
- (iii) Capturing all revenue in budget accounts, allowing a full overview of available resources;
- (iv) Ensuring fair national-subnational revenue sharing—relative to duties and responsibilities and taking into account special costs incurred by provinces/districts where hydropower or mining projects are located; and
- (v) Developing a public financial management (PFM) system that is able to deal with the major increase in revenues expected to occur with a growing hydropower and mining sector (see also the discussion of expenditure management in the next section).

Lao PDR has undertaken significant reforms to its PFM system, including taxation, in recent years. This process has been stimulated in part by agreements between GOL and the development partners providing funding for the development of the Nam Theun 2 hydropower project. Because NT2 will over time generate significant additional revenues for the government, revenue and expenditure management reforms were made part of the agreements.⁴² Over recent years, PFM reforms have been supported in a relatively coordinated way by development partners, especially through the multi-donor Public Financial Management Support Program (PFMSP) administered by the World Bank. Nonetheless, while overall revenue and expenditure management have improved and specific arrangements for NT2 have been put in place, there are still a number of overall weaknesses, as well as specific challenges related to fiscal policy and revenue administration vis-à-vis natural resources. These challenges are the focus of this section.

Taxing the natural resource sector: In Lao PDR, the following taxes and fees apply to natural resources: land fees, royalties, profit tax, turnover tax, personal income tax, dividend withholding tax, import and export duties, fees (buying and selling of shares, license fee, technical service fee), and fund contributions (environmental protection, community development, human resources, sustainable development and project monitoring funds).⁴³ Apart from taxes and royalties, the government also receives dividend payments from those hydropower or mining operations in which it holds a stake.

⁴¹ This includes formulating the tax regime such that the country attracts investors with strong technical and financial capabilities that are generally willing to comply with environmental and social rules.

⁴² This section does not discuss the special revenue and expenditure arrangements for NT2, since these are covered extensively elsewhere (see PER 2009 draft).

⁴³ See Mineral Law, Part VI, Chapter 4 Fiscal Obligations.

For mining investments, the general fiscal regime is set around 35 percent profit tax, royalty rates between 2-5 percent, and a 10 percent turnover tax on operating costs⁴⁴—but, in reality, the fiscal terms applied to mining sector projects vary. Actual tax rates and other conditions such as tax holidays are negotiated for each project during the license application process (as discussed in section II.1 above). Most of today’s major mining projects received their concession agreements in the early to mid-1990s and were given various tax incentives at the time. Neither the subsequent 1997 Mineral Law nor the 2009 revised law have been applied retroactively (although some re-negotiation of terms has taken place as discussed below). Currently, only one mining project is paying profit taxes and 17 are paying royalties. Given the number of licenses that have been issued since the mid-1990s, this suggests that some operations are either not required to make any payments or fail to do so. For hydro projects, tax rates appear to have been set more evenly; in part reflecting the fact that costs, revenue streams, and profits are viewed as relatively more stable and predictable.

From a governance perspective, a key limitation is that the actual taxation of the resource sectors is non-transparent. The detailed terms of concessions, including the actual tax rates and other fiscal terms applied, are not made public. Generally, even for more recent projects, actual rates appear to be lower than official rates. Some changes are under way—e.g., royalty rates may become more standardized for recently approved and new projects by a new presidential decree—although they would likely still have some variation (ranging from 3 to 5 percent) depending on the nature of the project or type of mineral. Transparency enables not just bottom-up accountability (i.e., making the government more accountable to its citizens), it also enables better horizontal checks and balances—that is, it allows other parts of government as well as the National Assembly to more easily question whether deals made are in the best interest of the country.⁴⁵ Greater transparency on fiscal terms could also foster greater competition among would-be developers, thus improving the terms they offer to government on potential deals and strengthening government’s bargaining position vis-à-vis the private sector.

The challenges of actually administering taxes are more pronounced in the mining than in the hydropower sector. The general profit tax rate applicable in Lao PDR is 35 percent.⁴⁶ All major mining taxes are national taxes, payable to central level authorities. The tax administration appears to have little expertise in estimating and auditing the tax liability of mines. According to the Tax Department, only one mine (Lane Xang’s Sepon mine) was paying any profit taxes. All other mines are still enjoying tax holidays, are under construction, or are reported as not making profits (including the second major mine, Phu Bia’s Phu Kham mine). When Lane Xang started operating, it initially enjoyed a 2-year tax holiday, followed by another 2 years of a fifty percent profit tax reduction; now, it pays the full agreed rate (33.3 percent). According to its Concession Agreement, Phu Bia’s eventual profit tax rate is set at 25 percent.⁴⁷ Both mining operations enjoy turnover tax (TOT) exemptions, not just for construction or investment but also for operating

⁴⁴ See IMF (2008), ‘Summary of Tax System,’ pp. 20-26.

⁴⁵ Greater transparency can also strengthen the hand of government negotiators vis-à-vis private companies, enabling government to argue that certain concessions demanded by companies would not be acceptable to public scrutiny.

⁴⁶ See Tax Law (2005), Article 40.

⁴⁷ Phu Bia signed its concession agreement in 1994. First gold shipments started in 2005 and commercial copper extraction only in mid-2008. Similar to the terms for the Sepon concession, Phu Bia originally enjoyed a tax holiday; this was renegotiated in 2007, ending the profit tax holiday, but then zero profit was made in 2008.

expenses.⁴⁸ The TOT exemption was set in Phu Bia's concession agreement; once this became known, Lane Xang requested and received the same exemption.⁴⁹

Responsibility for the collection of resource-related revenues is split between the MOF's tax department, which collects profit and turnover taxes, and the MOF's State Asset Management Department (Natural Resource Management Division), which collects royalties and land fees. The State Asset Management Department has staff permanently on site at major mines that pay royalties, while the tax department does not.⁵⁰ Smaller companies pay continuously as they extract and export, while major mining projects pay royalties annually or in tranches; hydropower projects pay royalties quarterly. The State Asset Management Department reports that the vast majority of existing mining projects (ca. 100) are small-scale and pay only land fees.

Royalties are currently paid by 17 mining projects and by 2 hydropower projects (Theun Hinboun and Houay Ho), as well as by Électricité du Laos which buys and exports electricity.⁵¹ Royalties collected in 2008 amounted to about US\$20m for Sepon, US\$10m for Phu Kham, and US\$3.5m for Theun Hinboun. Together, these three projects account for 70 percent of all royalty payments collected.⁵² For FY08/09, expected royalty collection is lower by approximately Kip 100 billion. Actual royalty amounts are calculated by the company but estimates are certified by MEM's Department of Mines and all royalty payments are made directly at the central MOF. The necessary documents are finalized with the State Asset Management Department and then payments are made to the central treasury by cash, check, or bank transfer.⁵³

Non-standardized and non-transparent actual tax rates and other fiscal terms are also problems in the hydropower sector. Actual tax administration, however, is widely felt to be less of an issue compared to the mining sector; the tax base is simply much more easily calculated and monitored based on the volume of electricity coming onto the grid and being exported. The setting or negotiation of prices in the hydropower sector is also much more predictable—with dependence on one or two export markets (Thailand and potentially Vietnam)—while for mining outputs there is more of a global market and extreme price volatility, as evidenced in recent years.

Existing hydropower projects have been granted varying tax rates, according to MEM's Department of Electricity. Rates and other fiscal terms are calculated based on the assumption that the developer should receive a 11-12 percent rate of return. Apart from tax rates, the duration of tax holidays are a key element of the fiscal terms—to date, hydropower projects have enjoyed a minimum five-year profit tax holiday and the government (Department of Energy Promotion) can extend the tax holiday and/or concession period. As a consequence, according to MOF's Tax Department, only one hydropower project (Theun Hinboun, 210 MW, operating since 1998) currently pays profit taxes. Two hydropower projects currently pay royalties: Theun Hinboun and Houay Ho (also operating since 1998).⁵⁴

⁴⁸ General turnover tax rates are 5 and 10 percent. See Tax Law (2005), Article 17. There are plans to replace the TOT by a VAT in 2010.

⁴⁹ According to Phu Bia Mining, the exemption functions in such a way that the companies do not pay any turnover taxes; i.e., the mining companies do not have to deal with any re-imbursement issues.

⁵⁰ Provincial representatives of the MOF and the MEM are present on site or come when ore is removed from mining site; a Ministry of Commerce representative also joins.

⁵¹ Royalty obligations are calculated per ton or ounce multiplied by the export price.

⁵² Total royalties collected in FY2007/08 amounted to approximately Kip 400 billion (US\$47 million).

⁵³ The treasury still has some accounts with commercial banks but most accounts are with the Central Bank.

⁵⁴ Currently, six hydropower projects of 40+ MW (three of 100+MW) are operating in Lao PDR, with a combined capacity of 660 MW. This will be more than doubled once NT2 (1,070 MW) enters into operation at the end of 2009. It is not clear why Nam Ngum (155 MW, in operation since 1971) does not

A key challenge in the hydropower sector—and in maximizing benefits from the sector for Lao PDR’s overall development—is the setting of prices vis-à-vis consumers, including small to medium scale individual consumers (residential and commercial), large-scale consumers (such as the mining sector), and consumers or key buyers in export markets. Of the three existing 100+ MW projects (Nam Ngum, Houay Ho, Theun Hinboun), the latter two are export oriented, while Nam Ngum mainly supplies the domestic market. Of NT2’s 1,070 MW capacity, 1,000 MW are intended for export and the remainder for the domestic market.

All existing electricity exports go to one single buyer, the Electricity Generating Authority of Thailand (EGAT).⁵⁵ Export prices from Lao PDR’s hydropower projects to Thailand have usually been fixed for a period of twenty-five years. While these agreements provide a stable revenue stream to the hydropower projects, there are two downsides. The first is that the price difference between what EGAT pays and what EGAT charges to consumers is greater than the difference between the costs of production and the price received by Lao generating projects (see Table 2)—i.e., a larger profit margin appears to accrue to EGAT than to the Lao side, even though the latter bears a higher overall risk. The second (related) issue is that for recent projects, including NT2, project costs have increased significantly after Power Purchasing Agreements (PPAs) with EGAT were concluded, further reducing expected profit margins and, therefore, expected revenue flows to the Lao treasury.⁵⁶

Table 2: Overview of generating costs and average electricity tariffs

Generating costs (average for Lao hydropower projects)	4-5c/kWh*
Average price paid by Lao electricity consumers	6c/kWh
Purchasing price by EGAT	average 6c/kWh**
Average price paid by EDL for importing electricity from EGAT/Thailand	7c/kWh
Average price paid by Thai electricity consumers	10c/kWh

*price used to be 2.5-3c/kWh; **with variation by project;

Source: EDL and MEM/Electricity Department; all prices are approximate

Furthermore, Thailand has recently scaled back its expected needs for additional electricity; EGAT is now signaling that it may only want to sign PPAs with two further projects in Lao PDR, Nam Ngum 3, and the Hongsa lignite power plant.⁵⁷ This may create perverse incentives for the already substantial number of hydropower developers active in Lao PDR who have signed MOUs with the government. Each developer faces an incentive to promote their project as supplier to the more limited demand from Thailand, putting downward pressure on the prices that are negotiated with EGAT and limiting the potential profit margins for (and hence tax receipts from) Lao registered companies. A more strategic orientation toward sector development and more capable governance arrangements would enable government to more prudently license fewer developers, choosing the most promising project locations in terms of their ability to

pay profit tax and royalties. Both Nam Ngum and Theun Hinboun were originally funded through external assistance.

⁵⁵ Électricité du Laos (EDL), the state-owned electricity distribution company, also buys electricity from EGAT during the dry season, for areas not sufficiently served by the national grid and for some mining companies.

⁵⁶ PPAs are concluded at a relatively early stage of hydropower projects, since they form part of the guarantees necessary for project financing.

⁵⁷ Initially, Thailand had estimated a need of up to 5000 MW additional generation capacity for import from Lao PDR; this has now been scaled back to an estimated additional need of 400-1500 MW.

produce low-cost hydropower with limited negative social and environmental impacts. If a national grid emerges, as is under discussion, grid-to-grid negotiations will be considerably more beneficial for Lao PDR than the current project-to-project system.

Government equity stakes constitute another important dimension of maximizing benefits and managing risks from natural resource exploitation. Taking government stakes in natural resource projects has regained popularity in a number of countries during the recent global commodity price boom. World Bank advice has often focused on the fact that this can pose considerable risks compared to an arrangement where the state shares in the benefit from natural resource use exclusively or predominantly via taxation.⁵⁸

Key State-Owned Enterprises in the Hydropower Sector

Électricité du Laos (EDL) was founded in 1959, and is a state-owned enterprise under the Ministry of Energy and Mines (MEM). It is governed by a board comprising retired senior officials from MEM and several other ministries. EDL currently owns and operates the main generation, transmission, and distribution assets in Lao PDR and has about 3,000 employees located throughout the country. EDL has been the implementing agency for public hydropower power projects and has sometimes acted as the Government's shareholder in the case of independent power producer (IPP) projects.⁵⁹

Domestic tariffs are negotiated every 4-5 years. The last such negotiation set tariffs for the years 2006-2011. As of 2009, main band residential tariffs and tariffs for agricultural users are around 3.5c/kWh, while industrial and commercial users pay a higher rate (7-10c/kWh).⁶⁰ For the time beyond 2011, EDL hopes to increase tariffs to an average of 7c/kWh. A key challenge for EDL is the building of additional transmission lines. EDL submits requests to the government for borrowing—mainly from international donors—to finance new power lines.

The **Lao Holding State Enterprise (LHSE)** was established in 2005 as part of the institutional arrangements for Nam Theun 2.⁶¹ It is a state-owned enterprise under the MOF. LHSE holds the government's 25 percent share in the Nam Theun 2 project and has also been designated as the government's agent for six other hydropower projects and one non-hydro energy project (the Hongsa lignite power project).⁶² To date, LHSE has no involvement with government stakes in the mining sector but this is being debated. Since NT2 has not yet started production, LHSE has not collected any revenue from dividends on behalf of the government thus far.

De facto, there is no clear division of labor between EDL and LHSE, and the government decides on a case-by-case basis which of the two should take the lead for any government involvement in new power projects. It appears that LHSE is increasingly being used as the preferred government investment vehicle for new projects.

In Lao PDR, the government is taking 10-35 percent stakes in hydro-projects, some through EDL and some through the more recently created LHSE. In mining, the government has taken 10 percent shares in Phu Bia (funded via future dividends) as well as in Sepon. The 1997 Mining Law does not specify any minimum or maximum government participation; the draft new

⁵⁸ The EU PFM report 2009 (p12) concurs, viewing government stakes in major resource projects as a serious fiscal risk no matter how they are being financed—whether through borrowing, deferred dividends, or tax waivers.

⁵⁹ EDL and LHSE are engaged in 7 IPPs each. See: http://www.poweringprogress.org/download/Institutional_diagram.pdf.

⁶⁰ See: http://www.EDL-laos.com/electricity_tariffs.php

⁶¹ See: <http://www.laoholding.com/>.

⁶² NT2 is the only of these currently under implementation.

mining law specifies that if the government decides to take a share, it should be no less than 10 percent. There are different mechanisms through which stakes in mining and hydro-projects can be realized. Some are free shares (e.g., the EDL share in Nam Lik); for some, the government borrows (e.g., the EDL share in Nam Ngum). Borrowing is currently undertaken by MOF, which lends the funds on to the LHSE. According to the law on state-owned enterprises (SOEs), LSHE could borrow independently; or there could be funding projects via bond issue, although this has never been done.

Important questions from a governance perspective are therefore:

- (i) How decisions about taking a government stake are made—including the size of the stake, how it is financed, and the agency/SOE designated to manage it; and
- (ii) How well any government stakes are subsequently managed from overall developmental, fiduciary, and transparency/accountability perspectives.

Currently, decision-making on these fronts appears to be rather *ad hoc*. According to MEM/DEPD the share taken depends on the financing capacity of the government on the one hand, and on the expected profitability of the project on the other hand. The government's share of NT2 was financed through concessional loans and grants and the government is considering borrowing from other sources for projects coming on-stream.⁶³ There are no clear rules for which government agency or holding company should become involved or on how government stakes should subsequently be supervised. There does not seem to be one government department that looks at this in an overarching way; instead there are overlapping responsibilities regarding the management and oversight of state shares. MOF has three relevant departments: one for State Assets; one for SOEs that seems to have been collecting financial data from SOEs since 2008; and an Inspection Department created in 2008 that is mandated to inspect and examine state organizations, including SOEs and state-private joint ventures.

In some hydropower projects such as Nam Ngum 2 (615 MW) and Xekamane 3 (250 MW) (currently both under construction), EDL is involved as the holder of government stakes. This is not considered to be good practice, since it creates a dual role for EDL as both an electricity buyer and distributor, as well as a shareholder in power generation projects. Moreover, managing government stakes in export-oriented power-generation projects can distract EDL from its core mandate to develop transmission and distribution within Lao PDR and to promote electrification in rural and remote areas. Yet EDL profits from being involved in power-generation projects, so this role may be difficult to remove.⁶⁴

Dividends from natural resources are not yet playing a significant role in Lao PDR, but this will change once actual dividend flows from the Nam Theun 2 project and from major mining operations are being received. Dividends from NT2 are to be used for operations and maintenance and debt payments—any remaining funds are then to be remitted to MOF for use in the agreed upon priority programs (initially this component is expected to be very small). For other projects, dividends will be used as mentioned in the State Enterprise Law (i.e., to re-invest in the sector).

⁶³ ADB is considering providing funding for the 440 MW hydropower project Nam Ngum 3; China's ExIm Bank is considering investing in the 1,878 MW Hongsa Lignite Power Project; and Russia may provide funding for two projects, Xekong 4 and Nam Kong 1.

⁶⁴ In recent years, EDL's transmission and distribution business has been profitable—generating net profits in 2007 and 2008 as the result of a reduction in system losses (from 22% to 13%) and tariff increases.

A further important aspect of reaping benefits and limiting risks is managing revenue volatility from natural resource extraction. Government expenditures finance important public goods on an ongoing basis, both through recurrent and capital budgets. Big swings in expenditures can create numerous problems—and revenues from natural resource extraction tend to be more volatile than those from other economic activities. In the case of Lao PDR, volatility is a greater problem with respect to mining than with respect to the hydropower sector (although the flip side is that hydro prices locked in over 25-year concession periods can be too rigid). Lao PDR has a significant dependence on resource revenues—making up just under 20 percent of total revenues in 2008—with an increasing trend over the medium to long term. The country does not operate a stabilization fund to help smooth resource revenue flows.⁶⁵ [This set of issues, including the institutional options for fiscal management of Lao PDR’s natural resource revenues, is taken up more thoroughly in the Fiscal Sustainability background paper for the Lao Development Report.]

Capturing all revenue streams in the budget. Lao PDR has recently made significant progress in re-centralizing its revenue collection.⁶⁶ All major revenues collected on natural resources are directly paid to the central treasury. But, as discussed above, only a very limited number of mines currently pay major taxes. The information received suggests that monitoring of tax obligations is not sufficiently strong to ensure that, for example, smaller mines are not avoiding tax payments or making informal payments at lower levels and avoiding contributions to the national treasury.

Fair national-subnational revenue sharing. Most revenue streams derived from natural resource exploitation—profit taxes, royalties, and dividends—are assigned to the central government.⁶⁷ Subnational levels (provinces, districts, and communities) receive personal income taxes, land fees, and funds for community development. The system for subsidizing poorer provinces from the center is still under development; there is currently no formula being used in order to determine the allocation of grants from the center to local governments.⁶⁸ Nonetheless, provinces and districts are generally keen to attract investments in the mining or hydropower sector, since these bring at least some additional revenue, as well as other benefits such as local employment.

Another institutional development relevant to the natural resource sector value chain has been the strengthening of the State Audit Organization (SAO) with the adoption of a new law on state audit in 2007 as part of a wider effort at public financial management reforms.⁶⁹ One of the

⁶⁵ In 2007, the government created the State Accumulation Fund in which to deposit a fiscal balance in the face of over-performing revenues, driven in part by natural resource revenues. This does not, however, function as a traditional stabilization fund to help smooth expenditures in the face of commodity price volatility. It is used, instead, for emergency expenditures—all receipts in 2007 and 2008 were used for flood relief in 2009.

⁶⁶ See EC (2009).

⁶⁷ Law on the State Budget 2006, Art. 37

⁶⁸ Consequently, the tentative rating given in the 2009 PEFA assessment for Lao PDR on indicator no. 8 “Transparency of Inter-Governmental Fiscal Relations” is a D.

⁶⁹ The SAO now reports directly to the National Assembly rather than the executive, its staff has grown, and it has plans underway to set up three regional offices (North, Central, and South). In 2008, the SAO underwent a peer review by the New Zealand Audit Office that lauded the new legislation and efforts at establishing capacity, while noting that full development of the SAO will still take several years and pointing out that the head of the SAO under the 2007 law does not yet enjoy full protection from removal without cause. Apart from the SAO, there is a State Inspection Authority (SIA), which has grown out of former party-based internal control structures and currently has an internal audit function.

rationales for strengthening the SAO is to enable it to undertake audits of NT2 revenues and related expenditures. Yet as of June 2009 (just as NT2 was becoming operational), the SAO had not yet done any audits related to the hydropower or mining sector or on investment projects.⁷⁰

Key Challenges and Opportunities for Improvement

Revenue collection in both the mining and hydro sectors is compromised by the lack of a strategic approach to the setting of fiscal policy, along with very weak capacity to verify and collect revenues due. The mining sector exhibits a number of weakness in the ability to set, verify, and collect revenues; and vulnerabilities in the strategic development of the hydro sector create a price environment for exported electricity that negatively affect the potential for revenue generation. In a related vein, there is currently no mechanism in place that enables the government to manage volatility in resource revenues.

- ***Recommendation: Conduct, with donor assistance, a thorough analysis of mining and hydro fiscal regimes, developing specific recommendations for strengthening them in light of international good practice.*** This review would address such issues as capping and phasing out tax incentives, the nature of the royalty regime, tax treatment of environmental clean-up and closure costs, and local-level taxation, and provide an assessment of profit tax and royalty rates in international perspective.
- ***Recommendation: Enhance revenue administration and monitoring through targeted capacity-building.*** One key step could be to revisit the issue of revenue administration (including the collection of both tax and royalty payments) and how mining and hydropower operations are monitored. This would include verifying whether there are any mines that should be paying royalties or profit taxes and currently are not; ensuring that the different authorities involved (MOF/Tax Administration, MOF/State Asset Management Department, MEM) cooperate well in sharing information; and building the auditing capacity of staff involved in revenue collection to enable them to properly assess the tax obligations of mining and hydropower operations.

The actual fiscal regimes applying to various concessions in both sectors are non-transparent. This lack of transparency hinders the ability of government agencies to collect revenues and also means that there cannot be a well-informed public debate on the fiscal benefits from resource extraction, or any real vertical accountability to citizens on this matter.

- ***Recommendation: Make transparent the fiscal terms that apply to mines and hydropower projects.*** Making publicly available only the information on fiscal terms (actual rates for taxes and royalties, tax holidays, etc.) would be intermediate step towards full disclosure of concession agreements.
- ***Recommendation: Publish regularly—quarterly or, at least, annually—the tax and royalty payments actually collected by GOL.*** Greater transparency on revenue receipts would enable a discussion among government officials, local experts, and the wider public about whether Lao PDR is generating an adequate level of revenues from its natural resources. It would also facilitate comparison with other countries, allowing Lao PDR to be more strategic about the

⁷⁰ The SAO focused initially on audits of the annual budget (to be presented to the NA during the July budget hearings) and on the ‘technical revenues’ or user fees collected by budget organizations. The National Assembly has taken a strong interest in the initial SAO reports but mechanisms for ensuring a follow-up on audit findings still remain to be developed.

manner in which it structures its revenue share from the natural resource sectors. As an example of such an approach, an increasing number of countries with large mining and hydrocarbon sectors are using the Extractive Industries Transparency Initiative (EITI) reporting format to develop greater transparency and clarity about the fiscal benefits being derived from natural resources.⁷¹

Expenditure: Public Investment Management

Good public investment management (PIM) is a key vehicle for translating revenues from natural resources into long-term sustainable development. ‘Good enough’ PIM include:⁷²

- (i) Prioritization of investment spending that is clearly grounded in national and sector development strategies, i.e., that is ‘policy-based’;
- (ii) Proper vetting of all major/significant projects and effective prioritization of projects;
- (iii) Adequate planning for and funding of recurrent costs and maintenance;
- (iv) Good execution and oversight of projects (timely, cost-effective, with integrity); and
- (v) Effective *ex post* audit and evaluation.

A high but gradually declining share of public investments in Lao PDR is funded by donors. According to available budget figures, this share stood at more than 85 percent for 2006/07 and at around 80 percent for 2007/08 (see Table 2 below).⁷³ For 2009/10 the share of external funding in total capital expenditures is expected to be 75 percent. Over the medium term, government revenues from the natural resource sectors are expected to increase significantly—and experience from other resource rich countries suggests that this will translate into a significant increase in domestically financed investment spending.⁷⁴ As this transition to more significant domestically funded investment spending happens, it is crucial to improve governance systems for prioritizing, planning, and executing public investments.

In FY 07/08, however, the share of domestically funded projects is diminished by the fact that 27 percent of domestic public investment plan (PIP) funds were allocated to overseas development assistance (ODA) counterpart funding; and 13 percent to paying off accumulated debts and unpaid contracts for domestic investments (see below). Consequently, only 59 percent of domestic funds (Kip 407 billion, or US\$48 million) were allocated for public investments, i.e., went to financing ongoing (Kip 227 billion) and new (Kip 180 billion) PIP projects.

Public Investments and Donor Alignment to National Plans

Lao PDR has several layers of national and subnational planning. The country’s overall development goal is to exit Least Developed Country (LDC) status and to have achieved poverty eradication by 2020. The National Growth and Poverty Eradication Strategy (NGPES) adopted in 2003 broadly sets out key goals and strategies. This has been followed by the adoption of the National Socio-Economic Development Plan (NSED) for 2006 to 2010.⁷⁵ The updating of the NSED for the next five-year period is currently under way. According to recent World Bank assessments of development plans

⁷¹ There are currently 29 EITI candidate countries and 2 EITI compliant countries.

⁷² See Rajaram et al. 2008, Jacobs 2008, and Petrie 2009.

⁷³ Not all donor funding is reported in the budget, so these figures are rough. About two-thirds of received overseas development assistance (ODA) is reported on budget (in 2008) according to the latest report on the implementation of the Paris Declaration. See: <http://www.oecd.org/dataoecd/25/37/41951420.pdf>.

⁷⁴ See IMF 2008.

⁷⁵ Both plans are available at <http://www.undplao.org/official%20docs/NSED%20partI.pdf>.

across client countries, Lao PDR's overall plans are still rated as relatively weak in terms of authoritativeness, clearly identified priorities, and clear links to public expenditure allocations.⁷⁶

In order to align support from Development Partners with its national goals, the Vientiane Declaration on Aid Effectiveness was adopted in 2006. In recent years, around two-thirds of ODA flowing to Lao PDR has been recorded in the country's budget; this is positive, even if further progress remains to be made. Yet only around one-third of overall ODA uses country systems for disbursement; and national procurement systems are being used for only 16 percent of aid flows.

The government has sought to learn from Vietnam's widely recognized progress in managing aid more effectively. In 2007, the donor coordination function was moved from the Ministry of Foreign Affairs to the Ministry of Planning and Investment (MPI), which is seen as more effective. Yet donor alignment is still seen as somewhat superficial. In terms of investment planning, provinces can approach donors for potential funding through MPI's Department for International Cooperation, although this route does not always appear to be followed. Provinces use donor proposal formats for externally funded investment projects.

The share of public investment relative to overall government spending has fluctuated in recent years, with some decline from 2005/06 to 2007/08 but estimated to grow again in more recent years to slightly over 40 percent (see Table 3). There is an overall concern that investment spending in Lao PDR has been high but not always well targeted; there has also been a somewhat declining trend relative to recurrent spending recently.

A public investment law is currently being finalized. The law was prepared in 2008 but was not adopted because of discussions with the National Assembly about whether investments by state-owned enterprises should be included or not. Until the law is adopted, public investments are governed by an earlier decree.⁷⁷ Among other things, the draft new law stipulates that MPI should provide unified formats for proposing and reporting on public investments.

The overall responsibility for national planning—including medium and long-term plans as well as annual investment planning—rests with the Ministry of Planning and Investment (MPI). MPI is currently in the process of preparing the next five-year National Socioeconomic Development Plan. For the national plan, bottom-up inputs from districts and provinces are being sought. As in many countries, however, there are nonetheless major inconsistencies between actual national level and provincial-level plans, as well as between overarching national plans and sector plans. Still to-be-improved donor coordination and alignment contributes to further fragmentation as well as duplication of efforts. Challenges in developing sufficiently clear and useful plans are recognized by the government and are being debated.

Table 3: Key data on public investment spending, 2005-2010, Kip billion

	2005/06 (actual)	2006/07 (actual)	2007/08 (budget plan)	2007/08 (actual)	2008/09 (initial budget plan)	2008/09 (revised budget plan)	2009/10 (MOF estimate)
Total revenue and grants	4,962	6,014				8,065	10,453

⁷⁶ World Bank's review on *Results-based National Development Strategies: Assessment and Challenges Ahead* (2008). Laos received a rating of 'C' on an A-D scale in the 2005 as well as in the 2007 assessment rounds.

⁷⁷ Decree No. 58, 2002.

Total expenditures	6,262	7,267	8,884	9,721	10,026	9,873	12,470
o/w capital	2,877	3,318	3,442	3,642	3,330	4,344	5,125
Capital as % of total expenditures	45.9	45.7	38.7	37.5	33.2	44.0	41.1
o/w domestically financed	403	403	1049	688	1,369	1,759*	1,265
Externally financed and own lending	2,126	2,329	2,393	2,954	1,961	2,083	3,860
Domestically financed as % of total capital	14.0	12.1	30.5	18.9	41.1	40.5	24.7

* The temporary jump in domestically funded public investments is due to additional spending in preparation for the South and East Asian (SEA) Games, held in Vientiane in December 2009.

Sources: Lao PDR authorities and World Bank

Annual public investment plan (PIP) process. The annual PIP combines bottom-up and a top-down processes. On the top-down side, MOF and MPI hold a meeting each February to decide on ceilings for capital investments. Subsequently, MPI broadly divides up available funds for: (i) allocations for servicing debt to contractors, (ii) counterpart funding for ODA funded capital projects, (iii) ongoing and new projects as proposed by provinces and line ministries.

According to Decree no. 58 (2002), specific ceilings should be announced to sectors and subnational governments no later than early May. This is relatively late, given that these agencies must submit their (prioritized) public investment proposals by mid-June. In practice, moreover, the ceilings have not been treated as binding. Consequently, the lists of proposed projects submitted by sector and subnational governments tend to be long relative to available funds. The ‘softness’ of ceilings means that ministries and subnational governments with greater negotiating power have often been able to receive greater allocations of investment funds.⁷⁸ Ongoing technical assistance is aimed at encouraging MPI to announce at least approximate ceilings earlier in the annual budgeting process.

Project proposals are collected bottom-up: from villages to districts, to provinces, and to the national level. The process of reviewing and assessing projects is differentiated into three tiers, depending on the size of the project (see below). Subnational governments play a strong role in the process of developing and proposing investment projects—districts and provinces are responsible for the initial assessment and prioritization of smaller projects. Line ministries have a relatively limited role—they are responsible for investment projects of national significance but they do not effectively coordinate sector investment priorities across subnational entities. The investment envelopes submitted by provinces and line ministries are then negotiated with MPI. Each July, envelope figures are approved as part of the budget approvals by the National Assembly (including donor-funded shares to the extent that they are reported in the budget).

⁷⁸ *Vientiane Times* (August 17, 2009): “The presentation also pointed out that the government had to put a stop to the system of budget allocation based solely on the negotiation efforts of officials from ministries and local administrations, rather than their actual needs.”

An overarching challenge is the fact that the number of investment projects—more than 3,000—appears high for a country of 6.8 million people and a GDP of approximately US\$5.3 billion. The vast majority of these are smaller scale projects executed at district and provincial levels, which may reflect a tendency to classify as ‘investments’ expenditures that should rather be counted as ‘current.’⁷⁹ A high number of projects easily swamps limited existing capacity for assessments and prioritization, especially at the district and provincial government levels.

Public Investment Planning: Institutional Roles and Responsibilities

Lao PDR has a planning function housed in the **Ministry of Planning and Investment (MPI)**, separate from the Ministry of Finance. MPI has three key responsibilities: planning—including developing medium and long term plans as well as annual public investment planning (Planning Department); managing foreign investments (Department of Investment Promotion); and developing policies related to and coordinating foreign assistance (Department for International Cooperation).⁸⁰ MPI is represented in each province by a **Department of Planning and Investment (DPI)** located within the provincial government. DPIs also have a dual responsibility for public investment planning and for attracting and managing foreign investments. In their planning role, DPIs collect proposals for public investments from provincial sector departments.

One challenge common to countries receiving significant amounts of development assistance is whether any central ministry or agency can act as a gatekeeper for reviewing and channeling the use of aid. The advantage of such a gatekeeper role is that it can help to ensure that capital investments funded by development partners are well aligned with national priorities and fit with domestically funded investments, and that there is no over-commitment of domestic counterpart funds. According to the information received, MPI does not have sufficient clout to reject proposals for donor funding to be received by provinces or line ministries. This leads to a situation where the government has not always been able to honor all promises of counterpart funding made by provinces or line agencies (such as the Departments of Public Works and Transport at provincial levels).

The role of the **Ministry of Finance (MOF)** in public investment planning is relatively limited apart from setting ceilings for overall capital spending as a way to preserve macro-fiscal stability. Key departments in MOF are the Budget Department and the Fiscal Policy Department.

The **National Assembly** has, to date, also played a limited role. It approves the budget annually each July; however, the budget as approved by the National Assembly is at a very aggregate level. According to Decree No. 58 (2002), Article 9 on public investment management, the primary authority to approve specific projects in the public investment plan list rests with different levels of the executive (depending on the size of the project). According to Articles 6 and 10, however, the Prime Minister seeks approval from the NA for the overall list and specifically for any projects exceeding Kip 25 billion (ca. US\$30 million).⁸¹

Provincial governors play a significant role in decision-making on smaller scale investment projects (up to approximately US\$600,000). Governors often support prestige investment projects, such as hospitals; but insufficient planning for future recurrent costs can mean that these facilities remain under-utilized. This also reflects the fact that recentralization has proceeded to a greater degree on the revenue than on the expenditure side.

Project assessment and prioritization. Existing materials suggest a general lack of prioritization and weak links between five-year plans and actual allocation of annual investment

⁷⁹ Jacobs (2008: 11) emphasizes that separate recurrent and investment budgets can create strong incentives to classify expenditures as investments.

⁸⁰ Prime Minister’s Decree no. 374/2007 on the Organization of the Ministry of Planning and Investment.

⁸¹ There are no specific provisions for the case that the NA would refuse approval or would seek changes.

resources. This is a challenge that Laos shares with many other countries with relatively low institutional capacity.⁸² A positive aspect of Lao investment planning is the recent division of projects into three categories based on size: category I projects are larger than Kip 50 billion (ca. US\$6 million); category II are those between Kip 5-49 billion, and category III are those below Kip 5 billion (ca. US\$600,000). Small (type III) projects are the bulk (around 2,800 of 3,000) of projects and are entirely handled at the provincial DPI level. For type II projects, MPI's Evaluation Department⁸³ provides an assessment and MPI's General Planning Department makes a decision. For type I projects, assessments are done by the Evaluation Department and decisions for funding are made by the Government.

With assistance from development partners (including a World Bank IDF grant and JICA assistance), Lao PDR is in the process of introducing a more formalized system of assessing project proposals that comprises both: (i) absolute assessments (the project on its own merits) and (ii) comparative assessments (against all those proposed in a province or sector). Absolute assessments are carried out each February/March; and, in principle, are followed by provincial-level workshops between DPI and sector departments. Three pilot provinces undertake both absolute and comparative assessments, while other provinces have only undertaken absolute assessments thus far. A clear limitation, however, is the fact that assessments have not yet been made public and are not even shared with relevant sector departments.

The ultimate decision-making power over the bulk of investment projects—i.e., small projects decided at the provincial level rather than through MPI—still rests with provincial governors, although they have to make their decisions with clear assessment criteria available. Nevertheless, it appears, *de facto*, that projects can still be initiated by provincial governors even if no budget funds have been made available. In such cases, construction companies start work but are then not paid, which leads to delays in project execution or unfinished projects.

Costing and budgeting. Good, realistic costing of investment projects is a challenge the world over; but, in a well managed system, more regular and less complex types of projects should be adequately costed. A general rule for costing in Lao PDR is to assume average prices and to allow for a deviation from these by 10 percent. In 2007 and 2008, however, costs for capital projects rose quickly. The country is affected by wider regional and global price fluctuations in construction materials, since most such materials are imported. When costs overrun, the reaction is usually to 'shrink' capital projects, e.g., by reducing the length of the road that is being built; the possibilities for such adjustments in scope or scale vary among projects and sectors. Furthermore, as in many other countries with relatively weak investment planning systems, forward estimates of future recurrent cost implications are not made consistently; and recurrent non-wage expenditures and maintenance have been underfunded.⁸⁴ In part, the lack of forward estimation of recurrent costs is linked to the fact that Laos does not yet operate a system of multi-year budgeting—a typical problem of many low income countries with limited capacity.

Execution of projects. Generally, the execution of projects is the responsibility of provincial governments or of sector ministries and the advisory or supervisory roles of either MPI or MOF are very limited. Available evidence suggests that project execution in at least some

⁸² See World Bank (2007), *Results-Based National Development Strategies, Assessment and Challenges Ahead*, Annex 6: progress country-by-country.

⁸³ Evaluation Department appears to be a misnomer; the department assesses whether projects are a priority *ex-ante* but seems to have little role with regard to any *ex-post* evaluations.

⁸⁴ This is in contradiction to Decree No. 58 (2002), Art. 7, which specifies that all projects worth more than Kip 1 billion have to be accompanied by an estimate of future recurrent costs.

sectors works well, in that projects are undertaken and finished at reasonable cost. Yet attempts at developing a modern procurement system to facilitate sound project execution have yet to gain traction. As part of the wider PFM reforms, a new Procurement Management Office was set up in the MOF in 2004 with the role of monitoring and advising on procurement across government. The unit and overall procurement systems are, however, perceived to be rather weak; and there is no functioning complaints mechanism, or the necessary transparency about who wins bids and based on what assessment criteria to enable a well-functioning complaints mechanism.

The central ministries—MPI and MOF—exercise some control over multi-year projects, as they allocate further funding on an annual basis. For multi-year projects, provinces or line ministries must submit budget requests and provide information on project progress. Decree No. 58 (Article 17) specifies that projects should be evaluated or assessed *ex ante*, during execution, and *ex post*. MPI has a Department of Investment Monitoring and Evaluation that was formed in 2002; its main focus is on *ex-ante* assessments. Occasionally, the department receives *ad hoc* requests from line ministries or provinces when substantial disputes emerge over an investment project (e.g., the project is unfinished, or there are disputes with the contracted firms). In recent years, Lao PDR has started to strengthen the State Audit Organization (SAO) but, thus far, the SAO has not undertaken any audits of investment expenditures and has no immediate plans to do so.

Key Challenges and Opportunities for Improvement

As resource revenues grow and domestically funded public investment increases, having good systems in place for prioritizing, planning, and managing these investments becomes increasingly important. Domestically funded public investment expenditures have, to date, been small relative to donor funded projects but this is set to change over the medium term, particularly as major natural resource projects such as Nam Theun 2 come on-stream. The issue of using overseas development assistance resources for strategically important projects also remains on the agenda. Currently, many different stakeholders (including provincial administrations, line ministries with substantial capital investments, MPI and to a lesser degree MOF, development partners, and SOEs) appear to pursue their public investments interests relatively independently of each other, not bound by a common system of assessing priorities—which has the overall effect of reducing the development impact of public investment.

- ***Recommendation: Improve coordination of the public investment plan.*** GOL could use the process of developing the next five-year plan in order to better align public investments with the development plan. In particular, GOL should emphasize the need for coordination of national, sector, and provincial development strategies, and institute a process to better handle tradeoffs. One important aspect of this challenge is strengthening aid coordination and alignment with national and sector strategies. A commitment to move in this direction has been made by the government as well as by development partners in signing the Vientiane Declaration on Aid Effectiveness.
- ***Recommendation: Improve prioritization of public investments by strengthening appraisal techniques.*** GOL should work to further develop the system for assessing proposed investment projects and ensure the adherence of all interested stakeholders (including donors) to overall systems. In addition, such assessments should be made accessible, at a minimum, more widely within government and to legislators in order to strengthen well-grounded prioritization. In some sectors, especially transportation, sector strategies already make many steps in the direction of what to prioritize under different funding scenarios; such experience could be rolled out to other government entities.

- **Recommendation: Strengthen audit of both public investment systems and specific projects.** The government should aim to bolster the SAO's mandate and ensure that it develops the capability to audit systems for public investment management (e.g., of specific provincial governments), as well as specific investment projects (both donor- and domestically funded).

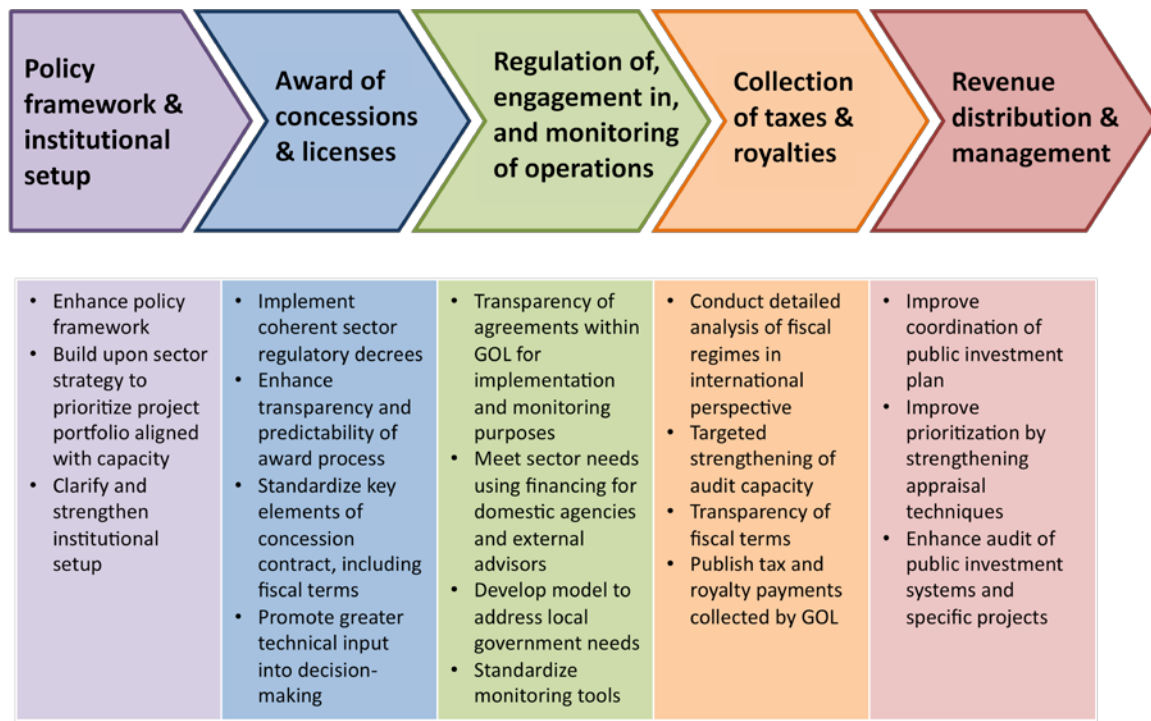
CONCLUSION

Natural resource extraction has been growing in Lao PDR over the past ten years and is poised to grow considerably farther over the next decade and beyond. Given its particular configuration of resource types and pre-existing governance conditions, Lao PDR is unlikely to face the worst forms of a resource curse, such as a total undermining of existing governance structures. Nevertheless, the government must remain vigilant in order to avoid squandering the massive potential development benefits from its resource wealth. In addition, it must work to prevent incurring substantial social and environmental costs or allowing benefits to primarily accrue to individuals and foreign investors, rather than toward the country's overall development. To these ends, GOL must work to overcome the growing gap in governance and institutional quality necessary for sound resource management.

Consequently, there are two major objectives regarding governance of the mining and hydropower sectors in Lao PDR—the first is to *do the right projects* by enhancing national portfolio-level governance arrangements; and the second is to *do the projects right* by improving natural resource project management processes. The GOL must determine how it can undertake resource exploitation in a deliberate manner, paying particularly careful attention to ensuring that exploitation does not proceed faster than the government's ability to manage the resource sectors. In turn, it must pay concerted attention to the process of natural resource management itself, in order to implement its own strategic vision.

The report has offered a series of granular recommendations for the GOL to consider as mechanisms for improving natural resource management, with an emphasis on: (i) strengthening policy-making, institutional coordination, and administrative capacity; (ii) enhancing transparency; and (iii) standardizing the NRM process to increase predictability and efficiency. At each step of the value chain, we have attempted to cover the full hierarchy of choices available to the government, ranging from initial decisions about sectoral strategy, the definition of the government's role or its overall level of involvement, and—within that context—technical steps that may be taken to respond to challenges, aimed at building institutional capacity, maximizing efficiency, and strengthening development outcomes. Figure 11 summarizes the high-level principles at each stage, and Annex 1 brings together all of the detailed recommendations in this report, separating them into those for short-term versus medium-term consideration.

Figure 11: Summary of high-level governance principles



Taking an integrated perspective across the natural resource sectors that combines these questions of strategy, government role, and institutional arrangements will strengthen the ability of the Government of Lao PDR to manage the country's natural resources for sustainable development outcomes.

ANNEX 1: SUMMARY OF GOVERNANCE RECOMMENDATIONS

Recommendations for Short-Term Implementation

Policy Framework and Institutional Setup

- ***Devote concerted attention to the process of natural resource management*** in order to enable coordinated implementation of these overarching policies and sector strategies, establish the key principles through which projects will be approved and managed (see below), and target institutional capacity building.
 - *Transparency as a principle of NRM.* Provide more information within government, to industry, and to the public about how decisions are made about developing projects and exploiting resources, and emphasize transparency across the steps of the value chain.
 - *Standardization of NRM processes.* This would yield a greater degree of predictability—creating a better climate for potential investors; and provide a practical approach for easing the constraints of scarce capacity—or, in other words, increase the efficiency of NRM by reducing arbitrary or discretionary steps.
 - *Strengthening institutional capacity and inter-agency governmental coordination.* Systematically involve all relevant actors in the concession-granting process, with clear roles and accountabilities for each.

Award of Concessions and Licenses

- ***Improve the legal framework of the sector by implementing coherent sector regulatory decrees.*** A key next step is to issue comprehensive regulatory guidelines for implementation of the new Minerals Law. Such guidelines should, in particular, establish clear roles for the core government agencies involved in the concession awards process.
- ***Enhance mechanisms for systematic agency coordination and strategic, comprehensive capacity-building.*** Retain MPI's lead role in handling investment proposals, but enhance technical consultations and input into decision making.
 - *Standardize and enhance the technical roles of MEM and MOF and other relevant government agencies (e.g., WREA) in the concession award process,* improving administrative efficiency, the quality of technical input, and inter-agency coordination.
 - *Institute an inter-ministerial technical committee responsible for preparing technical assessments to Cabinet for the negotiation and award of mining and hydro concessions.* This committee should be chaired by the MPI representative and comprise consistent, high-quality technical representation from MEM (Departments of Mines and Electricity), MOF (Fiscal, Tax, and State Asset Management departments), and WREA (Department of Environmental and Social Impact Assessment).
 - *Put in place a technical team on mining and hydro issues at MPI's Department of Investment Promotion (DIP), with targeted capacity-building on investment appraisal and cost-benefit analysis,* enabling systematic learning and facilitating decision-making on sector development priorities.

Regulation of, Engagement in, and Monitoring of Operations

- ***Improve transparency by making details of all Concession Agreements available to all government departments with project-related responsibilities.*** This step will greatly enhance inter-agency collaboration throughout the implementation, monitoring, and enforcement of mining and hydro projects.

Recommendations for <u>Short-Term</u> Implementation
<ul style="list-style-type: none"> • <i>Standardize social and environmental monitoring tools and core indicators.</i> The EIA decree provides for strengthened monitoring systems by project developers, government, and external agencies as necessary. Effective monitoring often relies on good data collection around the key parameters of interest; hence standardizing some core indicators would be very helpful—both for monitoring individual projects, and for comparing project performance over time.
Revenue Management
<ul style="list-style-type: none"> • <i>Conduct, with donor assistance, a thorough analysis of mining and hydro fiscal regimes, developing specific recommendations for strengthening them in light of international good practice.</i> This review would address such issues as capping and phasing out tax incentives, the nature of the royalty regime, tax treatment of environmental clean-up and closure costs, and local-level taxation, and provide an assessment of profit tax and royalty rates in international perspective.
<ul style="list-style-type: none"> • <i>Publish regularly—quarterly or, at least, annually—the tax and royalty payments actually collected by GOL.</i> Greater transparency on revenue receipts would enable a discussion among government officials, local experts, and the wider public about whether Lao PDR is generating an adequate level of revenues from its natural resources; and allow GOL to be more strategic about the manner in which it structures its revenue share from the natural resource sectors.
Expenditure: Public Investment Management
<ul style="list-style-type: none"> • <i>Improve prioritization of public investments by strengthening appraisal techniques.</i> GOL should work to further develop the system for assessing proposed investment projects and ensure the adherence of all interested stakeholders (including donors) to overall systems. In addition, such assessments should be made accessible, at a minimum, more widely within government and to legislators in order to strengthen well-grounded prioritization.
<ul style="list-style-type: none"> • <i>Strengthen audit of both public investment systems and specific projects.</i> The government should aim to bolster the SAO’s mandate and ensure that it develops the capability to audit systems for public investment management (e.g., of specific provincial governments), as well as specific investment projects (both donor- and domestically funded).
Recommendations for <u>Medium-Term</u> Implementation
Policy Framework and Institutional Setup
<ul style="list-style-type: none"> • <i>The GOL requires an overarching policy framework for development of both the mining and hydropower sectors.</i> This issue is discussed further in the sector background reports to the LDR; and has been the subject of ongoing dialogue between the GOL and its development partners. Now is an opportune time for the GOL to review, update, strengthen, and endorse its policy and sector development frameworks for the natural resource sectors.
<ul style="list-style-type: none"> • <i>In turn, the GOL should aim to articulate specific sector development strategies.</i> The starting point for sector strategy is the National Socio-Economic Development Plan (NSED), which, by its nature, will offer broad directions and priorities. Yet sector strategy is required to help interpret the best way to implement this plan in the specific sectors, particularly to enable GOL to take a deliberate approach to deciding how many projects and of what sort it will agree to have developed and in what sequence.
Award of Concessions and Licenses

Recommendations for Medium-Term Implementation

- **Standardize the concession contract and fiscal terms below a certain investment threshold.** Streamlining concession negotiation and award would lead to gains in administrative efficiency and increased transparency across government departments, in turn enabling more consistent and effective implementation on the part of GOL.
 - *Standardize the concession process and core of concession agreement structure, including a basic fiscal regime*, making additions to this core as particular project conditions require. This would eliminate the need to negotiate separate contracts for each and every concession agreement, significantly enhancing effectiveness.
 - *Share full concession agreements internally within GOL* to enable government agencies to perform their necessary roles during the concession award process, as well as for monitoring and enforcement purposes.
 - *Ensure predictability and transparency of regulatory environment*, including rapid dissemination of regulatory amendments, to enable government agencies to perform their roles and encourage quality investors.

Regulation of, Engagement in, and Monitoring of Operations

- **Match sector capacity and resources to sector needs, utilizing financing formulas for building capacity in domestic agencies and relying upon external advisory services.** Develop the capacity of newly created institutions such as MEM and WREA in order to meet the scale of the challenges in the future. A key part of this challenge is to find financing formulas, whether funded from the general government budget or through suitable developer-pays mechanisms. Using external advisors, financed as part of project development costs, to provide technical inputs and monitoring services should become a standard part of project management arrangements.
- **Strengthen models for local government engagement with an emphasis on coordination and standardization.** The fact that large-scale hydro and mining projects create significant additional indirect costs for local government, and the need to avoid financial dependence by local government on the project developer both need to be factored into a strengthened model for local level engagement.

Revenue Management

- **Enhance revenue administration and monitoring through coordination and targeted capacity-building.** Revisit revenue collection (both tax and royalty payments) and monitoring of mining and hydropower operations; and ensure that the different authorities involved (MOF/Tax Administration, MOF/State Asset Management Department, MEM) cooperate well in sharing information. Build the auditing capacity of staff involved in revenue collection to enable them to properly assess the tax obligations of mining and hydropower operations.
- **Make transparent the fiscal terms that apply to mines and hydropower projects.** Making publicly available only the information on fiscal terms (actual rates for taxes and royalties, tax holidays, etc.) would be intermediate step towards full disclosure of concession agreements.

Expenditure: Public Investment Management

- **Improve coordination of the public investment plan.** Use the process of developing the next five-year plan in order to better align public investments with the development plan. In particular, GOL should emphasize the need for coordination of national, sector, and provincial development strategies, and strengthen aid coordination and alignment with these strategies.

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