



**FOREST SECTOR
PUBLIC EXPENDITURE REVIEWS**

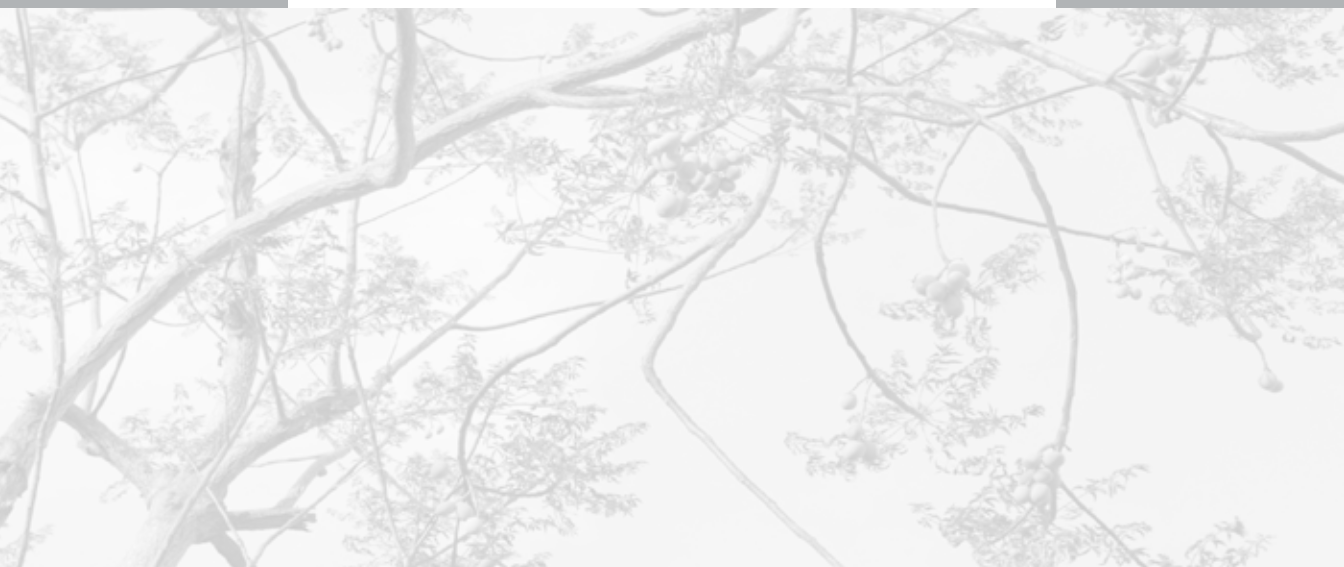
REVIEW AND GUIDANCE NOTE



PROFOR
PROGRAM ON FORESTS

**FOREST SECTOR
PUBLIC EXPENDITURE REVIEWS**

REVIEW AND GUIDANCE NOTE



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EXECUTIVE SUMMARY

INTRODUCTION

This report and guidance note has been prepared by the program on forests (PROFOR), a multi-donor partnership housed at the World Bank, in order to build a body of knowledge and global good practice to support public expenditure reviews (PERs) in the forest sector. Understanding the processes that drive public expenditure allocations, as well as assessing the efficacy of the expenditures undertaken, is crucial for ensuring that forests are properly and sustainably managed.

The report reviews experience from a large number of forestry, agriculture, and related sector expenditure reviews. Based on this literature review, a set of principles and procedures have been developed to guide and support future public expenditure analyses in the forest sector.

The report discusses challenges that are specific to the forest sector. Forest policy objectives tend to be a compromise between competing objectives, ranging from timber production by the private sector to conservation interests to resources for local communities and livelihoods. Balancing these competing objectives is a complex issue. In addition, where corruption and political interference are endemic, there are often significant gaps between policy plans and what is actually implemented. Undertaking a forest sector PER helps to establish whether sector expenditures are consistent with stated sector priorities, and also to provide an independent assessment of progress with any policy development or performance improvement initiatives.

Ideally, a forest sector PER should be carried out regularly (every three to five years) and timed so that its findings feed into the government budget process. Regular updating of PER work is needed in order to show trends and highlight any anomalies in forestry expenditure patterns. A PER can also contribute to the Reducing Emissions from Deforestation and Forest Degradation (REDD) process, and related support mechanisms such as the Forest Investment Program (FIP).

Findings of the Review

The review finds that, globally, very few forest sector PERs have been undertaken to date. Of the 61 PERs reviewed, only 14 focused to any degree on forestry, and 11 of these were part of a food and agriculture organization (FAO) program of sustainable forest development, whose principal focus was on aspects of forest revenue, with only limited analysis of sector expenditures.

The principal findings of the review of PER literature are as follows:

- The **definition of “forestry” and the “forest sector”** differs considerably between studies. Although the definition often adopted is “spending on the sector through core sector institutions” (i.e., the forestry ministry and other agencies that manage forestry expenditure), this definition is not consistently applied. These inconsistencies explain why no international comparisons are made in any of the forest sector PERs reviewed.
- There are considerable **inconsistencies between policy priorities and planned budget allocations to the forest sector**. Budget allocation decisions are often made in a nontransparent manner, influenced by political pressures and bargaining. The misalignment of expenditures is also partly explained by weak administrative capacity to manage public expenditures in the sector effectively.
- **Data problems** were a common feature of the PERs. This problem is common to many PERs, and hinders the comprehensiveness of the analysis that can be carried out. The problem is particularly acute where development partners (DPs) provide significant funding to the sector; expenditure reporting by DPs is often poor and much DP spending is “off budget.”
- In almost all of the cases reviewed, only a small proportion of the national budget is allocated to the forest sector, despite the sector’s importance to local and national economies. There is a perception, therefore, that **forest departments have been under-resourced** relative to their mandates. In many cases, the limited allocation of budget resources to the forest sector can be attributed to the sector’s failure to make a convincing case for an increased share of resources. The review points to a general lack of awareness among legislators and policy makers about the role of forests in national development and their environmental importance, resulting in a lack of political will to support the sector.
- Many of the PERs reveal **low disbursement rates** against approved budgets. Reasons for this include systemic delays within the Ministry of Finance, difficulties in complying with the requirements of DP procurement rules, and weak budget execution. In most of the studies reviewed, the disbursement levels of funds provided by the DPs were lower than those associated with funds provided by government.
- The importance of **nongovernmental organization (NGO) expenditure** and involvement in the forest sector is understated.
- Capital investments are undertaken without consideration of the associated **recurrent spending requirements** to adequately maintain these investments. The review also finds evidence of investments funded by DPs with insufficient regard to the government’s capacity to maintain them. This undermines the overall quality of investment in the sector.
- **Operations and maintenance (O&M)** funding in forest departments is inadequate. O&M funding is particularly vulnerable because when financing is tight, it is the easiest area of spending to cut. This is problematic, because if forest plantations are neglected during critical periods in their life cycle, the sustainability of the investments may be irreversibly jeopardized.
- Few of the PERs reviewed have attempted to **link public sector expenditure to outcomes**, owing to lack of data, complexity of analysis, and attribution problems.
- There is **limited analysis of the efficiency and effectiveness of forest expenditures**. Capacity to

undertake the quantitative analysis required to assess efficiency often is not available, and the analysis itself is time intensive and therefore costly. Consequently, little effort has been made to monitor the efficiency and effectiveness of public expenditure programs in the forest sector.

Guidance Note

The report concludes by providing a best practice guidance note for undertaking forest expenditure reviews. The guidance note is drawn from lessons derived from the review of PERs. The purpose is to provide practical support and guidance in the form of a common framework to those tasked with carrying out forest sector public expenditure analysis.

It is expected that initial experiences with piloting the guidelines will be used to revise the guidelines, which individual countries will customize to meet their specific requirements.

The guidance note covers the issues to be considered during the preparation phase of a forest sector PER, and in drawing up the terms of reference (ToR, of which an example is provided), the analysis that should be contained within the report, and a proposed structure for the report.

In many cases, the findings and recommendations of PERs have limited impact because they are poorly disseminated and no plans are agreed for their implementation. This fact highlights the need for strong engagement and commitment by the forestry ministry throughout the process. The findings and recommendations arising from the PER should feed directly into the budget process and forest development policy. Sector stakeholders should be identified at the outset of a PER so that specific messages arising from the review can be tailored to these different groups and communicated appropriately.

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ABBREVIATIONS

AU	African Union
BIA	Benefit Incidence Analysis
CAADP	Comprehensive Africa Agriculture Development Programme
CBO	Community-based organization
COFOG	Classification of Functions of Government
DFID	Department for International Development (UK)
DP	Development partner
EC	European Commission
FAO	Food and Agriculture Organisation
FIP	Forest Investment Program
GAC	Governance, Accountability and Corruption
GDP	Gross domestic product
KFS	Kenya Forest Service
MARD	Ministry of Agriculture and Rural Development (Vietnam)
MTEF	Medium-Term Expenditure Framework
NEPAD	New Partnership For Africa's Development
NGO	Nongovernmental organization
O&M	Operations and maintenance
OPM	Oxford Policy Management
PDR	People's Democratic Republic (Lao)
PEERS	Public Environmental Expenditure Reviews
PEFA	Public Expenditure and Financial Accountability
PEIR	Public Expenditure and Institutional Review
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Survey
PFM	Public financial management
QSDS	Quantity Service Delivery Survey
REDD	Reducing Emissions From Deforestation and Forest Degradation
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
VFM	Value-for-money

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INTRODUCTION

Background

This report was commissioned by the Program on Forests (PROFOR) a multi-donor partnership housed at the World Bank, to inform government forestry departments and development partners (DPs) working in the forest sector of the reasons why public expenditure reviews (PERs) are carried out, and of lessons learned from experience in undertaking such exercises. The work includes the drafting of a guidance note intended as a source of reference for those, including staff of the World Bank, other DPs, national forest departments, and consultants, who wish to carry out a PER of the forest sector. The aim is to highlight and suggest approaches to the principal issues that will need to be addressed if the most is to be made of the potential role of forest sector PERs in improving the effectiveness of public spending in achieving forest sector development objectives.

Forestry remains important to the local and national economies of many countries. It contributes significantly to gross domestic product (GDP), providing employment and incomes, generating export earnings, and supplying raw materials for manufacturing. It is also an important source of livelihood in rural areas, particularly for the poor, whose livelihoods can depend on forests and forestry resources. Forests are also important in providing a variety of environmental services, which are increasingly being recognized as essential. In many areas, watershed protection, biodiversity conservation, and carbon sequestration are worth more than the timber and timber products that could be removed on a sustainable basis.

Developments in forest finance, including Reducing Emissions from Deforestation and Forest Degradation (REDD)¹ and payments for environmental services opportunities, are increasing the regulatory and advisory services required of forestry departments. However, relative to other sectors, forestry is undercapitalized, uncompetitive, and underperforming. This poor performance is partly a symptom of inadequate and ineffective spending on forests by governments over the past few decades, as the sector has rarely received “proportional attention in terms of public expenditure vis-à-vis other sectors” (Brzeska and Fan 2009) due, in part, to the low priority attached to it by many governments and DPs.

The forest sector is dependent on public financing. Public resources are required to provide public services such as forest management, protection, and research, as well as to enable a regulatory environment in which the private sector can produce timber and related products. For this reason, for many years the World Bank and a small number of other DPs have been supporting forest development throughout the world.

Although the World Bank and other development partners² have undertaken national-level PERs in many countries, forestry and its related sectors have received little attention. As Vincent et al. (2002) have noted, this contrasts strongly with the situation in other sectors: “Despite the strong rationale, public expenditure reviews by the World Bank and other international development organisations have seldom attempted to quantify environmental expenditures, much less to analyse their cost-effectiveness or optimality...in contrast to the focus on expenditures in...education and health.” However, the World Bank and national governments have recently begun carrying out a number of PERs of the environmental sector, including forestry (see chapter 2).

Methodology

This report is the output of a team of specialists in the fields of forests, economics, public expenditure, and public finance. It makes extensive use of a large number of documents and reports on forest policy and priorities, as well as financial management practices and reforms. Some 61 PERs were reviewed during the study,³ using a standard checklist of questions (annex 4). These PERs include reviews commissioned by the World Bank, Department for International Development (DFID), Food and Agriculture Organisation (FAO), United Nations Development Programme/United Nations Environment Programme (UNDP/UNEP) and by national governments (details of PERs analyzed are provided in annex 3).

The review team found that only a limited number of forest sector PERs have been carried out. For this reason, the report was expanded to include PERs in related sectors such as agriculture, in particular, as well as environment, water, and sustainable land management. Where appropriate, PERs in other sectors, such as health/nutrition and education, were also consulted. Although a number of the examples used in the report relate to the agricultural sector, it is felt that they apply equally to forestry (and to other sectors as well).

From this literature review, it has been possible to distill lessons of good and poor practice used in analyzing public spending in the forest sector. These lessons have been used to develop a set of principles and procedures to guide and support those conducting public expenditure analyses, including associated financial assessments, of the forest sector. The overall aim is to improve the allocation and quality of these expenditures in order to ensure better development outcomes. The guidance note highlights a number of critical problems and methodological issues that are likely to be encountered when undertaking a forest sector PER exercise. The guidance is generic in nature, providing a broad guide and set of principles for practitioners.

A list of documents consulted is provided in the bibliography at the end of the main report. The literature review is supplemented by information obtained from correspondence and contacts with a limited number of PER practitioners and foresters.

Structure of the Report

The report is structured in three sections:

- Following this introduction, the remainder of chapter 1 answers the questions What is a forest sector PER?

Why carry out a forest sector PER? What makes forestry different? Who carries out forest sector PERs? When should a forest sector PER be undertaken?

- Chapter 2 provides the results of the review of the PERs of the forestry and related sectors. It enumerates their principal features and main shortcomings.
- Chapter 3 describes the key steps to be followed and issues to be considered when preparing a forest sector PER. It provides the suggested contents of a forest sector PER, and also suggests the areas in which the conclusions and recommendations of a PER should focus, together with proposals for disseminating the findings of such a review and implementing its recommendations. Annex 2 provides an outline and generic terms of reference for a forest sector PER.

WHAT IS A FOREST SECTOR PER?

A PER is a tool used to analyze both the allocation and actual disbursement of public funds to a specific sector over a given period of time. With the information and analyses undertaken, a PER would typically seek to improve the future prioritization and alignment of public resources with stated national policy objectives, strategies, and programs. Some PERs extend their analysis to the allocation of resources at subnational levels of government. Some PERs also include a review of the budgetary process and of public institutional arrangements within the sector.

A PER would typically cover the following main elements:

- An overview of sector performance over the recent past (typically three to five years) in terms of planned spending (the budget), actual spending (expenditures), planned and actual income collected (revenues), achievements (outputs), and whether these achievements met policy objectives (outcomes), together with a review of sector institutional arrangements and the decision-making processes behind them
- An assessment of whether sector expenditures are consistent with stated sector priorities and budget commitments, and whether planned expenditures are aligned with sector priorities
- A review and independent assessment of progress with any policy development or performance improvement initiatives
- Recommendations to enable targeted improvements in sector expenditure and budget management performance, based on politically and administratively realistic increments in performance of the budgetary system

Undertaking these tasks requires access to reliable and accurate data on sector budgets and actual expenditures. Ideally, data should be broken down by different types of spending (e.g., salary, nonsalary recurrent, capital), by functional type of intervention (linked to policy), by geographic area, and by level of government.

In many countries, access to such data is problematic. It can be especially problematic in the forest sector, where data are limited and capacities are weak. Therefore, the focus of a forest sector PER is likely to be

limited to gaining a simple understanding of patterns of expenditure and the processes by which spending decisions are made. For countries where a forest sector PER has not previously been undertaken, this understanding will provide a basis for extending the analysis and discussion in subsequent PERs (once the data and capacity constraints are addressed) to issues concerning the relevance, effectiveness, efficiency, and impact of such spending (Mogues et al. 2008).

PERs can also be carried out to meet other needs, such as helping to identify areas of public expenditure that most effectively stimulate pro-poor growth, (Akroyd and Smith 2006). In Zambia, one of the reasons for carrying out a PER of the agricultural sector (including forestry) was to ascertain whether the Comprehensive Africa Agriculture Development Programme (CAADP) requirement that the sector receive at least 10 percent of national public expenditure was being met (Govere et al. 2009). An institutional analysis can be useful, particularly if it is the first forest sector PER, in providing a better understanding of the context within which the review is being undertaken (Kolavalli et al. 2009).

DPs have undertaken a number of forest sector PERs in order to inform the development of new programs in the sector. For example, the World Bank has included PERs as an important part of its Country Environmental Analysis work, which has led to the preparation of new interventions in the environment sector (Anon. 2010).

BOX 1.1. THE 2010 ZAMBIA AGRICULTURE PER

The 2010 Zambia PER reviewed the effectiveness and efficiency of public expenditure in areas that can be expected to have a positive influence on technology and productivity. The review was prompted by a perceived slow rate of adoption of innovative agricultural practices and a level of agricultural production below that planned for in the First National Development Plan. The PER found that—

- Production has grown, significantly in certain areas, but there is insufficient data to state with reasonable certainty how this growth has been achieved.
- Core functions of public agricultural services, especially research and extension, have not received the required operational funds in recent years.
- Promoted technologies are not always suitable, especially for smallholder conditions.
- The large and growing expenditure on fertilizer and seeds and the cost of maize market interventions has not led to reduced spending on core agriculture activities, but is probably (depending on one's assessment of the political-economy processes) consuming funds that might otherwise have been available for core activities.

It concluded that agricultural growth could be better promoted by increased funding of research and extension, and to programs that push technical innovation and strengthen national agricultural markets.

Source: Orłowski et al. 2010.

WHY CARRY OUT A FOREST SECTOR PER?

With hard questions now being asked about both the quantity and quality of public expenditure in forestry and other sectors, it is important for sector planners and decision makers to have a thorough understanding of public spending patterns, trends, and their impact. Because of the potential of forests to contribute to economic growth, poverty reduction, and environmental improvement, it is important to evaluate the patterns of public expenditure in the sector in terms of its relevance, effectiveness, and efficiency, and, where appropriate, to recommend more effective approaches to allocating funds.

The objective of carrying out a PER, therefore, is to improve sectoral budget allocation and management decisions made during budget formulation and to improve the composition and management of national and local government budgets, as well as to enhance the efficiency of actual expenditure. The results of a review can be used to improve the efficiency, effectiveness, and equity of public spending in the forest sector in the future (by better aligning future expenditure with national development policy priorities), thereby improving the likelihood that sectoral/national outcomes will be realized.⁴ In addition, with public expenditure generally coming under increased scrutiny, it is critical that forest spending be targeted more effectively.

For example, the justification provided for the agriculture and forest sector PER in Honduras was (1) to enhance the efficiency, efficacy, and equity of services provided by the sector, and to improve the prospects of achieving the priority sectoral outcomes outlined in national planning documents; and (2) to establish options and recommendations to help improve the effectiveness and impact of the government forest institution. It was hypothesized that by altering the composition of sectoral expenditures and bringing about a more efficient use of public goods and services, the chances of meeting sectoral targets would improve, and that such action would also stimulate expanded investment by the private sector (Anson and Zegarra 2008).

In some cases, forest sector PERs have brought together, for the first time, data on forest expenditures, providing a foundation for future analyses of the impact of public spending on sector performance (Bekele 2001). A PER can contribute to a better understanding among government decision makers and sector planners of expenditure in the sector and stimulate discussion and exchange between the ministry and subnational line authorities on sector priorities and their fiscal implications. A PER can also form an integral component of the dialogue between government and DPs on sector policy and relative funding contributions from government and external partners.

PERs, together with a number of other tools, can be used to study the implications of decentralization on service provision in the sector. They can also play a useful role in improving dialogue between the sectoral ministry and the ministry(ies) responsible for finance and planning.

Finally, given that forestry bodies have, in general, been ineffective in making claims on limited national budget resources, a forest sector PER can help provide clear, understandable, and relevant information to enable the sector to make a more effective case for appropriate levels of budgetary allocation.

BOX 1.2. REVIEW OF AGRICULTURE AND FORESTRY PUBLIC EXPENDITURES IN HONDURAS— MAIN FINDINGS

The main conclusions of this 2008 review were as follows:

- Honduras has low levels of spending for agricultural and forestry (less than 5 percent of the budget) relative to its economic importance (about 40 percent of GDP).
- Honduras has exhibited relatively low disbursement levels in the execution of its agriculture and forestry budget, averaging about 60 percent disbursement since 2000 (sectoral expenditures measured as a percentage of the expenditure levels approved by the National Congress).
- There is underinvestment in “public good” activities, especially agricultural research and development, phytosanitary services, property rights and land access, rural infrastructure, forestry regulation, and protected areas.
- There is relatively high dependency on external donor funding (in the form of grants and loans) at 50–70 percent of the agriculture/forestry budget. There is also significant scope to improve the consistency of donor-funded projects to better support the government’s sectoral strategies and targets.
- The current sectoral strategy identifies operational criteria for expenditure prioritization as part of a medium-term expenditure framework (MTEF).

The overall conclusion of the study was that Honduras is at a turning point in formulating, adopting, and effectively implementing improved expenditure strategies and programs for the agricultural and forests sector.

Source: Anson and Zegarra 2008.

FEATURES OF EXPENDITURE IN THE FOREST SECTOR

Although forestry and agricultural expenditures are similar, the forest sector has its own features and challenges. Forestry often has its own socioeconomic development objectives and strategies, and funds for forestry may be budgeted, executed, monitored, and evaluated separately from those for agriculture. The growing deforestation problem in many countries and increasing pressure on forestry from alternative land use combine to make forestry expenditure reviews even more relevant, especially where public funds are scarce.

Forest resources are diverse in size, structure, and species. So, too, is the range of products and services derived from forestry resources. In the past, forests were managed primarily to source raw materials for industrial and local use. They also have provided a protective watershed function. However, land ownership and use has been an issue in many countries, as forest land has the potential to support economic activities of a perceived higher value.

Some investments in forests, particularly the creation of intensive plantations, have similarities with agriculture. Rural development initiatives may deal with community members as both farmers and forest users. As a result, forestry and agriculture are most appropriately seen as interrelated resources and economic activities, with similarities and several important differences. The justification for public intervention and financing of forestry resources, and the linkages between forestry and agriculture, are discussed below:

Undervalued Economic Returns

Growing long-rotation crops of trees for timber is rarely an attractive financial proposition. The risks are significant, and the returns are too low once the cost of capital is taken into account. However, forests provides a range of public good benefits for which markets currently do not exist or are at an early stage of development. As a result, forests are often undervalued. Some of these benefits are delivered off-site at landscape, regional, and even global levels. This presents an accounting challenge, particularly in plantation crops, where trees may be treated as capital goods while they are in the ground and income once they have been cut. The environmental services provided by forests are gaining increasing importance, as is the role of forests in contributing to local livelihoods.

High Management Costs

A great deal of forest land has traditionally been owned and managed by central governments. Even where concessions are granted and the private sector bears much of the investment and management cost of forests, governments have traditionally provided a regulatory function. Forest areas are inevitably remote, and the costs of public roads linking these areas to the wider community, along with providing means of transport for forestry staff, are significant for the forest sector.

Motivating trained and educated staff to work in remote forest areas requires appropriate resources and incentives. However, these may be insufficiently attractive to secure talented government staff. Although forestry shares this phenomenon with other government services, many of its rural postings tend to be in the most remote areas.

Livelihoods–Forests Nexus

Forests tend to be in remote areas where local populations, relative to other groups, tend to be less educated, less politically connected, and less able to communicate their needs within national planning processes. A significant proportion of the world's poorest live in and around forest land. Their dependence on these pockets of land for their livelihoods makes a focus on forests essential if poverty is to be reduced. The benefits of forests to the poor may principally be in the informal economy, neither recorded by national statistics nor used as a source of tax revenues. These communities are likely also to engage in agriculture, but may depend on forests at times of drought or other natural disasters, especially when crops fail or livestock die. Forestry in these circumstances blends into agriculture—at one extreme, communities are highly dependent upon forests, while at the other extreme, communities consist mostly of farmers who make only occasional use of forests (more often in times of droughts or floods). Government allocation of timber concessions may not have taken into account the presence of communities living in and close to the forest. Commercial exploitation may therefore conflict with local livelihoods.

Political and Governance Conflicts

The public nature of the forest resource has provided the potential for corrupt practices at various levels, with elites capturing the majority of benefits. The transparency of decision making is weak and illegal logging is widespread, leading to a loss of revenues to the government and unsustainable use of the forest resource. Where government receives forestry revenues, their equitable allocation among local, regional, and central governments may be a complex issue.

Forest conservation is not just a matter for the forest sector, as investments made in other sectors can threaten forests by increasing encroachment and by converting land to other uses. Forestry is rarely the preferred option, with its narrow financial considerations, and many tracts of land escape conversion only as a consequence of internationally recognized protection. Tackling deforestation is rarely given priority over tackling issues relating to health, education, and employment. Normally, it is only when floods can be attributed directly to deforestation that there is political will to reduce overuse and introduce suitable protection measures.

Policy Options

As a result of the factors listed above, forest policy objectives tend to be a compromise between competing objectives. These include timber production by the private sector, conservation interests, and the generation of local livelihoods. Balancing these competing objectives is a complex issue. In addition, where corruption and political interference have become endemic, there are often significant gaps between policy plans and what is actually implemented.

The Future: Is the Paradigm Shifting?

The combination of a lack of public resources for forest administration and the potential for REDD payments may result in a change in the forestry policy environment. If REDD payments are effective in reducing deforestation and degradation, efficient forest monitoring mechanisms will need to be developed. If REDD payments are linked to results, this will require significant changes in the current practices and objectives of public forest administrations. Furthermore, the Lacey Act (in the United States) and the Timber Trade Regulation (in the European Union) may undermine illegal activity but could divert trade toward domestic markets and to countries with less selective markets.

WHO CARRIES OUT FOREST SECTOR PERs?

A wide spectrum of agencies has an interest in undertaking PERs of the forest sector. Development partners value PER findings as an input to the design and monitoring of their country-level programs.⁵ The World Bank, together with DFID and the UNDP, has supported the majority of the DP-initiated PERs (see bibliography). PERs are also undertaken directly by governments, often as part of their annual budget process. The Kenya Forest Service is an example of the latter; each year, it undertakes a PER as part of its budget and MTEF preparation process (Kenya Forest Service 2008).

Owing to low levels of national capacity, it may be necessary to use international public expenditure specialists to assist local government staff or consultants in undertaking a forest sector PER. However, where this approach is adopted, the intention should be to build the capacity of national forest planners so that PER work becomes a regular feature of their future work programs. The institutionalization of PER approaches will result in the continuous assessment and evaluation of options for the better alignment of national and subnational programs with development priorities.

Forest sector PERs should be participatory and collaborative. If local stakeholders do not participate in the analysis, then the results may well be irrelevant or, if relevant, they may not be implementable.

WHEN SHOULD A FOREST SECTOR PER BE UNDERTAKEN?

A forest sector PER may be undertaken as a part of a wider expenditure review or an assessment of performance in relation to a national development plan. Ideally, however, a forest sector PER should be carried out regularly (every three to five years) and timed so that its findings feed into the budget process, providing information and data to planners and decision makers in the forestry ministry for use in budget preparation. As noted above, this is the case in Kenya, where the forest sector PER forms “an input into the preparation of the Medium Term Expenditure Framework and the budget” (Kenya Forest Service 2008). It may also be used to review ongoing programs against output indicators and to recommend adjustments where necessary.⁶

The PER work must be updated regularly in order to show trends and highlight any anomalies in forestry expenditure patterns. A regular PER can also contribute to the REDD process and REDD support mechanisms such as the FIP. Because REDD is a performance-based mechanism, with payments triggered when certain actions have been taken, the scope of the PER could be expanded to provide such monitoring information. For these reasons, it is recommended that forest sector PERs be limited in scope and repeated regularly, rather than being detailed, delayed, and repeated only irregularly.

In countries where a forest sector PER has already been undertaken, and where both planners and decision makers have a reasonable understanding of the nature and magnitude of public expenditure in the sector, supplementary specialized public expenditure analyses may be needed on an ad hoc basis to investigate specific areas of public expenditure that are causing concern.

OTHER FINANCIAL ANALYSES THAT COMPLEMENT PUBLIC EXPENDITURE REVIEWS

There are a number of tools for assessing public expenditure and budgets, all of which consider how effectively and efficiently the public expenditure management system delivers public services. Currently, the most commonly applied diagnostic tool is the Public Expenditure and Financial Accountability (PEFA) assessment. Public Expenditure Tracking Surveys (PETS) and Quantity Service Delivery Surveys (QSDS) are

BOX 1.3. THE USE OF THE PER TO SUPPORT THE FOREST INVESTMENT PROGRAM

The FIP is designed to support developing countries' REDD efforts by providing advance financing for readiness reforms and public and private investments that address the underlying causes of deforestation and degradation.

The FIP has four objectives:

1. To initiate and facilitate steps toward transformational change in developing countries' forest-related policies and practices
2. To pilot replicable REDD models to generate understanding and learning
3. To facilitate the leveraging of additional financial resources for REDD
4. To provide valuable experience for international REDD deliberations

A PER can support FIP activities by identifying—

- Current expenditures and expenditure trends in the sector and their alignment to priority areas (such as those outlined in REDD strategies and national policies)
- Expenditure management processes, including geographical variations in expenditure (e.g., under decentralized systems)
- Sector functions facing financing constraints (where donor financing or policy realignment may be needed)
- The disaggregation between recurrent and capital budget expenditures
- Current sector revenues, collection efficiencies, and utilization
- Expenditure outcomes and an assessment of value for money in service delivery

Source: Authors.

public expenditure tracking tools. Benefit incidence analysis (BIA) can be used to assess issues of equity in public spending. All of these tools help to construct a better picture of the operation of forestry financing systems at national and subnational levels.

In addition to these diagnostic tools, case studies can be commissioned to identify specific constraints to both improving public forestry expenditure management and using the public goods and services provided by the sector (Kolavalli et al. 2009).

Public Expenditure and Financial Accountability Assessment (PEFA)

The PEFA assessment has become widely recognized as the standard tool for assessing a country's public financial management (PFM) performance.⁷ The framework, launched in June 2005, provides a comprehensive "snapshot" of PFM performance. It assesses performance against 31 indicators across four areas: credibility

of the budget; comprehensiveness and transparency; the budget cycle; and DP practices. It is applied at the national (or recently subnational) level of government, rather than at sectoral level. The goals of the PEFA framework are to strengthen recipient and DP ability to assess the condition of country public expenditure procurement and financial accountability systems, and to develop practical reform and capacity-building processes.

The PEFA PFM report differs from other PFM assessments in two important respects. First, it reviews the entire PFM system, rather than specific aspects of the system. Second, although it identifies problems, it does not identify their causes. It can open up discussions on potential areas for reform, but other more specific public expenditure analysis tools are necessary to inform the precise design of any reform programs.⁸

Public Expenditure Tracking Survey (PETS)

A PETS is a tool that has become adopted as a feature of the budget process in a number of developing countries. Like the PER, a PETS can be used for assessing sectoral PFM systems and issues. As the name implies, a PETS focuses on tracking expenditure to final service delivery. It reviews budget execution systems and the flow of funds to service beneficiaries, identifying any bottlenecks and limitations in PFM capacity. A PETS may also include an assessment of the relevance and quality of service delivery.

As a PETS is a resource-intensive exercise, they tend not to be undertaken on a regular basis, but rather when there is a perceived problem with funds reaching beneficiaries. The approach systematically tracks the flow of resources through the different layers of government to determine how much of allocated/disbursed resources (human, financial, and in-kind) reach each level and how quickly they travel down to the frontline service provider. The approach can complement PERs by examining how resources and services actually are used in terms of the quantity and quality of services provided. The scope often includes a review of governance and accountability issues throughout the system.⁹

A PETS involves a combination of reviews of administrative data, structured surveys, and ad hoc visits to areas where public sector services are provided in order to obtain information from service users on both staff inputs and unofficial payments. This multilevel analysis can be used to estimate overall resource delivery, identify system weaknesses, and act as a catalyst for both strengthening public expenditure management systems (especially record keeping) and directing deeper enquiries into apparent losses or misapplication of funds. It is ultimately intended to provide local communities with information about the level of resources allocated to specific services in their area—which is often done through the media and by placing advertisements in schools and throughout districts—with the objective of increasing the effectiveness and equity of public spending on priority services. Not surprisingly, such surveys require sound planning and significant resources.

A PETS is useful for diagnosing gaps between government spending and performance where problems are suspected in budget execution related to the capture or “leakage” of resources. They have been used widely in investigating leakages resulting from ghost or absent workers (Gauthier and Reinikka 2007; Picazo and Kagulura 2007). Such analysis is especially helpful in poor control environments, where institutions are

undeveloped, or where there are unreliable data and poor reporting on execution, even though the effect on government spending or development outcomes in these environments is uncertain. Supplementary and more detailed studies of financial processes and performance have been undertaken where the understanding of “leakage” in a traditional PETS is not wholly applicable and the standard financial analyses do not allow a robust understanding of the key principal-agent relationships and attendant incentives involved in the system (e.g., Oxford Policy Management 2010).

Most PETS studies have been undertaken in the health and education sectors, although a recent PER did attempt to assess the appropriateness of funds used in the environment sector (Kazoora and Ogwang 2010). Another PER exercise provided suggestions for developing a PETS for agriculture and forestry (Cammack et al. 2008).

Within the forest sector, issues of resource provision, service delivery, and reporting are both diverse and complex. For these reasons, a PETS potentially provides an appropriate tool to study the governance of funding flows within the sector and the effectiveness and efficiency of execution of forestry budgets. To date, however, no forestry PETS has been undertaken. This may be due to difficulties associated with measuring service provision in the sector and the shortage of skilled practitioners to carry out such surveys.

Like other diagnostic tools, the PETS acts only as a source of information. Effective change to improve systems requires action from the institutions of government (and often its private sector contractors). Herein lies the dilemma of a PETS: It provides information that is both scarce and useful in poor control environments, yet it is precisely those environments that pose the greatest challenges to implementing the required changes.

Quantity Service Delivery Survey (QSDS)

QSDSs have been undertaken in a number of countries (Bangladesh, Chad, Macedonia, Mozambique, Papua New Guinea, and Zambia) and should be considered along with other forms of service delivery surveys. QSDSs focus on facility receipts, the actual staff in-post over the course of a year, the speed of disbursement following requests, and the reports of service users on both staff inputs and unofficial payments. Like the PETS, they have been widely used in investigating “leakages” resulting from ghost, or absent, workers.

QSDSs provide a useful foundation for measuring equity and the efficiency performance of frontline service providers. Their results allow the investigation of key service delivery outcomes relating to established contracts (more or less explicitly). The value of QSDSs is that they collect and analyze vital data, identify specific problems, and then demonstrate the need for disaggregation. However, the findings need to be supplemented with a qualitative understanding of the nature of ownership, incentives, and capacity in both performance contracts and the wider public finance management system, some of which can be provided through BIA and similar tools.

In some cases, service delivery surveys have been used to understand better the extent of client satisfaction with public services. If such surveys were to be carried out in the forest sector, the clients could include representatives of the timber industry who depend on public institutions to allocate timber concessions effectively and transparently.

Other related tools that may enhance the findings of QSDs include the use of citizen report cards in assessing benefit-sharing schemes, and the management effectiveness tracking tool, which is used to assess the effectiveness of spending on protected areas.

Benefits Incidence Analysis (BIA)

The purpose of a BIA, which has been applied mainly in the fields of health and education (International Monetary Fund 2003), is to assess the extent to which target groups benefit from the goods and services provided through government funding. A BIA seeks to measure the equity of public spending—that is, the share of public spending on a particular sector that benefits a specific group, depending on its socioeconomic, gender, geographical location, or age characteristics. The unit cost of providing public services is combined with information on the use of these services. The data requirements for such analyses are extensive.

Governance, Accountability and Corruption (GAC) Assessment

A GAC assessment may be undertaken alongside a PER in order to gain a more complete picture of the strengths and weaknesses of the governance of the sector. This approach can be helpful to forest sector planners in providing background information for formulating a future program of interventions for the sector.

INVENTORY OF RECENT FOREST AND RELATED PERS

This chapter draws on a review of PERs in the forest and natural resources sector. A total of 61 PERs were obtained and reviewed (table 2.1). They can be grouped into five headings:

- PERs of the forest sector or of a Ministry of Forestry (Honduras,¹⁰ Kenya, Vietnam).
- PERs of a larger sector or ministry that has forests within its portfolio; normally the Ministry of Agriculture (Ghana, Lao People's Democratic Republic (PDR), Mexico)
- PERs of forest expenditure as part of a cross-sectoral PER, such as "sustainable land management" or "environment" (Uganda, Tanzania).¹¹ This group also includes the environmental PERs undertaken as part of the World Bank's Country Economic Analysis work (Benin, Côte d'Ivoire, Namibia), and one currently under way in Madagascar. Each of these PERs contains some forest-specific data, information, and analysis.
- Analyses (limited) of forest public expenditure as part of a broader review of certain aspects of the forest sector in particular countries (such as the FAO Forest Finance Working Paper series,¹² the main focus of which was forest revenues).
- Selected national PERs that included some analysis of expenditure in the forest sector. In each of these cases the forest sector received only passing mention, largely as a by-product of other analysis. In these cases, forest expenditures were reviewed as part of the wider agricultural sector.

The list of PERs reviewed is shown in annex 3, and several are also listed in the bibliography.

Overall, the review shows that little work has so far been undertaken on analyzing expenditure in the forest sector. Of the 61 PERs reviewed, only 14 focused to any degree on forests,¹³ and only 11 of these were carried out under an FAO program of sustainable forest development where the principal focus of the PERs was on aspects of forest revenue, with only limited analysis of expenditure in the sector.

TABLE 2.1. SUMMARY OF PERS REVIEWED

Subject area	Number
Forestry	14
Agriculture	14
Environment/NR/SML	5
Sectoral (other)	3
General	25
TOTAL	61

PRINCIPAL FINDINGS OF THE FORESTRY AND FOREST-RELATED PERS REVIEWED

This section summarizes the main issues arising from the PERs reviewed during this study.

Data

As might be expected, data problems, including reporting inadequacies, were a common feature of the PERs. This problem hinders the comprehensiveness of the analysis carried out by the PERs. For this reason, the findings and conclusions of many of the PERs need to be treated with caution (Mogues et al. 2008).

In some countries, such as Vietnam and Lao PDR, expenditure reporting is fragmented: Capital and recurrent spending follow different reporting channels, whereas DP funds are separately reported and accounted. Owing to limited reporting by local governments (where service delivery takes place), central authorities have little information on actual expenditure levels and the composition of activities financed. Consequently, it is impossible to assess the effectiveness of expenditure at the program level (Cammack et al. 2008).

BOX 2.1. DATA PROBLEMS: AN EXAMPLE FROM VIETNAM

The inadequate flow of data on forest sector budgets and expenditures proved a significant constraint to undertaking a forest sector PER in Vietnam. This is because “no consolidated and comprehensive overview of public and other sector expenditure is available that provides a satisfactory picture of the status of sector financing and flow of resources into the sector. Expenditure planning and reporting responsibilities are spread between different ministries as well as different administrative levels. Specifically, planning of recurrent and capital budgets is separated between two ministries, and recurrent and capital budgets are only weakly linked and coordinated. This is compounded by different expenditure reporting and classification systems that do not allow the monitoring of spending along programs or sector objectives. In addition, expenditure analysis is further complicated by the fact that sub-national expenditures may not be fully captured in the spending data that is held at the central level. There are significant inconsistencies and gaps in the overall expenditure picture, which may also include over- and under-estimations of different expenditure.”

Source: World Bank 2010a.

DPs are substantial contributors to forestry budgets,¹⁴ particularly to forest development budgets. However, expenditure reporting by DPs has been poor. For example, in Zambia, “spending by donors in the project modality” is “touched upon occasionally” (Orlowski et al. 2010). In many instances, however, the DP funds are off-budget. These two factors combined mean that total forestry expenditure levels in many countries are largely unknown.

Proportion of the National Budget Allocated to Forests

In almost all of the cases reviewed, only a small proportion of the national budget is allocated to the forest sector, despite the sector’s importance to local and national economies. The result is that forest departments have been under-resourced relative to their mandates. Typically, they face shortages of qualified staff and insufficient resources to undertake the supervisory and regulatory functions required of them. As a result, the sector has been unable to contribute, at full potential, to livelihoods and the growth of the national economy.

In the Democratic Republic of Congo, only 0.4 percent of the 2000 national recurrent budget was allocated to the Ministry of Land Affairs, Environment, Nature Conservation, Fishing and Forestry, with forestry being only one of that institution’s numerous portfolios. Only 5 percent of the total investment budget was earmarked for expenditure by this ministry (Tshikala 2004). In Niger, less than 1 percent of the national recurrent budget is allocated to the Ministry of Water and Environment, with forestry only one of the spending areas controlled by this ministry (Hamissou 2001).

In Ethiopia, less than 1 percent of total federal government spending is allocated to forestry’s parent ministry, with only 2 to 3 percent of this total being allocated to the sector. To this amount, however, must be added the larger sums of money made available to state administrations for forestry (and wildlife) to cover their recurrent and capital expenditures. In recent years, these grants have been about 30 times the amount allocated centrally. In addition, regional state administrations are able to raise revenue and spend it locally, although no information is available on the amounts (Bekele 2001). Public funding of forestry projects and programs in Nigeria has historically been inadequate, with untimely disbursements at both federal and state government levels (Federal Department of Forestry 2001).

In spite of the lack of accurate information, the evidence suggests not only that forestry budgets are low, but also that there has been a systematic reduction in the funds budgeted and disbursed to forestry. This may partly be due to the prioritization of funds toward noneconomic sectors and the protection of social spending, as well as to ad hoc shortfalls in the funds budgeted (Akroyd and Smith 2006, 2007). For example, in Indonesia, not only is the proportion of the budget earmarked for forestry and other environmental expenditures low, but it also fell in real terms during the 1990s while simultaneously making up for a decline in GDP (Vincent et al. 2002).

The limited allocation of budget resources to the forest sector can, in many cases, be attributed to the sector’s failure to make a convincing case for an increased share of resources. The review of PERs also points to a general lack of awareness among legislators and policy makers about the role of forests in national development and its environmental importance (as in Uganda; see Arumadri 2001), resulting in a lack of

political will to support the sector. For the determination and allocation of funds to the sector, forestry is usually compared with agriculture on the basis of the sector's contribution to GDP. However, most outputs from forests (nontimber products and environmental services, for example) are excluded from these calculations, suggesting that the forest sector is insignificant in the economy (as in Nigeria; see Federal Department of Forestry 2001).

In at least one case, Vietnam, the proportion of public expenditure allocated to forestry is significantly higher than its contribution to agricultural GDP. Although forestry spending in Vietnam has declined, it still accounts for between 20 and 25 percent of total agricultural expenditure, significantly higher than its contribution to agricultural GDP, which is estimated to be close to 4 percent (World Bank 2010a).

Budget Execution Rate

Many of the PERs revealed low rates of disbursement. Reasons given for this included the following:

- Delays in the disbursement of budgeted funds by the Ministry of Finance
- Difficulties in complying with the different requirements of the numerous DPs concerning procurement and administrative procedures
- Internal institutional weaknesses involving the various executing agencies (including weak implementation plans), compounded by a weak monitoring system for tracking the delayed disbursements of approved funds.

In Kenya, "Releases to the [Forest Department] have not been timely, especially given the seasonality of forestry operations. These releases are also erratic and lower than the actual annual provision in the printed budget" (Mbugua 2003).

In most of the studies reviewed, DP disbursement levels tend to be lower than those associated with funds provided by the recipient governments. The reasons include the difficulties associated with DP procurement procedures and shortages of counterpart contributions from the recipient governments (Govereh et al. 2009). In Kenya, for example, delays in the disbursement of DP funds are attributed to the fact that the Forest Department must spend its funds first and then seek reimbursement through the Treasury. However, the Treasury does not always have sufficient liquidity to meet these requirements (Mbugua 2003).

Definition of the Sector

The definition of the forest sector differs considerably between PER studies. Some classification systems do not include certain forest expenditures. For example, the commonly accepted Classification of the Functions of Government (COFOG; see section 3) includes expenditure on neither forestry training nor state forestry companies in its definition of "forestry." Table 2.2 shows the range of institutional homes for forestry management among the governments of a sample of countries.

BOX 2.2. AN EXAMPLE OF LOW DISBURSEMENT: THE CASE OF UGANDA

The amount of money disbursed to the Uganda Forestry Department always falls short of the approved budget. This can be attributed to a variety of factors, including the following:

- Delays of a year or more in project implementation, while preconditions such as parliamentary approval in the case of loans are fulfilled. (Selection of an overambitious start date inevitably leads to increased commitment charges on the undisbursed loans.)
- Poor design. For example, neglecting to include design costs for infrastructure and insufficient flexibility in project implementation to overcome such problems.
- Inclusion of credit components that are difficult to implement.
- Unrealistic cost estimates in the original design.
- Shortages or nonrelease of counterpart funds to procure items such as fuel, vehicles, stationery, and advertising.
- Difficulties associated with understanding DP procurement procedures and/or problems experienced in following them correctly

Source: Arumadri 2001.

In Vietnam, while the Ministry of Agriculture and Rural Development (MARD) is responsible for most forest expenditure, other bodies such as the Ministry of Defence also are responsible for forest management. Data on the annual spending of this and other agencies need to be included with those of MARD if a complete picture of forest expenditure is to be obtained (OPM 2008). In some countries, much forest-related environmental spending is not recorded as part of the total expenditure of the forest sector.

NGO Involvement in the Sector

The importance of NGO expenditure in the forest sector is often understated. For example, in Mali, “many NGOs intervene in the forest sector, but information about these activities is not relayed back to public forestry institutions. Thus, the amount of foreign aid to public forestry institutions is probably higher than the figures reported” (Maiga 2001). In Uganda, “the active involvement of NGOs in service provision is often overlooked in planning public expenditures in the sector” (Hoole and Duncan, 1998). In documents detailing forestry expenditure in Uganda, there is no record of any NGO spending, yet we are aware that it is significant and may well be offsetting, in part at least, the low levels of government funding in the sector. Similarly, in Niger, it was estimated that some 70 local and international NGOs were involved with forest interventions at the start of the decade (Hamissou 2001).

TABLE 2.2 INSTITUTIONAL HOME OF FORESTRY IN A SAMPLE OF COUNTRIES

Country / institution	Forestry ²	Agriculture / Food/ Rural Dev't	Environment / Nat. Resrc. ¹	Authority / Commission	Lands / Mines
Bhutan		X			
CAR			X		
DRC			X (incl. land)		
Ethiopia		X			
Ghana					X
Guyana				X	
Honduras ³		X			
Kenya	X since 2008		X		
Lao PDR		X			
Lesotho		X			
Mali			X		
Namibia		X (since 2005/6)	X (pre-2005/6)		
Niger			X		
Nigeria		X			
Rwanda	X				
Tanzania			X		
Uganda			X (to 2001)	X	
Vietnam		X			

¹ In addition to forestry, the portfolios of the different ministries responsible for the environment include wildlife, natural resources, water, fisheries, tourism, and hunting.

² May include other portfolios, such as wildlife in the case of Kenya.

³ Also significant expenditure in the Ministry of Environment and Natural Resources. A Ministry of State Forestry was legally created in 2007, but was not operational by 2008 (Anson and Zegarra 2008).

Recurrent vs. Development Expenditure

A common feature in many developing countries is the failure to provide sufficient recurrent funds to service the demands of capital spending (for example, to meet the requirements for operations and maintenance), thus undermining the overall quality of investment in the sector. This is particularly the case in the forest sector, where DPs provide much of the budget. There is widespread evidence of investments being undertaken with the support of DPs, with insufficient regard for the government's capacity to maintain them.

In Lao PDR, for example, although the Forestry Ministry's recurrent expenditure increased over the analysis period, spending on operations and maintenance accounted for a low proportion of total sector spending—less than 2 percent in each year—and, in real terms, the volume of funding for O&M hardly altered during the period. This was inadequate in view of the heavy investments made over the previous decade in irrigation, which is relatively maintenance-intensive, as well as on other agricultural equipment, machinery, and buildings (Cammack et al. 2008). This resulted in an investment spike occurring in the sector every eight years as capital items were rehabilitated or replaced. Had more O&M funds been made available, the capital items could have been replaced less often (Community and Environmental Services Ltd. 2007, quoted in Cammack et al. 2008, 24).

In Honduras, some 70 percent of expenditure in the Ministry of Agriculture is classified as recurrent, a figure that may be even higher if DP expenditure, which accounts for between 50 and 70 percent of total expenditure in the agriculture and forest sectors, were correctly classified, rather than being labeled solely as development expenditure (Anson and Zegarra 2008).

This review has found that in many countries, much of the expenditure reported as “capital” includes significant amounts of spending of a recurrent nature (referred to as “disguised” recurrent expenditure by Cammack et al. 2008), which is neither separately identified in reporting nor grouped with other recurrent expenditure, further complicating any analysis of spending by economic classification (Vincent et al. 2000). This problem is common to all sectors; not only forests.

Wage vs. Non-Wage Recurrent Expenditure

O&M funding in forestry departments in developing countries is often inadequate (Bekele 2001) for two reasons. First, public employment pressures mean that wages and allowances tend to dominate the recurrent budget. Because wages are fixed in the short to medium term,¹⁵ the effect of any funding shortfall on nonwage recurrent expenditures, including O&M, is amplified. Within nonwage recurrent expenditure, O&M is particularly vulnerable because in any one year it is a discretionary expenditure; except for times of crisis, it can be put off until the following year. Even where O&M expenditures are included in the budget, they are vulnerable to reallocation in emergencies, until O&M itself is in crisis.

For example, in Lao PDR, expenditure data from the Ministry of Agriculture and Forestry showed not only that salaries represented the largest element of the recurrent expenditure each year, but also that they grew steadily between 2000–01 and 2004–05, from approximately Kip 10 billion to Kip 28 billion. As a proportion of total recurrent expenditure, salaries rose from less than two-thirds of the total to 80 percent (Cammack et al. 2008). Similarly, in Ethiopia, the shortage of nonwage recurrent funds resulted in a backlog of work required to implement essential silvicultural and other management operations (Bekele 2001), while in Kenya it led to employees in the forest service having insufficient tools and equipment to use for the forest management work they were required to carry out (Mbugua 2003). In response to the decline in both nominal and real terms, of the recurrent budget of Indonesia’s forest sector during the 1990s, pressure grew on the nonwage recurrent budget in particular. Interestingly, this led to the growing importance of DPs in funding the sector, as a significant proportion of these funds could be used to cover recurrent expenditure: “Hence, putative development expenditures actually include a significant portion of expenditures on routine activities” (Vincent et al. 2000).

This imbalance is dangerous, because the absence of sufficient recurrent funds to service the needs of past investments made in the sector risks much higher rehabilitation costs being incurred in the future. In forestry, the situation can be especially acute. If plantations are neglected during critical periods in their life cycle, the sustainability of the investments may be irreversibly jeopardized (World Bank 1999). For this reason, in several countries a significant proportion of the capital budget in any one year involves the rehabilitation of past investments, with funds in the development budget being earmarked for expenditure on “rehabilitation” or “maintenance” interventions, which in effect represent deferred recurrent expenditure.

The appropriate balance of salaries in recurrent expenditure varies by sector and country. However, some analysts consider that as a rule of thumb, wage costs exceeding 60 percent of the total recurrent budget for agricultural research and extension services are likely to compromise the effectiveness of service delivery (Govere et al. 2008;¹⁶ Hoole and Duncan 1998). Though no source is given for this figure, it does provide a useful benchmark against which forestry budgets and spending can be assessed. (To enhance the usefulness of future PERs, it is important that such a benchmark for the sector be established.) Spending such a high proportion of the recurrent budget on staff salaries provides an indication that unless operational resources are made available, a large number of forestry staff are unproductively employed and will remain so for the foreseeable future.

Public Expenditure Outcomes

Few attempts have been made in the PERs reviewed to link public sector expenditure with forest outcomes. This is due to lack of data, complexity of analysis, and attribution problems. The data required to estimate the marginal returns from different types of expenditure under specific programs are simply not available. In Vietnam, an attempt was made to do this by linking spending to area of forest planted. The review found little, if any, relationship between the funds spent on forests and the area planted. In 2001, total expenditure on the planting program was VND 148 billion, and approximately 105,000 hectares (ha) of trees were planted. Three years later almost the same volume of funds, in real terms, was spent, and yet more than 120,000 ha were planted, some 15 percent more. In fact, the expenditure per hectare on tree planting has shown significant fluctuations from one year to the next: In 2003, it was US\$48 per hectare, compared to US\$93 two years later. A number of explanations can be put forward to explain this discrepancy. The data themselves may not be accurate, rendering the differences spurious, or it could reflect a more efficient program of forest establishment. However, the latter hypothesis is not borne out by the trend in unit cost figures during the last three years of the analysis, which were significantly higher. This higher unit cost could, however, reflect the fact that tree planting took place in increasingly remote areas with restricted access and difficult terrain, consequently making it harder and more expensive to plant (OPM 2008).¹⁷

Alignment of Expenditure

Some PER studies investigated the link between national forest policy and resources allocated to forests. In the case of Lao PDR, this exercise was hampered by data limitations (Cammack et al. 2008). Nonetheless, in most of the countries for which data were available, the general pattern is that projects with high returns to growth were given lower priority than politically expedient programs, demonstrating considerable disconnect between planned annual budget allocations and the policy and strategy priorities outlined in national documents. In Honduras, for example, public expenditure within the forest sector on public goods such as implementing forestry regulations and managing protected areas was relatively low, with a higher proportion of funds being spent on private goods such as input subsidies (Anson and Zegarra 2008).¹⁸

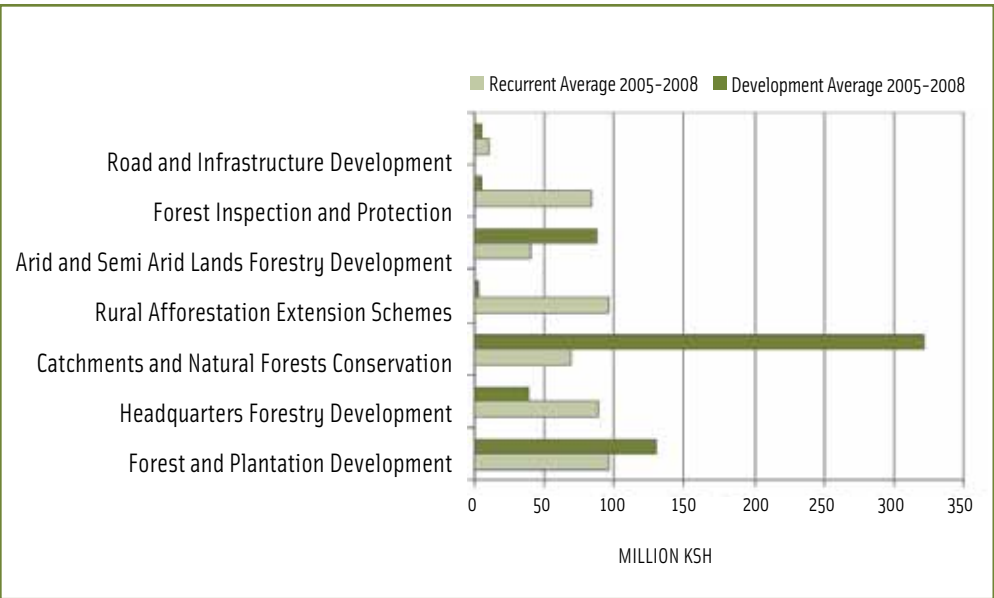
This finding shows that budget allocation decisions are often made in a nontransparent manner, influenced by political pressures and bargaining. In this setting, there are few short-term incentives for agencies in the forest or other sectors to develop evidence-based budget applications established on coherent,

well-constructed strategies, policies, and investment plans designed to meet the government's objectives (Brzeska and Fan 2009). The misalignment of expenditure can also partly be explained by limited administrative capacity in many forestry ministries to manage public expenditures in the sector effectively (Cammack et al. 2008).

As far as spending by the DPs is concerned, it is almost impossible to test the consistency between their pattern of expenditure and government-led sectoral development strategies, as much of their support is off-budget and local recording systems are so inadequate that they do not allow such assessments to be made.

Figure 2.1 shows the relative allocation of development and recurrent (nonwage) expenditures across different forest activities in Kenya (2008). It shows that DP "priorities" (development spending) were aspects of conservation, whereas government "priorities" focused on afforestation and regulation/inspection.

FIGURE 2.1 COMPARING RECURRENT AND DEVELOPMENT EXPENDITURE IN KENYA



Source: Kenya Forest Service, 2008. *Public expenditure review (PER) 2009 report*.

Decentralization

The review of PERs has shown that although the operations of many forest departments are theoretically decentralized, in reality many of the regional offices are starved of funds, and in some instances, there is a duplication of the functions performed at the two levels of government. Decentralized governments may sometimes retain a proportion of revenues or internally generated funds (see table 2.3).

TABLE 2.3. PROPORTION OF REVENUE RETAINED (FROM SELECTED PERs)

	CAR (2001)	Tanzania (2009)	Liberia (2004) ¹	Namibia (2001)	Guyana (2001)
Treasury	23%	32%	98% / 50%	100%	
Forest Agency	53%	63%	02% / 50%		100%
Local Councils	24%	5%			

¹ First figure is for stumpage charges, second figure for lease fees.

Revenues

In many cases, comprehensive data on actual revenues received at the central and local level for public services provided by the forest sector and from taxes levied on forest processing operations are not systematically available for analysis in PERs. The few forest sector PERs that cover revenues almost all draw attention to problems associated with (1) the poor monitoring and audit of collections, (2) revenue arrears, (3) the lack of methodology for the tax rates applied, and (4) shortage of comprehensive information on revenues (Chakanga and Kojwang 2001).¹⁹ Others refer to the lack of transparency in the use of these revenues, which frustrates any attempts at meaningful analysis.

SUMMARY OF MAIN SHORTCOMINGS

This section focuses on shortcomings in how forest sector PERs have been undertaken. Many of these shortcomings are fundamental and will take time to resolve, requiring support at both the sectoral and national levels (Cammack et al. 2008). Many of the problems discussed below are found in other sectors as well as forestry.

Definition of the Sector

The review found that the actual definition of “the forest sector” differs considerably between studies. Although the sector could be said to encompass productive forestry, forest conservation and spending on trees, through core sector institutions (i.e., the forest department and other environmental and natural resources agencies that manage forests), studies look at differing, inconsistent slices of total forest-related spending.

In a series of studies focused entirely on the same subject (the European Commission–FAO partnership program on sustainable forest management in African members of the African, Caribbean and Pacific Group of States; see note 2 in the bibliography), the definition of the sector used in the individual country papers varies significantly. For example, the review of expenditure in Nigeria did not include any spending incurred by the forestry research and training institutions (Federal Department of Forestry 2001), whereas the Ethiopian study in the same series did not include the significant sums of money spent on forestry by the Ministry of Education and the Institute of Biodiversity, Conservation and Research.²⁰ In Ethiopia, the Munessa Shashemene Forest Development Enterprise, a state enterprise established to ensure sustainable development of forest resources through the generation of forest revenues, uses all of the revenue that it generates for forest development. In 1999, its expenditure was almost 15 times higher than the Ethiopia

BOX 2.3. UNDERSTANDING FOREST REVENUE IN THE CONTEXT OF PUBLIC EXPENDITURE ANALYSIS

Understanding forest revenue in the context of public expenditure is important as it reflects how the sector is governed. There are generally three sources of forest sector revenues:

- Commercial (profit) from forest operations
- Cost recovery
- Regulation designed to limit particular activities or incentivize others

However, revenue generation activities are not always aligned to purpose. In Mali (Maiga 2001), for example, forest revenues were being used for cost recovery purposes, despite being designed for a regulatory purpose. In Nigeria (Federal Department of Forestry 2001), it was reported that pressure from central government to collect high levels of forest revenue undermined the use of forest charges designed to limit forest use. The Namibia review (Chakanga and Kojwang 2001), by contrast, stated that the government recognized that revenue generation was not for cost recovery (it represented only 3 percent of expenditure) but for regulating sustainable forest management, with all funds being retained by the Treasury.

Source: Authors.

BOX 2.4. FORESTRY EXPENDITURE AND REVENUES IN CENTRAL AND EASTERN EUROPE

With the exception of Estonia, for all East European countries government funding for the forest sector exceeds revenues derived from the sector in taxes or other payments. In some countries, subsidies are given to state forest enterprises, while in others such enterprises provide net revenues to the Treasury. State forest enterprises also contribute to local government budgets through taxes or other statutory payments.

Revenues generated from forests provide an important source of income for most Central and Eastern European countries. During the early period of post-Soviet transition, “forest funds” were created from the revenues of timber sales and were fiscally separate from the state budget. However, for most countries this no longer applies, and state funding and forest revenues are considered fungible and interdependent sources of financing.

Throughout the region, state forest institutions are poorly regulated and are able to utilize revenues generated. This creates a potential conflict between national forest policy (if it exists) and activities financed and undertaken by state forest institutions. In Bosnia, for example, the majority of public forest expenditure is channeled through the public forestry enterprises in each canton. These entities undertake public goods functions and generate revenues, which are retained. The enterprises also fund the regulating agencies, a further potential conflict of interest. The details of expenditure are not made public and their alignment to national policy priorities is not reviewed.

Source: Authors.

federal government's budget allocation to its forestry administration (Bekele 2001). Nonetheless, forest expenditure by this agency was not included in the sector total.

To compare the principal features and patterns of public expenditure on forests between countries, the forest sector needs to be clearly defined. The fact that no international comparisons are made in any of the forest sector PERs reviewed may be due in part to these inconsistencies.²¹ Data problems are also likely to have hindered such an exercise (see below).

Data Problems

The quality of most, if not all, PERs reviewed suffered because they were unable to collate a complete and detailed breakdown of recent expenditure. Both the poor quality of the data and their limited availability and access were raised as problems in all of the PERs reviewed, resulting in shallow analyses of expenditure being the norm. For example, "The major limitation to this study has mainly been data accessibility. In particular, data on revenue and expenditure were either not available or aggregated in other categories of expenditure in the sector ministries" (Amani et al. 2004). Similarly, in Lao PDR, the agricultural background paper (World Bank 2006) for the 2007 PER (World Bank 2007) noted that the Ministry of Agriculture and Forestry estimate of agricultural expenditure from 2002 to 2004 was dramatically less than the amounts reported in the government's Official Gazette, and that these differences could not satisfactorily be reconciled.

Other common data issues included the following:

- **Not all DP expenditures are recorded or captured.**²² In Ghana, DP funding accounts for 35 percent of forestry expenditure by the parent ministry, but it is usually under-reported or not accounted for in calculating total spending in the sector (Fan et al. 2009). In Mali, DP spending accounts for up to two-thirds of the total forestry budget (Maiga 2001).
- A significant proportion of DP expenditure is off-budget in special accounts with their own disbursement, accounting, and reporting procedures. The data are therefore more difficult to capture. In Rwanda, for example, only 67 percent of DP expenditure is recorded in the national budget, less than 45 percent is disbursed using the government's budget procedures, and only half follows the government's financial reporting systems (Kazoora and Ogwang 2010). In Kenya, the funding recorded from DPs is significantly higher than that recorded as going through the Treasury, indicating that large sums are "off-budget" (Bird and Kirira 2009).
- The DPs also provide notoriously poor expenditure forecasts; releases of funds are for the most part erratic (Akroyd and Smith 2006), and reporting is often poor. Overall, DP releases and expenditure data series are often incomplete or out-of-date, and governments are consequently unable to obtain a comprehensive picture of expenditure and its impact on the sector. Such poor reporting practices have resulted in uncertainty over the full magnitude of spending in the sector and whether overall spending reflects the forest sector's national priorities. Overall sector expenditure tends to be underestimated by as much as 30 percent, according to researchers in Indonesia²³ (Vincent et al. 2002).

- **Out-of-date records of expenditure and budget data.** In a PER carried out in Lao PDR, data on agriculture/forest sector spending were some three years out of date. This is a major handicap in a fast-changing budget environment (Cammack et al. 2008).
- **Inconsistencies in expenditure data obtained from different national sources.** In Vietnam, for example, MARD data portray a significantly higher expenditure pattern than the data assembled by the Ministry of Finance, and the National Assembly also produces a third series of budget data which are, again, different. In Nigeria, major differences were found in the budget and the aggregated expenditure data available from the Office of the Accountant General of the Federation and from the Federal Ministry of Agriculture, amounting to more than 54 percent of the total spent on the sector (Mogues et al. 2008). Expenditure data are also often fragmented, inconsistent, and poorly organized. Frequent revisions made to budgets and allocations during the course of budget implementation further complicate data collection and analysis. The involvement of multiple uncoordinated institutions in data collection compounds the problem of data inconsistencies (Amani et al. 2004).
- **Problems of dual budgeting.** It is difficult to collect expenditure data when different ministries are responsible for the recurrent (Ministry of Finance) and development (Ministry of Planning and Investment) budgets, as is the case in Vietnam. As a consequence, neither the Ministry of Agriculture nor the Ministry of Finance has the full picture, so neither is able to monitor expenditure adequately (World Bank 2010a).
- **Inaccurate economic classification of data.** As earlier noted, recurrent costs may be misclassified as capital expenditure, which complicates analysis of the economic classification of expenditure. When the capital budget hides a significant level of recurrent expenditure, the split between the two serves little analytical purpose. For example, a recent analysis of agricultural public expenditure in Tanzania shows that 74 percent of development expenditure could actually be classified as recurrent expenditure, mostly spent on providing goods and services (Zorya 2009). In Nigeria, the deliberate misclassification of recurrent expenditure (mainly operating costs) as capital spending is widespread throughout the government, as it allows spending departments to exert greater control over funds (Mogues et al. 2008). This misclassification, together with limited data on expenditure by function, complicates analysis of expenditure amounts and patterns.
- **Decentralization of the budget.** Decentralization, by as much as 80 percent of the sector's expenditure (in the case of Vietnam) also aggravates the collection of data on expenditure.²⁴ Cammack et al. (2008) found that in Lao PDR, inadequate and delayed local government reporting to the parent ministry on expenditure and releases resulted in incomplete, poor-quality data.
- **Fragmented reporting of information.** Problems arise where capital and recurrent expenditure follow different reporting channels and may be unsynchronized, which makes it difficult to report progress against program implementation. As a result, many of the PER data on the amount and composition of the expenditure and on the activities financed are simply not available.²⁵ The limited reporting of capital expenditure, together with the absence of records on DP contributions to the sector, led the 2001 Public Expenditure Review in Zambia (World Bank 2001) to conclude that there were no complete and consolidated data on agricultural expenditure for the country. Despite subsequent improvements in

government financial reporting, the presence of incomplete government and DP expenditure data and the lack of readily available expenditure data persisted (Akroyd and Smith 2007). Moreover, actual spending figures become available only after a two-year delay, which makes it extremely difficult to track and analyze actual expenditure in the forest sector (Govereh et al. 2009).

- **Failure to disclose data.** In a limited number of cases, reporting agencies have been unwilling to disclose budget and expenditure information to those involved in PER exercises.

Lack of Analysis of the Efficiency and Effectiveness of Expenditure

Given the current situation of limited (and, in some cases, declining) resources for the sector, a central challenge is to raise the efficiency of service delivery. The performance (outcomes and impact) of forestry services, such as extension, research, and forest management, is affected by the level and the effectiveness of public expenditure. A major obstacle to improving efficiency is the fact that data and information on the costs and quality of providing these services, which could be used as a basis for measuring efficiency and effectiveness, are both incomplete and inconsistent within government. This situation led the authors of one study to note that “NGOs have better cost information on services than does government” (Hoole and Duncan 1998). Furthermore, capacity to undertake the quantitative analysis required to assess efficiency is often not available, and the analysis itself is time intensive and therefore costly.

For these reasons, most governments do not undertake value-for-money audits, and the concept of using “unit costs” to assess and compare expenditure across similar activities has been adopted in only a limited number of places (Kazoora and Ogwang 2010). Consequently, little effort has been made to monitor the effectiveness and efficiency of public expenditure programs in the forest sector, except for informal studies.²⁶

For informed decisions to be made on levels of public funding to forestry, systematic measurement of the efficiency of service provision is required. Unit costs incurred in providing the standard levels of service by the public sector could be derived and decisions made on continued provision, and a convincing claim could be made for increased public funding of the sector in a situation of constrained resource availability.

At the same time, effectiveness and performance assessments require forestry budgets to be program- or activity-based, so that expenditures can be linked to activities. Performance budgeting also requires that activities be linked to outputs and outcomes. However, budgets in many countries do not include any indicators to monitor outputs and outcomes. For example, Lao PDR and Nigeria do not have program-based budget reporting; the yearly expenditure data are broken down according to economic classification, such as salaries, office rental, telephone, and stationery (Cammack et al. 2008; Moguees et al. 2008). It is therefore impossible to know with any accuracy either the capital or the recurrent funds spent on each of the individual programs or functions of the Ministry of Agriculture and Forestry—information that would be useful for policy planning and for monitoring the progress and evaluating the performance of existing programs. For example, although extension is an important activity of many forestry ministries, only in exceptional cases is information available on how much time or money is spent on demand-responsive extension activities compared with that spent on regulatory tasks. For this reason, the effectiveness of expenditure on this core function cannot be estimated.

BOX 2.5. VIETNAM—FOREST SECTOR PER FINDINGS AND RECOMMENDATIONS

In spite of the significant data limitations that affected the scope and depth of analysis, the recent PER of the forest sector in Vietnam came up with a number of useful findings and recommendations that could be of use to sectoral planners, the Ministry of Finance, and DPs, among others. Findings included the following:

- Financial returns in the sector are low.
- Plantation and output targets are not being reached.
- Low-quality forests and forest products are a result of inappropriate cost norms and insufficient levels of investment.
- DPs have misclassified expenditures.
- Public expenditure in the sector is unbalanced, with more funds being spent on protection and special-use forests than on production forests.
- Forestry investments have a limited impact on poverty reduction.

The authors of the review recommended that—

- Future resource flows should be secured through the provision of better incentives for the different actors in the sector,
- The respective roles of the public and private sectors needed to be revised,
- Public sector spending needed improved monitoring and evaluation,
- Improvements in basic management of expenditure were urgently required.

Source: World Bank 2010a.

CONCLUSIONS

In spite of the limited number of forest sector PERs that have been undertaken worldwide, it is possible to identify a number of key features, strengths, and weaknesses of those that have been analyzed as part of this study.

The overriding constraint to the success of the existing reviews has been the poor quality and availability of data on both expenditure and revenues in the sector, as well as a lack of benchmarks against which country performance can be assessed. Forest agencies need to make a greater effort to improve internal systems for tracking, recording, and disseminating comprehensive and up-to-date records of expenditure and revenue. Improved monitoring systems are needed to provide data on the outputs, outcomes, and impact of forest spending.²⁷ There is also a strong case for enhancing analytical capacity in the sector in order to undertake regular spending reviews. Both of these areas represent deep-seated constraints that need to be overcome.

It will take time for the results of any capacity-building intervention to be effective. Forest agencies also need to obtain more systematic and accurate information on the release and expenditure of the DPs in order to have a more comprehensive picture of aggregate spending in the sector.

A major finding of the review is the need to improve forestry ministries' understanding of the outcomes arising from forest expenditures, which will help them demonstrate these results to decision makers in government managing the budget, the private sector, and civil society. It is important that trends in these outcomes are monitored over time to enable forestry ministries to compile a body of evidence on their returns to public spending, which will lead to improved prioritization of resources within the sector and among forests and other competing needs.

INTRODUCTION

This guidance note provides an annotated checklist of items to be considered for inclusion in a forest sector PER. These guidelines detail the key elements of good practice based on an investigation of public expenditure reviews undertaken in recent years in the forest sector, as well as other forestry case studies. The purpose of the guidance note is to provide practical support and guidance in the form of a common framework to those tasked with carrying out public expenditure analysis. The guidelines propose a standard format to ensure that forest sector PERs follow best practices and are standardized.²⁸

Although the broad principles of a forest sector PER are presented below, there is no unique blueprint. The specific scope and approach of a PER have to be tailored to address the specific characteristics of the sector in a particular country.

Given the limited number of forest-sector PERs undertaken to date, this guidance note also draws upon experience from a range of other PERs that have been carried out in agriculture, natural resources, and related sectors in recent years. (Annex 3 lists the PERs reviewed during this study, and the bibliography lists other documents consulted during the study.)

BOX 3.1. EXAMPLES OF OBJECTIVES FOR FORESTRY AND RELATED PERS

(From studies where objectives were clearly stated)

- To form an input into the preparation of MTEF and sector budgets (Honduras, Kenya, Nigeria, Uganda)
- To assess whether reforms have improved sector budget allocation and appropriate public roles in forestry (Lesotho, Vietnam, Zambia)
- To provide information to improve sector budget allocation and management and delivery of priority outcomes (Honduras, Uganda, Namibia, Ethiopia, Ghana, Lao PDR, Rwanda)

Source: Authors.

PREPARATION

This section summarizes issues to be considered during the preparation phase of a forest sector PER, and in the preparation of the terms of reference (ToRs). Annex 1 provides an example of a generic ToRs for a PER.

Agency Commissioning the PER

The PER team must be fully aware of the identity of the institution commissioning the review. It will normally be one of the following:

- Development partners: For example, the Lao PDR public expenditure review was commissioned by the joint DFID/World Bank partnership program Public Expenditures for Pro-Poor Agricultural Growth, under which a number of country case studies on agricultural public expenditure were commissioned in order to collect, analyze, and disseminate evidence on those public expenditure policies that stimulate pro-poor, market-driven agricultural growth (Cammack et al. 2008).
- National governments: For example, the government of Tanzania commissioned consultants to undertake a PER of the environment sector, together with counterpart government officials (to ensure a degree of local ownership of the process and the product (Amani et al. 2004), and the Kenya Forest Service carries out a rapid but limited PER each year as part of its budget formulation process (Kenya Forest Service 2008).

The client will draw up detailed ToRs to guide the work of the study team, which are likely to follow closely the generic ToRs in annex 1.

Define the Objectives and Scope of the PER

PERs are costly exercises. For this reason, the objectives of the work need to be clearly specified. It will also be important at the outset to define those areas of forest expenditure that need to be included in the analysis. If several national (provincial) forest sector PERs are being commissioned, a common definition should be used to enable cross-country (province) comparisons to be made.

It is recommended that the sector be defined according to internationally accepted standards for the categorization of government functions. The most widely recognized system is the Classification of Functions of Government (COFOG). COFOG was developed by the United Nations and is incorporated into the International Monetary Fund's 2001 *Government Finance Statistics Manual*. It provides guidelines for the economic and functional categories of public expenditures. This classification system is consistent with the guidelines developed by the African Union/New Partnership for Africa's Development for the CAADP initiative (African Union 2005a).

Within COFOG, the definition of forestry is provided in Class 04.2.2 (Forestry) and Class 04.8.2 (R&D agriculture, forestry, fishing and hunting), within the Group 04.2 (agriculture, forestry, fishing and hunting).²⁹ Based on this definition, the COFOG definition for forestry includes the following:

- Administration of forestry affairs and services; conservation, extension, and rationalized exploitation of forest reserves; supervision and regulation of forest operations and the issuance of tree-felling licenses

- Operation or support of reforestation work, pest and disease control, forest fire-fighting and fire prevention services, and extension services to forest operators
- Production and dissemination of general information, technical documentation, and statistics on forestry affairs and services
- Grants, loans, or subsidies to support commercial forest activities
- Administration and operation of government agencies engaged in applied research and experimental development related to forestry
- Grants, loans, or subsidies to support applied research and experimental development related to forestry and undertaken by research institutes and universities

Forestry training at the university level, as well as at the formal secondary education level under the COFOG system, is classified as “education.” However, if significant, the PER team may wish to include such expenditure data within its analysis.

Under the COFOG classification, rural development is not an independent sector, but its operations are split among other sectors including health, education, and transportation. Forest-related spending by a rural development ministry will also need to be identified and included in the forest sector PER. This also applies to forest-related construction projects,³⁰ which in some instances are implemented by a Ministry of Works or equivalent.

COFOG Class 05 deals with expenditures relating to environmental protection, covering such areas as national parks and forest protection and integrated conservation (development projects and social forestry). In each case, only forest-related spending, which may in practice be difficult to identify, should be extracted.

Public enterprises, state-owned enterprises, and public corporations operating in the forest sector are usually recorded under general government and should be added to total public expenditures.³¹ Extra-budgetary institutions (such as a forestry fund) finance their operations through revenues self-generated by an act of law or an executive branch decision. Similar to public corporations, these extra-budgetary agencies are also government institutions and constitute part of the general public expenditure. For this reason, they should be included in recording government expenditure in the sector. In Francophone countries, the transactions of these extra-budgetary funds usually pass through the Treasury, so there should be no problem in identifying them. However, in countries where such funds have their own accounting and banking functions, reporting to finance ministries is weak or nonexistent, so problems may be encountered in estimating such expenditure. If such transactions are excluded from the scope of total public forest expenditure, the fact should be explained in a footnote to the review report.

It is possible that the adoption of a definition for the sector in terms of spending by the core institutions (i.e., the ministry responsible for forestry, other ministries or departments that spend money on the sector and sectoral agencies) may be preferred for classifying forest expenditure. However, this risks excluding significant amounts of expenditure in the sector.

In some instances, only a part of the forest sector is to be subject to a PER. This will require a different approach, as will the case when forest spending is to be analyzed as part of a larger cross-sectoral (environment, for example), ministerial (when forestry forms just one of the portfolios of a larger ministry), or national public expenditure review.

With few exceptions, the charts of accounts and budget classification systems used by most governments for public expenditure management do not follow the COFOG functional classification. Instead, they mostly follow sectoral lines (forestry, crops, or livestock) rather than functions (research or extension). Trying to convert expenditure classified according to sectors to expenditure classified according to function can be both difficult and time-consuming, the more so because data on the COFOG-defined forest sector in many countries are budgeted and accounted for under more than one ministry or organization. In most cases, changing existing budget classifications to the COFOG system would require substantial resources.

Collecting expenditure data is not as straightforward as it seems. The data are likely to be subject to “changes, shifts and transfers of budget codes, programmes and sub-programmes” (Kazoora and Ogwang, 2010). The data required for the analysis will need to be identified at the outset of the fieldwork, particularly when carrying out a repeat forest sector PER, as the budget codes used during the previous review may have changed. Whatever approach is taken to classify spending in the sector, a decision will also be needed on whether to include expenditure by DPs. In most countries, not all DP expenditure is channeled through the budget, and records of such spending are patchy, at best.

In practice, the scope of the data collection and analysis exercise is usually determined by the budget allocated to the task, as well as by the availability of the data. Inevitably, there will be a trade-off between the comprehensiveness of the investigation and the funds available. Simultaneously, the scope of the analysis is likely to differ depending on whether the PER is to be undertaken first or as a follow-up exercise; the former may be a comprehensive exercise that creates the momentum for subsequent regular but less ambitious reviews.

The period covered by the analysis will need to be clearly specified. Use of expenditure data over a period of three to five years is recommended as a minimum if trends are to be analyzed.

Expertise Required to Undertake the Review

The skill set of the review team will depend on the specific focus of the enquiry and the availability of human and financial resources. Ideally, the work should be carried out by a team of public expenditure analysts, financial management specialists (with experience in PERs), and forest sector experts, comprising both national and international expertise. A typical exercise might involve a two- to four-member team working for four to six weeks to draft the PER report.

An important element for meeting the objectives of the PER, and ensuring the sustainability of the exercise, will be the PER process itself. The process is in many ways as important as the report, particularly if it is the first review of expenditure in the sector. It is recommended that the work be done in as consultative and participatory a manner as possible. This would involve, for example, organizing at the outset a

preliminary PER workshop for senior government and DP officials to present the objectives of the study and the consultations it will involve, as well as making sure that the team comprises both external consultants and government specialists. A workshop might also be held at the end of the study to discuss and obtain feedback on the overall findings and conclusions. These arrangements will need to be carefully elaborated in the terms of reference.

Budget and Timeframe

To a large extent, the budget allocated for the work will determine the scope of the review in terms of the data that can be collected, the depth of the analyses that can be undertaken, the extent of a program of visits both at the center and to the field, and the range of expertise that can be contracted to join the PER team.

Any phasing of the study will need to be made clear from the outset and taken into account in the work plans of the study team and in the expectations of the client concerning the date by which the results will be made available. In the case of the Uganda agricultural sector PER, for example, the work was carried out in three phases, extending over a period of almost three years (Oxford Policy Management 2007; World Bank 2010b).

Principal Sources of Data and Documentation to Be Consulted

PERs are not audits seeking to independently verify the accuracy and propriety of financial reporting and management, nor will they normally involve primary data collection. For reasons already discussed, PERs rely on existing reporting and sector monitoring systems for the expenditure data they collect. These systems tend to have poor quality, quantity, and consistency of information, which means that the seemingly simple task of assembling and validating core expenditure data often represents a major challenge (Mogues et al. 2008). It is therefore important that preparation for a PER include a preliminary review of available data and how they are presented, in order to determine the PER's approach, comprehensiveness, and analysis. For example, in Lao PDR, the reporting system is fragmented, with information on capital (project) expenditure passing through the Ministry of Planning and Investment, while reporting on recurrent expenditure passes through Ministry of Finance channels. Furthermore, such reporting is often delayed. The result is that no single ministry has the full picture, nor is any single agency able to monitor sector expenditure adequately at the subnational level. Nevertheless, in spite of such problems, it is critical that analysts ensure that expenditure trends are real and not the result of difficulties associated with recording and analyzing actual expenditure information (Oxford Policy Management 2008).

It may be best for the PER team to assume that comprehensive data and documentation may not be available, and therefore prioritize and make choices about what types of secondary data collection are feasible or necessary. At the same time, the review may recommend additional studies for more detailed analysis.

PERs should compare final approved budget against actual expenditure to assess how much of the final approved budget is actually disbursed, and therefore evaluate the credibility of the overall budgeting system. Where the data permit, this analysis should be disaggregated by major spending areas, by both economic classification (e.g., wages, nonwages) and by major forestry spending program or activity.

Ideally, the review should use final audited accounts as the source for expenditure data. However, audited accounts are typically available only two to three years after expenditure has been incurred. In some instances, budget data may be the only information available and therefore will have to be used. Expenditure data for central and provincial levels are normally obtained from official expenditure reports compiled by the Ministry of Finance and can be supplemented as needed by information provided by the forestry ministry. The team should avoid a situation where there are doubts about the comprehensiveness and consistency of the data received, as was the case for the agricultural expenditure review in Nigeria (Mogues et al. 2008).

To determine spending trends over time, data should be presented in inflation-adjusted terms, thereby bringing all data to base year prices.³² The deflator that is often used for this purpose is the country-specific GDP deflator (which should be referenced). An early decision will be needed concerning the currency to be used throughout the review.

It will be helpful if, in the early stages of its work, the PER team can determine whether any forest sector PER or related study has already been carried out, possibly as part of a larger PER. Forestry could have been included in a ministry of agriculture PER, as in Ghana (Kolavalli et al. 2009). If it has, the documentation is likely to be a useful source of time-series data and other historical information on public spending in the sector. The team also must check the status of the recommendations made in the previous PER.

The PER may also collect and analyze information on the revenue raised by and either spent in or transferred out of the sector. However, this is not usually part of the basic ToRs for a PER.

Key Informants to Be Consulted

The PER team should attempt to consult with a number of other central agencies in order to obtain information and data on budgets, revenue, expenditure, policy, and performance—including budget allocations to lower-level governments and estimates of development assistance to the sector, if they cannot be obtained from the sector ministry—or to check the forestry expenditure data provided by the sector. National members on the team are likely to have the best insight into how the system actually works and where the data can be obtained. The relevant agencies include the following:

- Ministry of Finance (e.g., forest sector desk officer, budget director, officials in charge of aid administration)
- National planning body
- Other ministries involved in the sector
- Principal DPs involved in the sector (not only to obtain their forestry expenditure data, but also to collect any related studies they may have commissioned)
- Accountant General's department
- Office of the Auditor General (although audited accounts for recent years may not be available)
- Local economic and environmental research bodies

- National statistical service, to supplement information and data obtained from the forestry ministry
- Local governments
- NGOs/civil society organizations and other organizations involved with the sector
- Representatives of private sector interest groups

The Ministry of Finance is likely to be the key agency, as it will be the source of the most up-to-date budget and expenditure data. It is also able to advise on the practicalities of undertaking PERs in the country, as it will already have been involved with expenditure reviews in other sectors. The Ministry of Finance is likely to be interested in the results of a forest sector PER, and may wish to provide guidance and some direction to its work.

In the sector ministry³³ headquarters, the team will need to liaise closely with the finance, policy, planning (including monitoring and evaluation), and statistics departments; other agencies, such as forestry research and training centers; and the heads of other main sector departments, such as administration and forest management.

The PER may need to include analysis of expenditure and revenues at lower tiers of government. Because only partial data are likely to be available at the center, it will probably be necessary to visit some local governments in order to gain a more complete picture of subnational expenditures. Such visits will enable the team to meet with forestry staff and review expenditure and revenue information and data, as well as to appraise the budget process at this level. They will also allow the team to gain a more complete picture of the institutional strengths and weaknesses of decentralized forest operations. Because of time and cost constraints, this task is likely to involve only a brief survey of a limited number of such administrations (Oxford Policy Management 2007). The survey could be stratified according to criteria such as (1) agro-ecological zone (Kolavalli et al. 2009); (2) the capacity of the local government to provide data; (3) the relative importance of forests in the area; and (4) the time that has elapsed since the local government was established (Oxford Policy Management 2007). No matter how small the sample or how variable the type and quality of data available at each location, the visits should give the study team a sense of the major issues in the local government context and generate information on local forest policy, programs, budgets, the budget process, and expenditure.

As a general rule, meetings should be loosely structured to elicit information on forest policies and priorities, the whereabouts of revenue, expenditure and budget data (and the data themselves), the budgetary process, and revenue and expenditure reporting.

Identify the Target Audience for the Report

It is important to identify the audience for the PER report from the outset. This will determine the focus of the data collection exercise, the approach to data analysis, and the presentation of the results. The audience may be a separate agency from that which commissioned the PER; many PERs are commissioned by DPs, with limited national ownership.

Identify the Group Managing the Review

It will be important to make a decision early on concerning the individual who will represent the client and be responsible for managing the review. It is recommended that a PER steering committee or working group be established to guide the work of the team and to review its outputs. Such a group may also be useful in facilitating meetings between team members and key informants and stakeholders. It is also recommended that the working group include representation from civil society (the Forest Forums in Ghana, for example) in order to engage communities in work on resource allocation in the sector and to increase accountability. Private sector representatives may also participate in the working group.

PER REPORT STRUCTURE AND ANALYSIS

This section discusses the proposed structure of the forest sector PER report and the analysis that it should contain.

Introduction and Sectoral Context

The introductory section of the PER report should describe the purpose of the review, the methodology used (how information and data were collected and the principal sources of the expenditure data), the composition of the PER team, the time expended, the geographical areas visited, and the institutions and individuals consulted. Any data collection or methodology problems or other problems encountered in any of the other facets of the study should be described.

It is important to indicate whether the analysis includes any off-budget expenditure in the sector (if not, some estimate of its significance should be provided) in order to show how complete a picture of total public expenditure in the sector the review provides. A statement is needed on the team's assessment of the reliability of the expenditure data and on how current the information is.

The time period for which expenditure data has been collected should be discussed. Where possible, the PER should cover between three and five years of data, possibly longer if required by the ToRs, and if the data allow. Whatever period is chosen, it needs to be adequate to establish a sufficiently robust baseline against which future expenditure can be measured. Actual expenditure data should be used, although budget figures can be substituted if this is difficult for some years in the time series. However, budget figures will need to be reviewed to see if they were adjusted through supplementaries during the budget year.

To the extent possible, the analysis should assess the adequacy of forecast expenditures in the sector (for example, over the next three or four years of an MTEF). This will be based on analysis of historic expenditure, performance analysis, and current policy priorities for the sector.

Mention should be made of whether this is the first forest sector PER to be carried out in the country. If not, reference should be made to whether the government has considered and acted upon the principal changes in expenditure priorities (against past patterns) recommended in the previous exercise (Cammack et al. 2008).

The section should also define or clarify any technical words used in the study. These would include such terms as “current” and “constant.” “Capital,” “development,” and “investment” expenditures are used interchangeably for time-limited expenditures, mostly of a capital formation nature.

Sectoral Context

This background section should be relatively short and largely descriptive. It should set the scene by putting the forest sector in the national context:

- A brief description of the state of the national forest resource, both natural forest and plantations, with tables and diagrams showing recent changes in the areas under the different categories of forest and in overall land use.
- Analysis of the forestry contribution to the following areas:
 - GDP (primary production and secondary processing),³⁴ compared with other sectors
 - Exports (and imports, as in the case of Vietnam)
 - Employment
 - Manufacturing (e.g., wood processing)
 - Rural livelihoods
 - Environmental services supplied by the sector (such as the conservation of a variety of public goods generated)

Recent trends in these indicators can be informative; for example, in Vietnam, the value of the export of manufactured wooden products increased tenfold between 1997 and 2007; most of these goods were produced from imported timber (Oxford Policy Management 2008).

- A description of the growth of the sector in recent years compared with other sectors (e.g., agriculture, health, education, industry) and the economy as a whole.
- The contribution of the investors and the private sector, and levels of certification.
- A review of national and rural poverty levels showing recent trends, with an analysis of the role forestry has played and will continue to play in reducing them.
- A description and brief assessment of the current forest sector policy framework and development strategy, including any plans for policy revision. It is important to highlight environmental issues as they relate to the forest sector (such as deforestation, land degradation, and their main drivers), and the principal program areas (including their projected costs and output targets, where available). If policy implementation has fallen short of expectations, reasons for this should be explored (for example, the limited/inadequate provision of nonwage recurrent funds (Cammack et al. 2008)). Some analysis of the political economy of the sector is also useful.
- A review of the implications of decentralization and centrally determined policies on service delivery in the sector, together with commentary on the overall clarity of roles and responsibilities at the different levels.
- The legislative framework within which the sector operates.

This section should also provide a description and analysis of the institutional structure of the sector, in terms of systems and forestry body(ies). The human resources of public sector forestry bodies should also be reviewed and an indication given of the principal changes that would be made if additional (or fewer) funds were made available. The sustainability of the forest institutions is another important issue to be investigated.

If this is not the first forest sector PER, this section should map any fundamental changes that have taken place in institutional structure, systems, and staffing since the last PER, as well as any policy reforms.

Key Features of Expenditure

If the data are available, the PER should contain analyses (text supported by tables, figures,³⁵ or annexes, where the data are voluminous) of as many as possible of the following features:

1. **Annual total forest expenditure** in real (inflation-adjusted) terms over time, and as a proportion of total public expenditure. It may be helpful to show Ministry of Forestry expenditure as a proportion of total public expenditure on the forest sector to provide an indication of the relative importance of the sectoral ministry.
2. Annual forest spending, **relative to total public expenditure and to other sectors** of the economy, such as agriculture, health, education, water, and transport (Cammack et al. 2008). This exercise informs the reader where the money comes from and makes opportunity costs more striking. It also portrays the relative priority attached by the government to the forest sector, which is normally low compared with other sectors.
3. Annual forest spending **relative to the size of the sector** (forestry GDP), known as the “intensity (ratio)” of forest expenditure. This figure is useful as a measure of the amount of public resources a country spends on forests relative to the value added by the sector. It is an alternative measure of the priority given to forests by the government, compared with the share of forest expenditure in total expenditure. It is useful for comparing spending performance across different countries and can be used to track spending performance over time.

For the most part, however, cross-country comparisons are of limited use, and care is needed in making such comparisons because of contextual differences³⁶ and the fact that they say nothing about the effectiveness and efficiency of services being delivered. In most cases, “benchmarks” or “norms” do not exist. Comparisons should be used only to identify major anomalies.

As an increasing number of forest sector PERs are carried out following a more uniform methodology, such benchmarks will be developed and refined so that more international comparisons should become possible.

4. Annual forest expenditure **disaggregated between capital/development and recurrent** spending streams. Such a breakdown can show whether trends in sector spending apply equally to capital and recurrent budgets, known as the “economic classification” of expenditure.
5. Annual forest expenditure by **Ministry of Forestry programs** or main areas of activity. Analysts will be able to assess which programs appear under-resourced.

6. Expenditure disaggregated between the **different functions of the sector** (such as forest management, reforestation, soil and water conservation, and the supply of seedlings), or the “functional classification” of expenditure. It is also important to establish the proportion of expenditure that has been used to meet arrears, as these funds can make a significant demand on the recurrent budget.

7. **Expenditure (or “releases”)³⁷ as a proportion of the amount budgeted** each year (e.g., budget execution, execution rate, burn rate, disbursement rate, out-turn) disaggregated between (1) recurrent and capital spending and (2) central and local government. This figure is an important indicator of the credibility of the budget in allowing forestry ministries and agencies to plan activities and deliver the public services outlined in their policy statements and work plans (Brzeska and Fan 2009). Ministries and agencies can only do this if approved budgets provide a good guide to the resources that actually will be made available. For this indicator, the PEFA framework scores the highest where “In no more than one out of the last three years has the actual expenditure deviated from budgeted expenditure by an amount equivalent to more than 5% of budgeted expenditure” (PEFA Secretariat 2006).

A low disbursement rate could reveal, for example, that funds allocated to staff salaries have been underspent because of a high level of staff vacancies, while underperformance on development expenditure may reflect inadequate procurement capacity, the late release of funds (Mogues et al. 2008), revenue shortfalls, or late reporting (Cammack et al. 2008). The exact cause needs to be identified, as low disbursements jeopardize the credibility of the budgeting process. It is also important to ascertain whether the problem is common to all sectors or only to forestry. In many countries, it is systemic across all sectors and most acutely felt at the local government level, with significant shortfalls in disbursements to the spending agencies compared with the funds budgeted for expenditure.

In a limited number of cases, actual disbursements may exceed budget allocations owing to supplementary funds being made available to the sector during the budget year.³⁸

8. **Forest expenditure at the local government level**, relative to national expenditure. This gives a picture of the degree of decentralization and of the government’s ability to deliver forest services at the local level. It will also provide an indication of the trends in expenditure between central and local levels, which are likely to be different (Cammack et al. 2008). However, local government expenditure data may be unavailable. In Mexico, for example, only aggregated data at the federal level are available and included in the sector PER (World Bank 2009). It is important to account for double-counting of local expenditure at the national level, as is reported to be the case in Vietnam.

9. The **spatial distribution of forest spending** within the country, across regions or provinces. Such analysis provides an indication of any regional disparities in expenditure and whether they are undermining the equity of public spending.³⁹ The results can be compared with indicators of development/poverty by region—the Human Development Index, for example—and appropriate conclusions drawn. In Zambia, the “current regional distribution of government agricultural spending is neither efficient nor equitable” (Govere et al. 2009), whereas the 2007 PER for Lao PDR (World Bank 2007) noted that “poverty headcount and level of per capita agriculture expenditure are negatively correlated.”⁴⁰

10. Annual expenditure on forest sector subsidies.

11. **DP data on expenditure** integrated into each of the above. Then a separate series of analyses should be undertaken, highlighting the DPs' contribution to the sector:

- Annual DP forest expenditure (some DPs—USAID, for example—have a high proportion of off-budget expenditure) compared with the budgeted figures
- Annual DP forest expenditure vs. total forest spending
- Annual DP forest expenditure on-budget vs. off-budget
- Annual DP forest expenditure by government program (with technical assistance shown separately) to indicate the extent to which DPs' spending is aligned with the government's policy priorities
- Annual DP project/program support vs. DP sector support (if any)
- Annual DP forest expenditure by economic classification (though DPs cover a significant proportion of the sector's capital spending, host governments usually manage to meet most of the recurrent budget themselves)
- Annual DP spending at national and local government levels

Data should be presented and analyzed for the period covering the previous three to five years, or longer if possible. This time series of spending data (presented in constant or "real" terms) will reveal such trends as the proportion of sectoral expenditure accounted for by forestry research or the provision of support to the forest sector by the DPs. It will also be possible to assess the consistency of spending by both government and DPs in each of these areas, to highlight areas of inconsistency, and to flag areas where further research should be focused.

It is important for the PER to determine whether the funds spent are received in a predictable manner. Expenditure predictability is particularly important for effective planning and operational efficiency. As with agriculture, allocations to forestry should be aligned with the sector's seasonal requirements. It is not unusual to find annual expenditure figures that look reasonable, accompanied by an intra-year cash flow picture that shows a high level of variability (size) and lack of certainty (timing) of budget allocations to the forest ministry and agencies. In these circumstances, it is useful to establish whether this is a sector management issue or an aggregate-level problem. The PER should attempt to explore the extent to which the government is taking steps to overcome the problem.

National and Local Budget Cycle Management and Institutional Arrangements

Budget management and execution has two parts: (1) the executive functions of budget formulation and execution and (2) the functions of authorizing, monitoring, auditing, assessing, and lobbying for change. Credible budget processes will be transparent, based on multiyear programs with monitorable indicators, and capable of identifying and correcting deficiencies over time—in part by giving managers appropriate levels of authority and holding them accountable for results, with sanctions for inappropriate behavior.

Fan et al. (2009) detail the different stages in an ideal budget process: (1) the national sector policy and strategy context; (2) the MTEF, which links these national priorities with the annual budget process; (3) budget preparation based on the MTEF figures; (4) budget execution; and (5) monitoring activities and evaluating outcomes. In this context, the forest sector PER should attempt to answer three main questions:

- **Budget formulation and approval:** How are budgets made?
- **Budget implementation:** How are they carried out?
- **Feedback loops** (e.g., internal and external audit, oversight): Are they effective and adequate?

As an integral part of the exercise, the review needs to assess the effectiveness, efficiency, and quality of the budgetary process within the ministry or agency responsible for forests. This requires examination of budget planning, formulation, execution, and accountability. The assessment should focus on the pattern of planned and actual expenditures and how closely the two are correlated, and on budgetary outcomes.

The PER should also explore the institutional features of the budget and the system of public expenditure management, guided by three questions:

- **Rules:** What formal rules and institutions govern budget activities?
- **Practice:** How effectively are the rules implemented? (Are they respected; are incentives aligned?)
- **Improvements:** How could rules and institutions change to improve budget outcomes?

Several points should be considered in this regard, some of which are relevant to the Ministry of Finance (i.e., macro level) and others to the forest sector:

- **Budget ceiling:** What institutional capacities define the budget ceiling? What rules exist for respecting it?
- **Allocative mechanisms:** How are resources allocated across sectors? To what extent is the process competitive? Examples of such mechanisms include the existence of medium-term planning or budget programs at sector level, cooperation between the Treasury and the sectors in preparing initial allocations, and the role of cabinets in debating and deciding allocations.
- **Role of DPs:** Do they support or undermine the budget process by promoting “their” programs or by the lack of predictability in their funding of the sector?
- **Ministerial programs:** What capacity and experience exist for formulating and monitoring multiyear spending programs that articulate clear spending priorities and include monitorable indicators of success? Is the forestry ministry able and willing to consult service-users in the definition and monitoring of its programs? What is the quality of analytical debate within and between ministries (for example, does the forestry ministry talk to the ministry of local government about service delivery responsibilities and monitoring)?
- **Budget execution:** What rules govern budget execution? How are funds released (e.g., monthly, quarterly, ad hoc), and what impact does this have on the ministry responsible for a sector that is

seasonal in nature? Does the ministry have independent powers to hire and fire staff? Are any special disbursements or accountability requirements imposed by the DPs, and what effect does this have on domestic capacity?

- **Accounts and reporting:** Is there regular and timely reporting to management and the legislature about actual revenues and expenditures, including comparisons with the budgeted amounts? Is the audit function independent of the executive? Does the Office of the Auditor General report in a timely manner? What do past audit reports say about forestry expenditure?

The answers to these questions will enable the PER to assess budget management in the sector and Ministry of Forestry, its effect on expenditure programs, and ways to improve it.

Sources of Finance

The sources of public finance for forest activities are likely to include a mixture of local and central government funds, grants, and loans from DPs directly to the Ministry of Finance or through budget support, and internally generated funds (known in some countries as “appropriations in account”). In some countries, a significant proportion of the funds made available for forest activities—sustainable forestry management in particular (Gondo 2010)—is provided by international and local environmental NGOs (Fowler et al. 2007). Each of these sources of revenue should be discussed and data presented showing their relative importance and trends over time (Amani et al. 2004). Any difficulties associated with the monitoring and audit of collections and estimating arrears should be highlighted.

Prioritization (Improving Allocative Efficiency)

Although the size and allocation of expenditure in the forest sector are important, its composition also matters. Having identified the amount of expenditure accounted for by the sector, and the pattern of spending, the next step is to look at whether the government’s stated policy objectives and priorities for the sector are reflected in the pattern of forestry public expenditure, both between and within its sub-subsectors, as well as the consistency of the pattern over time. It is also important to review whether public spending on forestry is justified in terms of the principles of welfare economics (public and private roles).

Many sector expenditure proposals are criticized because they do not provide a clear justification for why certain publicly funded functions and services are given priority over others. Ensuring that public funds are allocated to the most appropriate purposes demands first a clear set of objectives for the forest sector, which requires a vision for how the sector can contribute to national development objectives (such as economic growth, jobs, income generation, and environmental sustainability), and what constraints need to be addressed if the vision is to be realized.

The budget is a political document, so the expenditures it contains should reflect the desire to achieve policy objectives and the vision for the sector. There should be a clear relationship and consistency between national and regional forest policies and strategies, and the pattern of expenditure in the sector. In this context, the review should discuss the justification for public intervention in the forest sector. Such a discussion

may highlight areas where decisions relating to forests have been based on narrow political considerations rather than national policy. An example from the agricultural sector is the increasing bias of Zambia's public expenditure toward subsidizing the cost of fertilizers and maize producer prices, rather than financing the strategies detailed in the Fifth National Development Plan (Chiwele et al. 2010; Orłowski et al. 2010).

The analysis may show, for example, that the relative importance of expenditure on a particular function has increased. This can then be compared with evidence that this function is delivering a strong, positive impact on sector outcomes. However, where the analysis shows that the actual pattern of expenditure is not supporting policy priorities, the team should suggest corrective actions. This may require expenditures to be reallocated from lesser to higher priority programs and from less to more effective programs, or for the sector to close programs that are inconsistent with policy. However, these recommendations may be complicated by the fact that expenditure is rarely classified in accordance with programs covering specific areas of policy.

If the forest sector objectives are to be achieved, a clear understanding is needed of the role of government in relation to the functions carried out by the private sector, NGOs, or community-based organizations (CBOs). In the past, governments have typically undertaken a wide range of functions that are now considered better undertaken by nonstate players, especially as state resources become more constrained. Forest sector expenditures, therefore, should be assessed with respect to the following principles of welfare economics:

- What is the rationale for public intervention (market failure; redistribution; or a core public good such as forestry research, training, or sustainable forest management?)
- If there is a rationale for public intervention, how are these activities, services, and functions most efficiently carried out? Which are best done by government departments, parastatals, the private sector, or other participants?
- If the best instrument is public financing, what is the fiscal cost and how does it compare with the cost of other public expenditures that meet the above evaluation criteria?

An analysis of the appropriate role of government in financing forestry services requires an assessment of whether certain services should be curtailed (to be delivered exclusively by the private sector or not at all) or whether user charges should be introduced. Certain services may also warrant expanded provision. Analysis of the appropriate institutional configuration for delivering services would require consideration of options for contracting out and the use of different government agencies government (e.g., executive agencies) as well as consideration of institutional and legal changes that might increase the effectiveness of government services.

Although much of this discussion will be based on first principles, it will help if quantitative estimates of points such as the degree of market failure could be obtained. If the rationale is redistribution, some analysis of the incidence of public expenditures would be useful (e.g., from household expenditure surveys or a geographical/social group breakdown of expenditures).

The PER should also analyze the extent and impact of any subsidies in the sector—such as the provision of subsidized inputs, machinery, or rural finance, or a subsidy of output prices—including any partnerships with

the private sector, and estimate the relative importance of spending on these compared with overall sectoral expenditure. This analysis should be complemented by information on whether expenditure on key public goods is being curtailed as a result of these subsidies, thereby jeopardizing maintenance of the existing capital stock.

Obtaining Value for Money—Increasing the Efficiency of Service Delivery

Even if the level and composition of public expenditures are appropriate, the forest sector may be inefficient in meeting its service delivery objectives. Greater efficiency in this case means achieving the same outputs using fewer inputs, or achieving more outputs (in terms of the quality or quantity of a service) for the same amount of inputs. Because resources are constrained in many countries, greater efficiency is crucial, and as a result the PER team must go beyond the allocation of resources and look at the efficiency of expenditure—assessing outputs and outcomes rather than just inputs and activities. The aim is to identify the main resource allocation choices facing program managers and recommend changes in the balance of existing expenditure between services and cost items that may improve performance.

Efficiency analysis should focus on unit costs by function. It is hard to be more efficient and to demonstrate efficiency unless outputs and inputs can be measured. Unfortunately, it is often difficult to obtain unit costs by function, but aggregated ratios are helpful (e.g., overall costs per hectare of forest by district). It is also possible to see what is driving unit costs, even where these can be only roughly estimated (Are extension adviser to forest user ratios broadly appropriate? What is the ratio of senior to junior researchers in forest research stations?). At the very least, it is usually possible to get a feeling for efficiency by analyzing the composition of expenditure, especially the balance between wages and other recurrent costs, and examining operations and maintenance items in more detail.

Typically the private sector has a better idea than government of what it costs to provide a particular output or to undertake a particular activity. Where possible, services should be costed across service providers, which may be done on the basis of the cost of providing a service to an accepted norm (e.g., per 1,000 ha of indigenous forest). Although this approach is difficult and imperfect (it is not easy to capture the quality of a service, for instance), it may be useful as an indication of the efficiency of providing an input. It may also be possible to compare the cost of providing this service through government compared with alternatives such as NGOs.

Introducing the value-for-money (VFM) concept into the analysis of public sector expenditure is one result of the search for ways to ensure that the public sector makes the best use of limited resources. However, there are usually sufficient issues at the strategic level, and in terms of expenditure capture, to preclude any extensive enquiry into the effectiveness of the provision of public goods and services. Furthermore, as noted earlier, VFM analysis has a high demand for data, which usually requires a separate study to provide detailed answers to all the relevant issues (World Bank 2010b).

If a VFM study is to be undertaken to estimate the efficiency and effectiveness⁴¹ of government expenditure in the sector, the first task is to collect reliable information on outputs and outcomes associated with different

types of expenditures (e.g., regional, functional). With such data, it may be feasible to estimate the unit cost of providing different services (such as advisory services per farmer), which can then be compared across different service providers (such as district local governments) or over time, or both, with respect to various norms. Any studies that have already been undertaken on this topic in the sector should also be used.

Budgets must be program- or activity-based if this work is to properly link expenditures to activities. Where performance budgeting has been adopted, budget allocations are directly linked to outputs and outcomes; however, many developing countries do not use performance budgeting. In Lao PDR, for example, budgets do not currently include indicators to monitor expected outputs and outcomes, and therefore performance cannot be measured against budget (Cammack et al. 2008).

The lack of data and analytical capacity can be major a obstacle to undertaking such an exercise. For this reason, it is recommended that the PER be realistic in trying to measure the efficiency of expenditure, perhaps focusing on the largest program or project item in the budget. It should be possible to assess the efficiency and effectiveness of spending by that program, and it may be feasible to extrapolate the conclusions to the wider forest sector.

In practice, few attempts have been made in any sector to examine the outcomes associated with public spending. In part this is due to the complexity of the analysis required, the lack of an appropriate baseline, and the costs of additional data collection. The demand for VFM analysis within the budget process—linking resource allocation decisions to evidence of impact—has been limited, even though the results would allow improved prioritization between the competing demands on the ministry's budget (Akroyd and Smith 2007). Where governments face resourcing constraints, forest departments need to be able to justify public expenditures on the sector by providing strong links between spending and forest sector outcomes.

In their recent review of agricultural PERs, Fan et al. (2009) conclude that “Very few studies attempted to link different types of government spending to growth, and even fewer attempted to analyze the impact of government spending at the sector level.” Interestingly, one such study of the agricultural sector in Uganda (Fan and Rao 2003) shows high returns to spending on feeder roads, research, and the provision of advisory services.

The analysis should assess whether institutional arrangements stimulate cost-efficiency. For example, in many countries any cost savings or revenues generated by the sector are returned directly to the Ministry of Finance, at no benefit to the collecting agency. Such a practice reduces the incentives for the forestry ministry to save or collect revenues.

Other institutional issues to review include the following:

- **Linking inputs and outputs:** Are managers accountable for results, and, if so, do they have the managerial autonomy and reliable budget necessary to deliver results? To what extent are expenditures coordinated between the forestry ministry and other agencies? What is the basis of calculation of district budgets for forests? Could alternative transfer formulas be established to promote greater efficiency and effectiveness in resource use?

- **Financial accountability:** Is there an effective internal audit system? Are good procurement practices observed? Is financial information reliable and timely?
- **Leakages:** What mechanisms exist to improve expenditure performance and reduce nonperformance (e.g., public disclosure on expenditure allocations, client satisfaction surveys, expenditure tracking surveys, effective external audit)?

Any recommendations to improve the efficiency of expenditure arising from such an institutional analysis will require both effective management to ensure that they are implemented and a robust system of monitoring any subsequent changes.

Expenditure Management and Fiscal Discipline

The PER should identify any problems relating to the management of public expenditures to the forest sector, and propose steps to deal with them. Although most forest departments are likely to identify shortage of funds as a constraint, it is important to provide a comprehensive and frank assessment of the full range of problems. Some of these problems stem from wider causes over which the ministries have little if any direct control (timeliness of release of funds, for instance), whereas others may have arisen within the ministries themselves. The PER should draw attention to ministry-specific issues, which may include the following:

- Delays or inconsistencies in allocating ceilings among departments
- Delays in releasing funds once received by the ministry
- Difficulties with appropriate budget composition (personnel/nonpersonnel expenditures; recurrent/development balance)
- Delays or difficulties in obtaining information accounting for expenditures
- Reporting problems
- Difficulties in the planning/budgeting/accounting relationships between the headquarters and the provinces or districts
- Difficulties in budget relationships with DPs

Assessment of Forest Revenues

It is not usual practice for a sector PER to cover sector revenues in detail. However, sector revenues may warrant special attention, as these revenues can be significant in the forest sector.

Types of Revenue

Revenues arising from forest resources and forestry activities have a number of uses, including offsetting current government expenditure and optimizing the use of resources by reducing waste and encouraging the use of particular resources. These revenues come from numerous sources, and identifying all of them presents an initial challenge. Ideally, all revenues that provide significant income streams or have a significant impact on economic activity should be examined. Estimates should also be made of revenues lost

through ineffective or inefficient collection methods, or from illegal logging. Where possible, the analysis should provide estimates of informal payments (e.g., Olken and Barron 2007).

Forest sector revenue sources, excluding government and DP funding, include the following:

- A forestry fund
- Land and property rent and licenses for nonforestry land use (e.g., water, communications, buildings)
- Concession fees (as a lease, but including a forest resource to be managed)
- Performance bonds
- Direct sales of forest products (timber, wood fuel, charcoal, nonwood forest products) as raw, semiprocessed, or ready-for-market materials
- Miscellaneous sales (seed and seedlings)
- Stumpage (usually according to weight or volume, with varying degrees of complexity by species, location and size) for roundwood, fuelwood, and charcoal
- Royalties (usage-based payments), which are typically paid as a proportion of the revenue derived from the use of the asset or a fixed payment per unit sold
- Fees and permits for collecting nonwood forest products or using forests for other purposes
- Specific levies (e.g., per unit of production), which are raised in some countries for training, research, or other centrally organized functions
- Fees from tourism (e.g., rental, licensing, entry, hunting, residential)
- Fees on production from privately owned forests
- Export taxes
- License fees
- Fines and penalties from law enforcement activities
- Sales of impounded timber and other forest products
- Inspection and license fees for industry (e.g., sawmills)
- Payment for environmental services

Forest Funds

Sources of information on a forest fund may differ from those relating to normal government expenditure. Governance and legal arrangements may also be different. As a result, it is important to include issues concerning the fund in the ToR of the review and to understand what permission is required to obtain access to the information. Access to parastatal and government corporations' information may require additional permission.

BOX 3.2. FOREST FUNDS

Forest funds can be used to channel and administer financing for specified purposes in the forest sector. Forest funds are designed to set aside a portion of national revenue for forestry purposes. They exist for more than a single government budget cycle, segregating specific forestry-related revenues and earmarking them for investments in forestry.

The simplest forest funds are little more than entries in the government budget, under control of the forest or finance ministry. More complex funds may have separate institutional structures, such as an agency to administer the fund or an advisory board. In some countries, the institutions administering the fund are partially or fully independent, perhaps existing as a corporation or trust. Rather than coordinating spending on a national level, some funds are decentralised spending entities, holding money for local management units or communities.

Source: Salmi and Craig, 2004.

It will be important to establish if there is a mechanism for regularly reviewing the tax rates that are levied and whether they have recently been amended. The methodology used in computing the rates should also be appraised and proposals made for improvements, where appropriate. The PER should also assess whether the rates being charged are promulgated and displayed in a clear and transparent way.

Comparing Revenues

Any comparison of revenues received between countries has to be made with care. Often, a number of agencies are involved in forest management, such as forestry commissions or private sector concessionaires. Where a government is involved directly in land management, it may not only receive revenue from timber harvesting and processing but also incur harvesting and reestablishment costs. Where governments manage forests but sell standing timber to the private sector, the gross revenues are reduced, but so are the costs. The government may need to provide and maintain forestry road infrastructure, the cost of which should be included in any discussion of revenues.

Different revenues may be collected by different departments and at different locations. For example, the central government may collect revenues from larger organizations with offices in the capital city, whereas payments by smaller businesses and informal collections (in the case of rattan, for example) may be undertaken at or below the local government level.

The mechanism of revenue transfer to the central Treasury needs to be examined in order to identify the extent of deductions, if any, at different administrative levels. Understanding this flow of revenue is essential to gain an idea of the incentives for officials to collect funds and to enhance the transparency of the collection exercise.

Revenue Analysis

A variety of indicators can be used to assess the use of forest revenues and resources:⁴²

- Revenue as a proportion of total government revenue (and trends)
- Revenue as a proportion of government expenditure on the sector (and trends)
- Amount and proportion of funds from each source (and trends)
- Proportion of the revenue due that is actually collected⁴³
- Costs of collection compared with the revenue generated
- Potential for revising charges/rates/fees
- Estimate of illegal logging and the revenues thus foregone
- Market trends for timber and timber products, and their impact on resource use
- Forest revenues compared with the (potential) value of the resource

A value-chain analysis of the revenue flows to the sector may be undertaken. It should highlight the different sources and uses made of the funds, the gap between expected and actual revenues, transfers made to the Treasury and to other parts of government, the amount reinvested in the sector, and how it is used. The transparency and reporting systems relating to the collection of funds should be discussed.

Overall Assessment and Recommendations

The PER should conclude by summarizing the main findings of the review, highlighting evidence of forest interventions and expenditures that have positive outcomes on sector and social policy objectives. This will help inform the debate about future budgetary allocations to forestry and also any reprioritization needed to improve efficiency and effectiveness.

A limited number of recommendations should be made, following directly from the analyses and findings presented. Recommendations can be grouped into three main areas:

- How to decide on priorities (may also be expressed as how to improve the allocative efficiency of expenditures) and to demonstrate the thinking that has gone into this process
- How to achieve greater efficiency in the way outputs are achieved, and to show that alternative delivery mechanisms have been analyzed (rather than simply that past practices have been continued)
- How to improve the management of budgetary expenditures (e.g., setting ceilings, release and accounting of funds, data collection and monitoring)

Experience shows that many governments lack the political and institutional commitment to implement PER recommendations. For this reason, the review team may propose that an implementation committee, comprising government and DPs and chaired by the Ministry of Finance, be formed to review and take forward the recommendations. The ToR of many PERs now require the team to review the status of recommendations made in previous PERs.

The findings and recommendations of many PERs have limited impact because they are poorly disseminated and not always implemented. This fact highlights the need for strong engagement and commitment by the forestry ministry throughout the process. The findings and recommendations of the PER should feed directly into the budget process and forestry development policy. Sector stakeholders should be identified at the outset of a PER so that specific messages from the review can be tailored to these groups and communicated appropriately.

BIBLIOGRAPHY

- African Union. 2005a. *Guidance note for agriculture expenditure tracking system in African countries*. September. NEPAD: Addis Ababa.
- African Union. 2005b. *Report of the experts' workshop on agriculture expenditure tracking system*. AETS/Exp/Rpt (I). December 15–16. Addis Ababa.
- Akroyd, S., D. Hoole, J. Kariuki, S. Karuga, and L. Abe. 2001. *Uganda plan for modernisation of agriculture public expenditure analysis*. December 21. Oxford: Oxford Policy Management with Agriconsult.
- Akroyd, S., and L. Smith. 2006. *Review of public spending to agriculture; case studies for WDR team: Ghana, Kenya, Uganda, Zambia*. For DFID/World Bank. November. Oxford: Oxford Policy Management.
- Akroyd, S., and L. Smith. 2007. *The decline in public spending to agriculture – does it matter?* OPM Briefing Notes, 2007-02. Oxford: Oxford Policy Management.
- Amani, H., E. Mushi, A. Ako, R. Minja, and I. Kiwango. 2004. *Public expenditure review of environment. Financial year 2004*. Final report. May. Tanzania: NORPLAN and Vice-President's Office.
- Anon. 2010. *Côte d'Ivoire: Analyse environnementale du pays*. Final Report. March.
- Anson, R., and E. Zegarra. 2008. *Honduras: Public expenditure assessment and strategy for an enhanced agricultural and forestry sector*. Prepared for the World Bank/ARD, in collaboration with RUTA. Draft for discussion. April 13.
- Arumadri, J. 2001. *The forest revenue system and government expenditure on forestry in Uganda*. FAO Forest Finance Working Paper: FSFM/WP/08. October. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Banque Mondiale. 2010. *Bénin: Analyse environnementale du pays*. May. Washington, DC: Unité Environnement et Gestion des Ressources Naturelles.
- Bekele, M. 2001. *The forest revenue system and government expenditure on forestry in Ethiopia*. FAO Forest Finance Working Paper: FSFM/WP/04. July. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Bird, N., and N. Kirira. 2009. *Government institutions, public expenditure and the role of development partners: meeting Kenya's environmental challenges*. April. London: Overseas Development Institute (on behalf of the Royal Danish Embassy, Nairobi).
- Brzeska, J., and S. Fan. 2009. *Agricultural public expenditure reviews: A synthesis of six country cases and two cross-country studies*. DFID/World Bank project, Public Expenditures for Pro-Poor Agricultural Growth. Working draft. May 7. Washington, DC: IFPRI.

- Cammack, T., M. Fowler, and C. Phomdouangsy. 2008. *Lao PDR public expenditure study*. DFID/World Bank (ARD) Partnership. Public Expenditures for Pro-Poor Agricultural Growth. Lao PDR Case Study. Final draft. February 18. Oxford: Oxford Policy Management.
- Chakanga, M., and H. Kojwang. 2001. *The forest revenue system and government expenditure on forestry in Namibia*. FAO Forest Finance Working Paper: FSFM/WP/09. November. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Chiwele, D., M. Fowler, E. Humphrey, I. Outes-Leon, and J. Willis. 2010. *Evaluation of budget support in Zambia: Agriculture case study*. July. Draft. Oxford: Oxford Policy Management.
- Community and Environmental Services Ltd. 2007. *Irrigation diagnostic study*. Draft final report. August. (Volume I). Vientiane: Department of Irrigation, MAF and Programme de capitalisation en appui a la politique de développement rural.
- DFID. 2009. *How to manage fiduciary risk*. How-to note. December. London.
- Doe, J. 2004. *The forest revenue system and government expenditure on forestry in Liberia*. FAO Forest Finance Working Paper: FSFM/WP/13. July. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Fan, S., and N. Rao. 2003. *Public spending in developing countries: trends, determination and impact*. EPTD. Discussion Paper No. 99. February. Washington, DC: IFPRI.
- Fan, S., B. Omilola, and M. Lambert. 2009. *Public spending for agriculture in Africa: trends and composition*. ReSAKSS working paper No. 28. April. Washington, DC: IFPRI.
- Federal Department of Forestry. 2001. *The forest revenue system and government expenditure on forestry in Nigeria*. Federal Ministry of Environment, Abuja. FAO Forest Finance Working Paper: FSFM/WP/02. April. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Fowler, M., C. Gasirabo, S. Kanyarukiga, and A. Mutijima. 2007. *Rwanda public expenditure review: agriculture*. April 4. Mimeo. Kigali.
- Gauthier, B., and Reinikka, R. 2007. *Methodological approaches to the study of institutional and service delivery: A review of PETS, QSDS and CRCS*. Unpublished paper.
- Gondo, P. 2010. *Financing of sustainable forest management in Africa: An overview of the current situation and experiences*. August. Paper presented at the first meeting of the UN Forum on Forests ad hoc expert group on forest financing (September 13–17, 2010, in Nairobi, Kenya). Zimbabwe.
- Govere, J., E. Malawo, T. Lungu, T. Jayne, K. Chinyama, and P. Chilonda. 2009. *Trends and spatial distribution of public agricultural spending in Zambia: Implications for agricultural productivity growth*. Working Paper No. 36. February. Lusaka: Food Security Research Project.
- Gupta, S., K. Miranda, and I. Parry. 1995. *Public expenditure policy and the environment: A review and synthesis*. World Development, Vol. 23, No. 3. pp. 515–528.
- Gurkan, A., K. Kaiser, and D. Voorbraak. 2009. *Implementing public expenditure tracking surveys for results: lessons from a decade of global practice*. PREM Note No. 145. November. Washington, DC: World Bank.
- Hamissou, G. 2001. *The forest revenue system and*

- government expenditure on forestry in Niger. FAO Forest Finance Working Paper: FFSM/WP/05. July. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Hoole, D., and Duncan, A. 1998. *Uganda public expenditure review: Agriculture*. January. Oxford: Oxford Policy Management.
- International Monetary Fund. 2003. *How useful are benefit incidence analyses of public educational and health spending?* Working Paper. November. Washington, DC.
- Kazooru, C., and P. Ogwang. 2010. *Putting environment on budget: Public environmental expenditure review to support poverty environment initiative in Rwanda*. Final report. August. Kigali: UNDP, REMA, and UNEP.
- Kenya Forest Service. 2008. *Public expenditure review (PER) 2009 report*. October. Nairobi: Ministry of Forestry and Wildlife.
- Kolavalli, S., R. Birner, S. Benin, L. Horowitz, S. Babu, K. Asenso-Okyere, N. Thompson, and J. Poku. 2009. *Public expenditure and institutional review: Ghana's Ministry of Food and Agriculture*. Ghana Strategy Support Programme background paper no. 17. Washington, DC, and Accra, Ghana: International Food Policy Research Institute.
- Maiga, A. 2001. *The forest revenue system and government expenditure on forestry in Mali*. FAO Forest Finance Working Paper: FFSM/WP/06. June. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Maile, N. 2001. *The forest revenue system and government expenditure on forestry in Lesotho*. FAO Forest Finance Working Paper: FFSM/WP/03. April. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Mbugua, D. 2003. *The forest revenue system and government expenditure on forestry in Kenya*. FAO Forest Finance Working Paper: FFSM/WP/11. May. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Ministry of Finance, Planning and Economic Development. 2010. *Annual budget performance report FY 2009/10*. October. Kampala: Republic of Uganda.
- Mogues, T., M. Morris., L. Freinkman, A. Adubi, and S. Ehui. 2008. *Agricultural public spending in Nigeria*. IFPRI discussion paper 00789. September. Washington, DC: Development Strategy and Governance Division, IFPRI.
- Olken, B., and P. Barron. 2007. *The simple economics of extortion: evidence from trucking in Aceh*. June. Working Paper 13145. Cambridge, MA: National Bureau of Economic Research.
- Orłowski, D., C. Coulter, M. Mwala, and M. Orłowski. 2010. *Agricultural innovation and public expenditure*. Zambia 2010 public expenditure review; background paper. Draft. April 28. Maputo: Ximungo Consultores.
- Oxford Policy Management. 2007. *Uganda: agriculture sector public expenditure review; phases 1 and 2*. Final report. July. Oxford.
- Oxford Policy Management. 2008. *Vietnam – forest sector expenditure review*. Draft report. July 14. Oxford.
- Oxford Policy Management. 2010. *Study of funds flow, results and accountability of domestic and international health service financing, DRC*. Draft Inception Report. February. Oxford.

- PEFA Secretariat. 2006. *Public expenditure and financial accountability – public financial management performance measurement framework*. Reprinted June. Washington, DC: World Bank.
- Picazo, O., and S. Kagulura. 2007. *The state of human resources for health in Zambia: Findings from the Public Expenditure Tracking and Quality of Service Delivery Survey (PET/QSDS), 2005/06*. Paper presented at the "Human Resources for Health Research Conference," June 7–8. Lusaka, Zambia.
- Rosenbaum K., and J. Lindsay. 2001. *An overview of national forest funds: Current approaches and future opportunities*. International workshop of experts on financing sustainable forest management, January 22–25. A government-led initiative in support of the United Nations IPF/IFF/UNFF processes. Oslo.
- Salmi, J., and K. Craig. 2004. *Study on forest sector financing in Guyana*. Final draft. March 5. Georgetown: United Nations Development Programme Guyana Forestry Commission Programme on Forests.
- Sida. 2004. *Anti-corruption regulation*. Sida manual. Stockholm.
- Sida. 2007. *Public finance management in development co-operation – a handbook for Sida staff*. April. Stockholm.
- Swanson, A., and L. Lundethors. 2003. *Public environmental expenditure reviews (PEERS): Experience and emerging practice*. Environment Strategy Paper No. 7. Washington, DC: World Bank.
- Tshikala, E. 2004. *The forest revenue system and government expenditure on forestry in Democratic Republic of Congo*. FAO Forest Finance Working Paper: FFSM/WP/07. September. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.
- Vincent, J., J. Aden, G. Dore, S. Ganguli, V. Rambe, T. Walton, and J. Garcia. 2000. *Indonesia environmental expenditure review*. Draft. March 30. Washington, DC: Environment and Social Development Unit, World Bank.
- Vincent, J., J. Aden, G. Dore, M. Adriani, V. Rambe, and T. Walton. 2002. *Public environmental expenditures in Indonesia*. Bulletin of Indonesian Economic Studies, Vol. 83, No. 1. pp. 61–74.
- World Bank. 1998. *Public expenditure management handbook*. Washington, DC.
- World Bank. 1999. *Kenya Forestry Development Project. Implementation Completion Report (Credit 2198-KE)*. Washington, DC: Rural Development Operations 1, Eastern and Southern Africa, Africa Region.
- World Bank. 2001. *Zambia public expenditure review: Public expenditure, growth and poverty – a synthesis*. Report No. 22543-ZA. December. Washington, D.C: Macroeconomics 1, Southern Africa, Africa Region.
- World Bank. 2006. *Lao PDR: Public expenditure review background report – agriculture*. Washington, DC: EASRD.
- World Bank. 2007. *Lao PDR: Public expenditure review: integrated fiduciary assessment*. May 15. Washington, DC.
- World Bank. 2008a. *Uganda sustainable land management public expenditure review (SLM PER)*. Report No. 45781-UG. November 4. Washington, DC: Agriculture and Rural Development Unit, Sustainable Development Department, Africa Region.
- World Bank. 2008b. *Republic of Namibia: Rapid*

country environmental analysis/Namibia public environmental expenditure review (CEA/PEER). Volume II. Final draft. January 15. Washington, DC: AFTEN.

World Bank. 2009. *Mexico: Agriculture and rural development public expenditure review*. Report. Washington, DC.

World Bank. 2010a. *Socialist Republic of Vietnam: Aligning public spending with strategic priorities in the forest sector*. Washington, DC: Social, Environment and Rural Sustainable Development Unit, Sustainable Development Department, East Asia and Pacific Region.

World Bank. 2010b. *Uganda: agricultural public expenditure review*. Report No. 53702-UG. February 28. Washington, DC: Agriculture and Rural Development Unit, Africa Region.

World Bank and DFID. 2010. *Practitioners' toolkit for agriculture public expenditure review*. Draft. June 16. Washington, DC: Agriculture and Rural Development Department.

World Bank and Inter-American Development Bank. 2008. Costa Rica: *Public expenditure review – enhancing the efficiency of expenditures*. Report No. 40774-CR. Washington, DC: Central America Department and Country Department for Central America, Mexico, Panama and Dominican Republic.

Yalibanda, Y. 2004. *The forest revenue system and government expenditure on forestry in Central African Republic*. FAO Forest Finance Working Paper:

FSFM/WP/10. February. Rome: Forestry Policy and Planning Division/Accra: FAO Regional Office for Africa.

Zorya, S. 2009. *Rapid budget analysis for annual review 2009/10 agriculture sector*. November 9. Mimeo. Tanzania: World Bank office.

Bibliography Notes

1. The World Bank agricultural PER website provides useful references: www.worldbank.org/agper. A number of the documents in the above list are also to be found on this website.

2. A series of 11 FAO-supported forest finance working papers studying the financing of public sector forestry activities were reviewed (<http://www.fao.org/forestry/finance/2368/en/>). The studies focused almost exclusively on issues concerning forest finance and taxation revenue-sharing arrangements. Discussion and analysis of expenditure in the sector was, for the most part, limited, out-of-date, and highly aggregated.

NOTES

1. See <http://www.un-redd.org/AboutREDD/tabid/582/Default.aspx>.
2. Although in the past most PERs were commissioned and/or coordinated by the World Bank and other DPs, several countries now recognise PERs as an integral part of their expenditure management systems and, therefore, commission and carry them out themselves.
3. A few of these are not PERs in the strict sense of the term, but rather are reviews of forest finance, including some limited discussion of expenditure (see note 2 to the bibliography).
4. It is possible that changing the composition and prioritization of forestry expenditure will have a greater impact on national policy goals than simply increasing funding within the sector.
5. A variant on this theme is the "rapid assessment" agricultural PER undertaken each year by the World Bank in Tanzania, following the publication of the budget. This exercise seeks to provide those involved with the sector with an analysis of the budget and a comparison of figures for the coming year with trends in sectoral expenditure in preceding years (Zorya 2009).
6. Similarly, in Honduras, the forests sector PER is seen as part of a larger process in the sector—one of strengthening and integrating planning and budgeting, resulting in the development of an MTEF encompassing the main sector ministries and other agencies involved in the forest sector (Anson and Zegarra 2008).
7. Guidance on PEFA assessments is available from www.pefa.org.
8. For instance, the assessment of fiduciary risk is the specific focus of a DFID "How To" note (DFID 2009), updating earlier such notes, while corruption is dealt with, for example, in Sida's (2004) manual on anti-corruption regulation.
9. For a review of the use and results of the PETS in general, see Gurkan et al. 2009.
10. This PER treats forestry and agriculture as one sector.
11. This PER of the environment reviewed expenditure in the Forestry and Beekeeping Department along with the other departments of the Ministry of Natural Resources and Tourism.
12. Studies of 11 African countries were carried out under this program (see the bibliography).
13. One of the two Vietnam forest sector PERs was not completed; the other consolidates all of the information and data contained in the first and provides additional analyses. For this reason, they are counted as one study.
14. For example, in Kenya, the DPs accounted for 90 percent of the capital budget in 2000 (Mbugua 2003). In Honduras, some 142 DP-supported agriculture/forestry projects were under implementation in 2007, accounting for more than half of funds spent in the sector (Anson and Zegarra, 2008).
15. Principally for political reasons (Bekele 2001).
16. Govereh et al. point out that such expenditure has averaged close to 70 percent in Zambia in recent years.
17. It could, of course, also be the result of other factors, such as a decline in the standard of seedling production.
18. On the other hand, the Tanzania environmental sector PER notes that a high proportion (31.8 percent) of expenditure in the forest sector is on afforestation activity "because deforestation is a priority problem in the sector" (Amani et al. 2004).
19. Several examples of these problems are given in the 11 studies in the FAO forest finance working paper series (see note 2 to the bibliography).
20. The same is true of Mali, where spending on forestry research is reported on by a separate ministry (Maiga 2003).
21. Such cross-country comparisons are common in the PERs of other sectors; see Akroyd and Smith (2006).

However, in the case of forestry, caution is advised in making cross-country comparisons (see section 3).

22. Or, if such expenditures are recorded by the DPs themselves, such information is not systematically passed on to those in the recipient government involved in recording public expenditure. In addition, the financial year of DPs and expenditure reports sometimes differ from that of the government with which they are working.
23. In this instance, the environmental sector includes forest.
24. Some forest sector PERs fail to distinguish between national and local government expenditures.
25. An example of this is in Lao PDR, where, owing to reporting problems, the Ministry of Agriculture and Forestry has neither aggregate data on arrears nor information on the funds actually released to its provincial and district departments (Cammack et al. 2008).
26. This is in contrast to the education, health, and water sectors, where several PERs contain detailed value-for-money analyses.
27. It will be important for any PER team to undertake its own field visits in order to verify a sample of the data produced by the monitoring and evaluation system and to visit a sample of the investments funded from public resources. These visits will aid in assessing the impact and value-for-money of the expenditure.
28. It is expected that initial experiences with piloting the guidelines will be systematically collected and used to revise the instrument on a regular basis, as individual countries customize the guidelines to meet their own requirements.
29. COFOG website: <http://unstats.un.org/unsd/cr/registry/regcs.asp?Cl=4&Lg=1&Co=04.2>.
30. Such as transport and/or local government ministries that implement road-building projects, which include significant roadside tree-planting components.
31. This contradicts African Union guidance (African Union 2005b).
32. The recent Kenyan forest sector PER shows all budget and expenditure data in current terms, which makes it difficult to understand recent trends and to appreciate whether projected expenditure increases are due to inflation or to more spending on goods and services (Kenya Forest Service 2008).
33. In Vietnam, two "parent" ministries are involved in the forest sector: the Ministry of Agriculture and Rural Development and the Ministry of Natural Resources and Environment (although the latter's role is limited).
34. Forestry contributes less than 1 percent to GDP in Lao PDR. However, if wood processing is included, the figure rises to approximately 5 percent (Cammack et al., 2008).
35. Annex 1 provides suggestions on data tables to be included in the PER report.
36. For example, different 12-month periods may be used in different countries. Financial years are not necessarily the same and do not necessarily coincide with calendar years.
37. It should be noted that these two terms may not be synonymous.
38. For example, Uganda's 2009–10 national budget was overspent by 3.8 percent overall, due to expenditure of "supplementary" budget resources (Ministry of Finance, Planning and Economic Development 2010).
39. See Govereh et al. (2009), for example, for a detailed analysis of the spatial equity of agricultural expenditure in Zambia.
40. This finding was confirmed by the subsequent agricultural/forest sector PER, which found that agricultural expenditure was favoring more well-off provinces, thus reinforcing spatial inequalities (Cammack et al. 2008).
41. Effectiveness of expenditure in a sector refers to budget outputs and outcomes in relation to its policy objectives.
42. Each of which should include an analysis of recent trends as well as intercountry comparisons, as appropriate.
43. In most cases, only a small proportion of the forest revenues due are actually collected. In Kenya, an estimated 45 percent of revenues are "only selectively collected" (Mbugua 2003), which means that the proportion of the costs of plantation establishment and maintenance being met by revenues is steadily decreasing (World Bank 2010a). Moreover, a recent study failed to "discover the level of internally generated funds that had been collected in recent years, despite the acknowledged importance of this funding stream to a parastatal" (Bird and Kirira 2009).
44. A number of these are also listed in the bibliography.
45. The list is based on the parameters used by Swanson & Lundethors (2003) in analyzing a number of Public Environmental Expenditure Reviews.

ANNEX 1: SAMPLE TERMS OF REFERENCE FOR A FOREST SECTOR PER

At a basic level, the forest sector PER should take a backward look at public expenditure and performance (in relation to other actors in the sector) and then make suggestions about future direction, based on international good practice and the government's policy objectives and expenditure ceilings. Increasingly, a secondary objective is to identify institutional and organizational impediments to the achievement of sector targets and provide recommendations on how these might be addressed.

A. Introduction and Objectives

1. Context and objectives of the forest sector PER. Describe the medium- to long-term forest sector policy objectives that government is trying to achieve. Has a financial management review (e.g., PEFA) been undertaken as a precursor to this PER? Have other sector PERs been commissioned (health, education, agriculture, roads, and water are usually reviewed regularly)? Have expenditure tracking surveys or beneficiary incidence analyses been commissioned to complement the PER?

2. Who is the recipient? Is the PER being done in a collaborative way, with government? If not, why not?

3. Scope and timing. The PER will review current and historical patterns of allocation within the sector and the source of funding (government, DP) and mode of financing (loans, grants). It will also review the results of spending in terms of outputs and outcomes. This information will help to inform decisions about future spending to enable achievement of sector objectives. What is the timeframe for the PER: When will it start and finish, and is it timed so that the findings can readily feed into the next budget cycle?

B. Task Description

4. Overview of the forest sector

- Sector goals and priorities, and any recent policy developments
- Recent sector performance, including assessment of public, private, and community-based roles and responsibilities
- Rationale for public provision of publicly funded forestry goods and services, according to their public/private nature and externalities; whether goods and services with externalities are given priority in policy statements or expenditure allocations
- Legal, regulatory, and sector institutional frameworks, as well as the incentive structure in the sector, which determine long-run outcomes
- The extent of decentralization

5. Forest sector expenditures

- Overall trends in allocations to the sector (over the past X number of years), in absolute terms and relative to other sectors, the overall budget, and the sector GDP
- Functional and economic classification of the agricultural sector budget and changes over time.
- Levels and trends of recurrent and development expenditures, identifying the salary, operational costs, and development components (which are often included in both the recurrent and development expenditure categories)
- Allocations against core functions as set out in sector plans, and against any national policy priorities (e.g., poverty reduction)
- Composition and performance of the forest budget by funding source: government/external DPs, and by funding modality (projects, sector budget support, general budget support, etc.)
- Changes over time in the share of the forest budget spent centrally and transferred to local governments..
- Estimate of the amount of off-budget expenditure going into the forest sector by activity (subsector)

6. Review the effectiveness and efficiency of service delivery.

- Extent to which expenditure patterns are consistent with the sector priorities.
- Recurrent budget implications of capital spending (projects) and whether recurrent costs are properly planned for and sustainable.
- Personnel and capacity building issues.
- Assessment of what capital projects to keep now, what projects to keep in the pipeline, and what projects to drop. Where possible, assess the sources of funding for operation and maintenance, particularly the contributions of service users.
- Assessment of input costs relative to comparator countries (for comparable technologies and service levels). Inferences may be made by analyzing the split among the various inputs required to produce outputs—for example, the split among personal emoluments, operations and maintenance, transfers and capital expenditure, and even between headquarters and regional or district spending.
- Cost of providing services through government compared with alternatives (e.g., NGOs, civil society bodies).

7. Data appendix. Containing relevant tables about public sector coverage, performance, and costs of service delivery. At a minimum, tables similar to those in annex 2 should be presented. The appendix should also include an assessment of the existing data collection and monitoring systems, and identify improvements as required.

ANNEX 2: EXPENDITURE TABLES TO BE INCLUDED IN A FOREST SECTOR PER

ANNEX TABLE 2.1. TOTAL PUBLIC EXPENDITURES IN THE SECTOR (I.E., BY ECONOMIC CLASSIFICATION)

	2008	2009	2010	2011
Total Expenditures				
Recurrent Expenditures				
Salaries				
Materials				
Investment Expenditures				
By subsector or type				
Memo items:				
Sector recurrent as % gov. recurrent				
Sector recurrent as % gov. discretionary				
Sector total exp. as % gov. total exp.				
Sector total per capita or service user (e.g., pupil) (US\$)				
Sector total in real terms				
Subsector total in real terms				

Government's discretionary expenditure = total government expenditure less debt interest. This indicates the priority given to the sector. For example, if overall government expenditure has fallen, has sector expenditure been protected?

Compare per capita expenditure with that of other appropriate countries (on a regional or GDP basis). International comparisons can be useful in pointing out significant anomalies, but it should be remembered that there is no optimal ratio or norm for expenditure allocations across countries.

ANNEX TABLE 2.2. AS TABLE 1, BUT COMPARING ACTUAL EXPENDITURE WITH THE BUDGET ALLOCATION FOR EACH OF THE MAIN CLASSIFICATIONS.

	2008		2009		2010		2011	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Total Expenditures								
Recurrent Expenditures								
Salaries								
Materials								
Capital/Investment Expenditures								

Discuss the reasons for main variances and impact on service delivery.

ANNEX TABLE 2.3. AS TABLE 1 (EXCLUDE MEMO ITEMS), BUT BY SUBSECTOR OR MAIN PROGRAMS (I.E., FUNCTIONAL CLASSIFICATION).

ANNEX TABLE 2.4. TOTAL EXPENDITURES BY REGION (EQUITY)

	2008	2009	2010	2011
Total Expenditures				
Regional expenditures (% share)				
Region A				
Region B				
Etc.				

Note: Data may not be available in this format, or the analyst may have to use proxy indicators and compare them with other regional indicators (population, wealth, etc.). Does distribution of expenditure correspond with distribution of acknowledged needs?

ANNEX TABLE 2.5A: RECURRENT EXPENDITURES BY PROGRAM (I.E., FUNCTION)

	2008	2009	2010	2011
Total Expenditures				
Program 1				
Program 2				
Program 3				
Etc.				

The ability to do this depends on an accounting system/coding structure that can allocate public expenditure by program. The functional classification of expenditures may be at only one level or at more than one level. A program should represent a set of expenditures delivering reasonably homogenous benefits. This facilitates management, promotes accountability, and creates a link (albeit imperfect) between expenditures, objectives, and ultimately, outcomes.

ANNEX TABLE 2.5B: CAPITAL EXPENDITURES BY PROGRAM (I.E., FUNCTION)

	2008	2009	2010	2011
Total Expenditures				
Program 1				
Program 2				
Program 3				
Etc.				

ANNEX TABLE 2.6: FINANCING PUBLIC EXPENDITURE IN THE SECTOR

	2009	2010	2011	In Percentage		
				2009	2010	2011
Total Expenditures						
DOMESTIC						
Government Budget						
Investment						
Recurrent						
EXTERNAL (incl. donors, World Bank)						
Special funds						
Self financing						
TOTAL						

Note: It is often difficult to obtain consolidated data on external financing. It may be necessary to separately commission the collection of data on external financing.

ANNEX TABLE 2.7: NONGOVERNMENT EXPENDITURE IN THE SECTOR (OPTIONAL)

Information on expenditure by NGOs, CBOs, and private firms depends on the availability/existence of relevant surveys.

ANNEX TABLE 2.8: UNIT COSTS: REAL RECURRENT EXPENDITURE (TOTAL)

	2008	2009	2010	2011
Program 1				
Total expenditure (real terms)				
Etc.				

Unit costs can be used to compare with other agencies providing a similar (ideally identical) service as an indicator of efficiency. They can also be used as the basis for targets or costing/budgeting. They must be interpreted with care as they do not take into account the quality of the service provided.

ANNEX 3: PERS REVIEWED⁴⁴

Country	PER type	Author	Year	Title
Bolivia	Agriculture	World Bank	2010	Plurinational State of Bolivia: Agriculture Expenditure Review
Bosnia	General	World Bank	2006	Bosnia and Herzegovina: Addressing Fiscal Challenges and Enhancing Growth Prospects: A Public Expenditure and Institutional Review ⁷
Burkina Faso	General	World Bank	2005	Financial Accountability Review
Burundi	General	World Bank, Government of Burundi	2008	Republic of Burundi: Public Expenditure Management and Financial Accountability Review (PEMFAR): Improving Allocative Efficiency and Governance of Public Expenditure
Cape Verde	General	World Bank	2006	Cape Verde: The Challenge of Increasing Fiscal Space to Meet Future Pressures: Public Expenditure Review
CAR	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Central African Republic
Costa Rica	General	World Bank, Inter-American Development Bank	2008	Public Expenditure Review: Enhancing the Efficiency of Expenditures
Djibouti	General	World Bank	2006	Republic of Djibouti: Public Expenditure Review: Making Public Finances Work for Growth and Poverty Reduction
DRC	General	World Bank, Government of DRC, DFID, SIDA	2008	Democratic Republic of Congo: Public Expenditure Review (PER)
DRC	Forest finance	FAO	2004	The forest revenue system and government expenditure on forestry in Democratic Republic of Congo
Eritrea	Health and education	World Bank	2008	Eritrea: Health and Education Sectors: Public Expenditure Review
Ethiopia	Agriculture	World Bank	2008	Ethiopia: Agriculture and Rural Development Public Expenditure Review 1997/98 – 2005/06
Ethiopia	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Ethiopia
Georgia	General	World Bank, European Commission	2008	Georgia: Public Expenditure and Financial Accountability (PEFA): Joint World Bank-European Commission Public Financial Management Assessment
Ghana	Agriculture	IFPRI	2009	Public Expenditure and Institutional Review
Guinea Bissau	General	World Bank	2007	Guinea-Bissau: Public Expenditure Review (PER) Update
Honduras	Agriculture and forestry	World Bank, RUTA	2008	Honduras: Public Expenditure Assessment and Strategy for an Enhanced Agricultural and Forests sector

Country	PER type	Author	Year	Title
Indonesia	General	World Bank, Government of Indonesia	2007	Spending for Development: Making the Most of Indonesia's New Opportunities: Indonesia Public Expenditure Review
Indonesia	Agriculture	World Bank - confidential draft	2010	Indonesia: Agriculture Public Expenditure Review
Indonesia	Environment	World Bank	2000	Indonesia Environmental Expenditure Review
Kenya	Forestry	Ministry of Forestry and Wildlife, Kenya Forest Service	2008	Public Expenditure Review (PER) report
Kenya	Forest finance	FAO	2003	The forest revenue system and government expenditure on forestry in Kenya
Lao PDR	General	World Bank	2009	Lao PDR: Public Expenditure Review: Macro-Fiscal Context
Lao PDR	Agriculture	OPM	2008	Lao PDR Public Expenditure Study: Public Expenditures for Pro-Poor Agricultural Growth
Lebanon	Electricity	World Bank	2008	Republic of Lebanon: Electricity Sector Public Expenditure Review
Lesotho	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Lesotho
Liberia	General	World Bank, Government of Liberia, African Development Bank, IMF, UNDP, DFID, Swedish National Auditing Office	2009	Liberia: 2008 Public Expenditure Management and Financial Accountability Review
Liberia	Forest finance	FAO	2004	The forest revenue system and government expenditure on forestry in Liberia
Lithuania	General	World Bank	2009	Lithuania: Social Sectors Public Expenditure Review
Macedonia	General	World Bank	2008	FYR Macedonia: Public Expenditure Review
Malawi	General	World Bank, Government of Malawi	2007	Malawi: Public Expenditures Review
Mali	Sustainable land management	IFPRI	2010	SLM Advisory Services: Key Institutional, Financing and Economic Elements for Scaling Up Sustainable Land Management in Mali: Benefit-cost analysis
Mali	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Mali
Mexico	Agriculture	World Bank	2009	Mexico: Agriculture and Rural Development Public Expenditure Review
Montenegro	General	World Bank	2008	Montenegro: Beyond the Peak: Growth Policies and Fiscal Constraints: Public Expenditure and Institutional Review
Namibia	Natural resources	World Bank	2008	Republic of Namibia: Implementing the Agenda of the Namibian Ministry of Environment and Tourism: A Rapid Country Environmental Analysis with a Public Expenditure
Namibia	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Namibia
Nepal	Agriculture	IFPRI	2007	Nepal Agriculture Public Expenditure Review
Nicaragua	General	World Bank	2008	Nicaragua: Public Expenditure Review 2001–2006

Country	PER type	Author	Year	Title
Niger	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Niger
Nigeria	Agriculture	World Bank, IFPRI	2008	Nigeria: Agriculture Public Expenditure Review
Nigeria	Sustainable land management	IFPRI	2010	SLM Advisory Services: Key Institutional, Financing and Economic Elements for Scaling Up Sustainable Land Management in Nigeria: Benefit-cost analysis
Nigeria	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Nigeria
Paraguay	General	World Bank	2006	Paraguay: Public Expenditure Review: Main Report
Rwanda	Agriculture	Martin Fowler, Claver Gasirabo, Sam Kanyarukiga, Augustin Mutijima	2007	Rwanda Public Expenditure Review Agriculture
Senegal	General	World Bank	2005	Senegal: Enhancing the Efficiency of Public Investment: Public Expenditure Review
Serbia	General	World Bank	2009	Serbia: Doing More with Less: Addressing the Fiscal Crisis by Increasing Public Sector Productivity
Seychelles	General	World Bank	2009	Seychelles: Public Expenditure Review
Sudan	General	World Bank	2007	Sudan Public Expenditure Review: Synthesis Report
Tajikistan	General	World Bank	2005	Tajikistan: Public Expenditure and Institutional Review
Tanzania	Water	World Bank	2009	Review for Aligning Policy, Institutional and Financing Priorities
Tanzania	General	World Bank, IMF, EC, DFID, JICA, AfDB, SDC, SIDA, KfW, Governments of Netherlands, Finland, Norway, Sweden, Ireland and Denmark	2009	United Republic of Tanzania: Public Expenditure and Financial Accountability Review 2008
Tanzania	Agriculture	United Republic of Tanzania, Vice Presidents Office	2004	Public Expenditure Review of Environment
Turkey	General	World Bank	2006	Turkey: Public Expenditure Review
Uganda	Agriculture	World Bank	2010	Uganda: Agriculture Expenditure Review
Uganda	Sustainable land management	World Bank, IFPRI	2008	Uganda: Sustainable Land Management Public Expenditure Review
Uganda	Forest finance	FAO	2001	The forest revenue system and government expenditure on forestry in Uganda. Forest Finance Working Paper FSFM/WP/08
Vietnam	Forestry	Unknown	2008	Vietnam – Forests sector Expenditure Review
Vietnam	Forest finance	World Bank	2010	Aligning public spending with strategic priorities in the forests sector
Zambia	Agriculture	Food Security Research Project (FSRP)	2009	Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth
Zambia	Agriculture	Dieter Orłowski, Chris Coulter, Mick Mwala, Monika Orłowski	2010	Zambia – 2010 Public Expenditure Review, Background Paper. Agricultural Innovation and Public Expenditure

ANNEX 4: CHECKLIST USED IN ANALYZING FOREST SECTOR PERS⁴⁵

1. Country; title; date; author(s); sector(s) or ministry(ies) covered; institution commissioning the PER/ institution funding the work (they could be different).
2. Purpose/rationale of the PER, according to its authors (e.g., stand-alone, part of wider financial management strengthening program).
3. Definition of the forestry/natural resources/agriculture sector covered—boundaries. Definition of expenditure (some may have only budget data to analyze). IF NO FORESTRY, STOP HERE.
4. Scope (Capital and/or recurrent? All expenditure not disaggregated? Functional and economic classification? Private sector expenditure? NGOs? Local government expenditure as well as national? If scope is limited, are data availability and accuracy problems advanced as the reason?).
5. Expenditure alignment with sector policy priorities contained in national policy framework for the sector.
6. Other key comparisons and analyses undertaken (e.g., time series and trends in both capital and recurrent expenditure), sector expenditure for GDP and other sectors; planned vs. actual expenditure.
7. International comparisons—benchmarks; highlight outliers.
8. Period covered by the analysis.
9. Efficiency/quality of public expenditure, assessed through analysis of sample of large projects. Output/ outcome analysis.
10. Development assistance—effectiveness; alignment with government priorities and financial system; country management.
11. Typical problems/weaknesses identified with sector expenditures (e.g., capital expenditure commitments not matched by increased recurrent budget allocations, mismatched expenditure and policy priorities), and common recommendations proposed.
12. Discussion of methodological and data issues (including data problems encountered)
13. Discussion of revenues raised by concerned public institution through forest taxes.

14. Follow-up activities proposed (repeat PERs, inclusion as part of sector ministry's annual budget/planning activity?).

Other

15. Revenue collection from forests, broken down by source of funds.

16. Mention of the intended target audience (users) of the study contents and findings (Ministry of Finance, specific ministries, the World Bank) and justification for study being undertaken.

THE FOREST SECTOR IS TYPICALLY POORLY FUNDED IN MOST DEVELOPING COUNTRIES. LACK OF ADEQUATELY QUALIFIED STAFF, LACK OF FUNDS TO CARRY OUT ESSENTIAL SUPERVISORY OPERATIONS AND LACK OF EQUIPMENT ARE SYMPTOMS OF INEFFECTIVE BUDGET PLANNING AND ALLOCATION. IN THE END, MISMANAGED FORESTS COMPROMISE DEVELOPMENT AND ENVIRONMENTAL GOALS.

CREDIBLE PUBLIC EXPENDITURE REVIEWS SHOULD HELP POLICYMAKERS AND DONORS BETTER ALIGN FOREST POLICY AND PUBLIC SPENDING AT A TIME WHEN CARBON FINANCE RAISES THE PROSPECT OF INCREASED FINANCIAL FLOWS. THIS STUDY REVIEWS PUBLIC EXPENDITURE REVIEWS IN THE FOREST SECTOR AND MAKES PRACTICAL RECOMMENDATIONS BASED ON THIS ANALYSIS.



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