Decentralization of Natural Resource Sectors in Indonesia: Opportunities and Risks

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Environment and Social Development Unit
East Asia and Pacific Region
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Acronym/Definition</th>
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</thead>
<tbody>
<tr>
<td>AMDAL</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>ANDAL</td>
<td>Detailed environmental impact report</td>
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<tr>
<td>APBD</td>
<td>Anggaran Pembiayaan Belanja Daerah – Regional budget</td>
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<td>APBN</td>
<td>Anggaran Pembiayaan Belanja Negara – State budget</td>
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<td>ASM</td>
<td>Artisanal and small-scale mining</td>
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<td>BAPEDAL</td>
<td>Environmental Impact Management Agency</td>
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<td>BAPEDAL Regional</td>
<td>Branch Office of BAPEDAL</td>
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<td>BAPPEDA</td>
<td>Regional Development Planning Board</td>
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<td>BAPPENAS</td>
<td>National Development Planning Board</td>
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<tr>
<td>BPN</td>
<td>National Land Agency</td>
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<tr>
<td>Bupati</td>
<td>Kabupaten (rural district) head</td>
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<tr>
<td>DGM</td>
<td>Directorate General of Mining</td>
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<tr>
<td>Dinas</td>
<td>Provincial or district agency reporting to governor, mayor or bupati</td>
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<td>Dinas Pertambangan</td>
<td>Regional Mining Agency reporting to governor, mayor or bupati</td>
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<td>DPRD</td>
<td>Regional People’s Assembly</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>Ha</td>
<td>Hectares</td>
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<tr>
<td>INPRES</td>
<td>Instruksi Presiden – ad hoc budget transfer by presidential decree</td>
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<tr>
<td>Kabupaten</td>
<td>District</td>
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<tr>
<td>Kandep</td>
<td>Kantor departamen – District office of a central line agency</td>
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<tr>
<td>Kanwil</td>
<td>Kantor wilayah - Provincial office of a central line agency</td>
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<tr>
<td>Kanwil Pertambangan</td>
<td>Provincial office of MME</td>
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<tr>
<td>KODAM</td>
<td>Provincial AMDAL Commission</td>
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<tr>
<td>MLH</td>
<td>Ministry of Environment</td>
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<td>MME</td>
<td>Ministry of Mines and Energy</td>
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<td>MoA</td>
<td>Ministry of Agriculture</td>
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<td>MoFr</td>
<td>Ministry of Forestry</td>
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<tr>
<td>MoMEx</td>
<td>Ministry of Marine Exploitation</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>PKA</td>
<td>Directorate General of Nature Conservation</td>
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<tr>
<td>PROPER</td>
<td>BAPEDAL’s industrial water pollution control program</td>
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<td>RKL</td>
<td>Rencana Pengelolaan Lingkungan – Environmental Management Plan</td>
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<td>RPL</td>
<td>Rencana Pemantauan Lingkungan – Environmental Monitoring Plan</td>
</tr>
</tbody>
</table>
**Table of Contents**

Executive Summary ............................................................................................................................ i

1. Introduction................................................................................................................................. 1

2. The Legal Framework and Safeguards...................................................................................... 3

3. Technical Capacity ....................................................................................................................... 15

4. Environmental Constituencies and Accountability................................................................. 20

5. Regional Environmental Expenditure ..................................................................................... 27

6. Conclusions and Recommendations......................................................................................... 28

Bibliography .................................................................................................................................... 31
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Executive Summary

Indonesia has embarked on a major decentralization. The legal framework for decentralization (Laws 22 and 25 of 1999) authorizes the country's districts (municipalities and rural kabupaten) to manage most government services, and more than doubles the subnational share of public expenditures to over 40 percent. This reallocation would make Indonesia, now unusually centralized for its size and diversity, one of the most decentralized countries in the region.

Indonesia's economy will remain natural resource-dependent over the next decade. However, recent unsustainable resource use levels and degradation threats raise concern that decentralization in the natural resource sectors could lead to environmental neglect and further undermine the sustainability of natural resource use. This report analyzes opportunities and risks of decentralization of the terrestrial natural resource sectors off Java, with particular attention to forestry, mining and conservation of terrestrial biodiversity. Its findings and recommendations are summarized and updated from a larger study of environmental and natural resource management issues and options in post-Suharto Indonesia.¹

Whether Indonesia's drive to decentralize leads to more efficient, sustainable resource use or invites serious environmental deterioration will depend to a large extent on whether decentralization goes forward with or without adequate environmental safeguards in the regions. The core safeguards are national minimum environmental standards and a consultative environmental assessment (AMDAL) process. The regional environment agencies (BAPEDALDA) and natural resource line agencies (Ministry of Forestry, Directorate General of Nature Conservation, Ministry of Mines and Energy) share responsibility for their proper application at regional levels. Under one scenario, newly empowered local authorities would condone or even invite more intensive local resource use to boost local income and revenues, without adequate environmental safeguards. Whether due to lack of technical capacity or sympathy for populist demands for access to local resources, this scenario would lead to resource depletion, devastated landscapes and long-term, perhaps irreversible damage to the regional resource base. If exploitation rates in the resource-rich regions off Java remain at current unprecedented levels, these risks could play out quickly over the next five to ten years, ultimately narrowing affected regions' economic options.

The benefits of decentralization with safeguards could include improved resource outcomes (more efficient, sustainable resource use and conservation of protected resources) and improved governance (greater local participation in resource allocation decisions, greater accountability of regional governments, freeing of central agencies to concentrate on policy and oversight). However, to achieve these benefits, the key actors - central ministries, district and provincial governments, and local communities - must undergo substantial institutional change. Because the benefits of sensible decentralization in the natural resource sectors will accrue in the long run, there will be substantial pressure for "quick

¹ Indonesia: Environment and Natural Resource Management in a Time of Transition, February 2001. This report updates and supplements the decentralization chapter of the larger study, with an analysis of regional environmental mainstreaming issues and opportunities in the mining sector, and a summary of public environmental expenditure trends at regional levels.
fix" decentralization, without regard to potential long-term negative impacts on the environment. Unless these risks on the road to decentralization receive priority attention in the short term, they could easily foreclose achievement of the long-term benefits.

This report identifies four factors that will largely determine whether decentralization in the natural resource sectors goes forward with or without adequate environmental safeguards and, ultimately, whether its environmental outcomes are positive or negative. These factors include: the incentives created by the legal framework for decentralization; regional technical capacity; the presence or absence of a regional environmental constituency and regional accountability; and public expenditure levels.

The evolving legal framework for decentralization (Law 22/1999, Law 25/1999 and Government Regulation 25/2000) appears to create incentives for less sustainable natural resource use in two senses. First, Indonesia’s approximately 350 districts will become more dependent on natural resource-based revenues, and the resulting perverse incentives to accelerate land conversion and natural resource exploitation in the forestry and mining sectors could prove compelling for bupatis in revenue-starved rural districts. Regional revenue sources need to be vetted, and safeguards need to be applied, in order to ensure that natural resource-based revenues under the decentralization reforms “do no harm” to regional resource bases.

Second, the decentralization strategy laid out in the legal framework largely bypasses the country’s 27 provinces and cedes greater autonomy to the 350 districts. Indeed, strong district level management capacity is a medium- to long-term objective and an indicator of a healthy and mature natural resource and environmental management system. It should be noted, however, that most countries that have successfully pursued a decentralized approach to environmental management have devolved authority mainly to the provincial level. This is because provincial capital cities and towns are much more likely to be able to afford highly trained environmental personnel and sophisticated equipment, and to have the institutional infrastructure for support of essential technical capacity building and constituency building during decentralization. At present, these elements are less developed at the district level.

On the other hand, the legal framework creates several potential “checks and balances” to prevent or correct misallocation of functions (districts’ and provinces’ option to “upload” functions, the Regional Autonomy Advisory Board, the President’s authority to veto regional regulations and decisions, and the regions’ right to appeal). To support sustainable resource use under decentralization, these mechanisms need to be substantially strengthened.

Overall, technical capacity for safeguards application is limited at provincial and, to an even greater extent, district levels, in both core environment agencies and the natural resource agencies. Given that their mandate and experience have focused mainly on industrial and urban pollution to date, core environment agencies at all levels lack knowledge and experience in applying safeguards in the natural resource sectors. Regional environment agencies’ technical credibility with the regulated community is an issue, and is particularly acute in regions where priority environmental issues and employment are mainly in the natural resource sectors. Although the natural resource line agencies share responsibility for application of safeguards, “mainstreaming” of environmental policies and best practices
into their operations has been slow and uneven.

Regional environmental constituencies are embryonic outside Java. A survey of opinion leaders in three resource-rich provinces off Java showed significant variability in their views of local resource depletion, causes of environmental damage and government's environmental performance, with potentially important implications for decentralization. Significantly more opinion leaders shared core pro-environmental attitudes in some provinces than in others. Moreover, some provinces' core environmental constituencies were more inclusive (that is, included government officials and businessmen as well as civil society, and therefore were more likely to influence decision-makers) than others. Nevertheless, a common denominator across all three provinces was the weak link between attitudes and specific actions to support sustainable natural resource use. The survey results underline the fact that community support for the environment is significantly more developed in some regions than in others, and needs to be encouraged as an integral part of decentralization in the natural resource sectors.

The heart of accountability is a two-way exchange between local communities and government, in which regional officials' engrained habits of seeking higher-level approval and largely one-way communication with local communities are replaced by two-way communication, in which the official is prepared to explain and justify government performance and use of public resources. Unless environmental constituencies and accountability mechanisms are functioning properly, environmental safeguards cannot function properly.

Although a few of the measures necessary for improved natural resource management can be achieved at minimal cost, the majority will require significant public and private expenditure on preventive and mitigating measures. However, public expenditure on environmental activities is extremely low in Indonesia, in terms of percentage of GDP, percentage of government expenditures, and per capita expenditure level, as well as relative to the other East Asia crisis countries. Moreover, environmental expenditures at regional levels have suffered especially deep cuts since the crisis, and the share of total environmental budget allocated to regional activities relative to activities at the center has decreased. Additional funding is needed to keep pace with major post-crisis increases in pressure on Indonesia's forests, biodiversity stock and land affected by mining operations, as well as urban and industrial pollution. Whether regional budgets include environmental expenditures commensurate with increasing pressures on regional resource bases will be a critical indicator of political will to support adequate regional safeguards.

Recommendations. With these considerations in mind, the report recommends a practical approach to decentralization of the natural resource sectors with adequate environmental safeguards, which emphasizes:

- First, a two-track program of technical capacity and constituency building:
  - a technical capacity building program including training in environmental aspects of the natural resource sectors should be a top priority. Strengthening of safeguards capacities of natural resource agencies and BAPPEDAs (Regional Planning Boards) is also needed. Available technical capacity and constituency-building resources - in particular, the generally stronger institutional base for building capacity and constituencies at the provincial level - should be used to strengthen safeguards.
capacity for the benefit of the districts, in particular, rural districts. District staff could be seconded (magang) to provinces for training and piloting; and

- a constituency building campaign to spread environmental knowledge, build pro-environmental attitudes, and forge links between attitudes and proactive behaviors to improve environmental quality should be targeted on key decision-makers in the regions. Constituency-building should be accompanied by "accountability pilots," in which regional officials explain and justify government performance and use of public resources related to natural resource and environmental management.

- Second, strengthening the "checks and balances" in the legal framework to prevent or correct misallocation of functions among levels of government. The adjudication role of the Regional Autonomy Advisory Board should be strengthened, by mandating proactive and systematic monitoring of regional performance of decentralized functions generally, and relative to natural resource and environmental management in particular. A cross-sectoral Natural Resources Council should be established, to provide technical advice to the Board on natural resource management and environmental safeguards at provincial and district levels. The Board and Council should include members from all levels of government and civil society, and local communities should have standing to appeal when regional natural resource and environmental management performance is inadequate.

- Third, additional funding to keep pace with the major increases in pressure on Indonesia's natural resources since the 1990s. Expenditures are required to rehabilitate degraded forests, expand replanting programs, improve forest fire management, protect and manage parks better, conduct mine inspections, manage mine reclamation bonds, establish credible environmental databases, build technical capacity in government agencies, and support constituency building programs. Regional government officials and civil society, who are about to assume increased authority and responsibility for natural resource management for the first time, need to be aware of the implications of environmental expenditure trends and options for their jurisdictions. As decentralization proceeds, the regional share of public environmental expenditures should increase.

- Fourth, an asymmetric approach, which recognizes that some regions will be ready for natural resource and environmental management sooner than others. Assigning differentiated authority to regional governments based on political commitment, constituency strength, technical capacity, population, revenues and environmental expenditure levels can alleviate the pressure of having to implement a country-wide uniform decentralization program. Decentralization support grants to provinces and districts that demonstrate commitment to capacity building, constituency building, environmental expenditures and regional implementation of safeguards could be a mechanism to facilitate decentralization, while recognizing the need for an asymmetric approach.

Table 1 summarizes the suggested roles of each level of government, cross-level bodies and local communities in decentralization of the natural resource sectors.
<table>
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<tr>
<th>Responsible Level</th>
<th>Functions</th>
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| **Center**                | * Provide legal framework that defines clearly responsibilities and services to be provided at central, provincial and district levels, how each level will generate revenues, and how their performance will be evaluated. Set minimum national standards. Specify a notional timeframe for transition, recognizing that implementation will necessarily be asymmetric.  
  * Set policy and get out of operations, except where functions are specifically reserved to the center or activities cross regional boundaries (e.g. central responsibility for cross-provincial activities), and reorganize central agencies and fiscal balance accordingly.  
  * Deliver training (mainly training of trainers to provinces), to build knowledge of minimum standards and service delivery capacity.  
  * Monitor compliance with national minimum standards (mainly provincial compliance during early decentralization), and be prepared to recentralize functions where compliance is lacking.  
  * Perform provincial natural resource utilization and safeguard functions, if “uploaded” from provinces and/or recommended by Regional Autonomy Advisory Board. |
| **Cross-level Management**| **Regional Autonomy Advisory Board**  
  * Evaluate regional service delivery and performance, to determine readiness for decentralization, and need for recentralization in case of regional failure to meet national minimum standards. |
| **Mechanisms**            | **Natural Resource Council**  
  * Conduct consultation with all levels of government and civil society regarding natural resource utilization permitting, environmental safeguards and monitoring.  
  * Advise Regional Autonomy Board on permitting, environmental safeguards and monitoring. |
| **Province**              | * Develop and implement integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization, for cross-district and mid-size activities.  
  * Deliver transitional on-the-job training to district officials, temporarily seconded to provincial agencies, to prepare for eventual full district autonomy. Working with district officials, assist pilots of integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization to within-district and small-scale activities at district level.  
  * Self compliance monitoring and reporting to community organizations and center.  
  * Build accountability to provincial community and upward.  
  * Asymmetric transfers of authority and sharing of responsibility, based on different natural resource endowments, population, capacity and constituencies.  
  * Perform district natural resource utilization and safeguard functions, if “uploaded” from districts and/or recommended by Regional Autonomy Advisory Board. |
| **District**              | * Build capacity to deliver natural resource utilization and environmental management services.  
  * Build accountability to local community and upward.  
  * Pilot integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization for within-district and small-scale activities.  
  * Self compliance monitoring and reporting to local community and upward to province and center.  
  * Asymmetric transfers of authority and sharing of responsibility at district level, based on different natural resource endowments, population, capacity and level of constituency development. |
| **Local community**       | * Constituency building, moving from passive acceptance of government’s actions to insistence on consistent delivery of services tailored to local needs, and accountability of district and provincial officials. |
Decentralization of Natural Resource Sectors in Indonesia: Opportunities and Risks

1. INTRODUCTION

Indonesia has embarked on a major decentralization. The legal framework for decentralization (Laws 22 and 25 of 1999) authorizes the country's 350 districts (cities and rural kabupaten) to manage most government services, and will more than double the subnational share of public expenditures to over 40 percent. This reallocation would make Indonesia, now unusually centralized for its size and diversity, one of the most decentralized countries in the region. Over the next 3-5 years, the balance struck between the political imperative for visible action and the need for structured preparation will determine whether decentralization will improve the welfare of Indonesia's people by encouraging sustainable utilization of natural resources, or invite serious environmental deterioration. Local environmental constituencies and improved accountability will also be critical factors.

Indonesia's economy will remain natural resource-dependent over the next decade, and decentralization in the natural resource sectors – forestry, mining, fisheries – will create both risks and opportunities. Given the potent mix of the lingering economic crisis, political uncertainty and a partial breakdown of law and order, decentralization of natural resource utilization and environmental management could accelerate environmental degradation. Under this scenario, newly empowered local authorities would condone or even invite more intensive local resource use to boost local income and revenues, without adequate environmental safeguards. Whether due to lack of technical capacity or sympathy for populist demands for access to local resources, this scenario would lead to resource depletion, devastated landscapes and long-term, perhaps irreversible damage to the regional resource base. If exploitation rates in the resource-rich regions off Java remain at their current unprecedented levels, these risks could play out quickly over the next five to ten years, ultimately narrowing affected regions' economic options.

On the opportunity side, the benefits of decentralization with safeguards could include improved resource outcomes (more efficient, sustainable resource use and conservation of protected resources) and improved governance (greater local participation in resource allocation decisions, greater accountability of regional governments, freeing of central agencies to concentrate on policy and oversight). However, achieving these benefits will require all the key actors - central ministries, district and provincial governments, and local communities - to undergo substantial institutional change. Because the benefits of sensible decentralization in the natural resource sectors will accrue in the long run, there will be substantial pressure for "quick fix" decentralization, without regard to potential long-term negative impacts on the

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2 At present rates of forest conversion (1.7 million ha annual forest cover loss off Java from 1988-2000), Sumatra will lose essentially all its dry lowland forests soon after 2005, and Kalimantan will have very little lowland forest left by 2010. Small-scale mining operations, which increased significantly following the economic crisis, have substantial environmental impacts (sedimentation of water bodies, mercury pollution, total lack of land reclamation after mine closure), but are unregulated and use no environmental precautions. See Indonesia – Environment and Natural Resource Management in a Time of Transition, 2001, pp. 7-13, 67-70.
environment. Unless these risks on the road to decentralization receive priority attention in the short term, they could easily foreclose achievement of the long-term benefits.

This report focuses on present knowledge of the problems and prospects for decentralization of natural resource utilization and environmental management in Indonesia, the critical issues to be decided, and decentralization support strategies for donors and for the Government of Indonesia. Decentralization is inherently complex. One size fits neither all sectors nor all locales. This chapter therefore emphasizes the sectoral and geographic variations that must be confronted when the theory of decentralization moves to the reality of the diverse Outer Islands. The concerned government agencies are the Ministry of Forestry (MoFr), including the Directorate-General of Nature Conservation; the Ministry of Mines and Energy (MME) and their regional counterparts; BAPPENAS and the BAPPEDAs (Regional Planning Boards); and the Ministry of Environment, the Environmental Impact Management Agency (BAPEAL) and their local and regional counterparts (BAPEALDA and BAPEAL Regional). The greatest short- to medium-term opportunity of the decentralization process lies in improved accountability and coordination among these agencies, leading to integrated planning, permitting, environmental safeguards, and monitoring and reporting of compliance with national minimum standards at district and provincial levels.

The geographic focus of this report is one category of Indonesian province, defined by natural resource endowment relative to population. The resource-rich, low population provinces that are our focus include most provinces in Kalimantan, several provinces in Sumatra, and Irian. These provinces send far more revenues to the center than they get back. Given that many environmental problems found in densely populated areas, such as lack of sanitation, solid waste, noise and odors, are fundamentally local, and hence best addressed at the local level, decentralization of environmental management in urban and resource-rich, high population regions offers substantial, visible benefits to local residents. However, environmental issues in the natural resource sectors, such as destructive logging practices, mining waste disposal and effluent from oil palm processing, generally occur in less densely populated areas, where natural resources may be virtually the sole source of employment. Environment differs from other service sectors in developing countries, such as health, education or road-building, in that it ordinarily lacks a ready-made constituency, and this is particularly true in resource-rich, low population regions. The problem of building pro-environmental constituencies receives substantial attention in the analysis that follows.

Given district governments’ relative lack of technical and managerial capacity, even on Java, it is unlikely that district governments off Java currently possess adequate resources, such as well trained officials, university high population in absolute terms but resource-poor relative to population (Java, Bali, South Sulawesi, some regions in Sumatra, which have abundant water and coastal zones, some forests, and national parks); and c) resource poor, low population (the Nusatenggara provinces). Personal communication from Guy Alaerts.

3 There are three basic types of province: a) resource-rich, low population (e.g. Kalimantan); b) resource-rich, low population provinces that are our focus include most provinces in Kalimantan, several provinces in Sumatra, and Irian. These provinces send far more revenues to the center than they get back. Given that many environmental problems found in densely populated areas, such as lack of sanitation, solid waste, noise and odors, are fundamentally local, and hence best addressed at the local level, decentralization of environmental management in urban and resource-rich, high population regions offers substantial, visible benefits to local residents. However, environmental issues in the natural resource sectors, such as destructive logging practices, mining waste disposal and effluent from oil palm processing, generally occur in less densely populated areas, where natural resources may be virtually the sole source of employment. Environment differs from other service sectors in developing countries, such as health, education or road-building, in that it ordinarily lacks a ready-made constituency, and this is particularly true in resource-rich, low population regions. The problem of building pro-environmental constituencies receives substantial attention in the analysis that follows.

4 Many other provinces break roughly even, and a few would be even poorer without the transfers they receive from the center. Although many findings of this study may also apply to the other two categories, the field studies conducted for this report did not extend to those areas. Further research is needed to assess whether decentralization prospects for environmental and natural resource management differ from the resource-rich, low population areas targeted in this report.
faculties, accredited laboratories, and political leaders of sufficient stature to sustain the natural resource base for use by future generations. Capacity building will depend on resources such as these, which are generally more likely to be found in provincial capitals rather than smaller district towns.

The incentives and penalties for sustainable resource use to be applied by newly empowered local authorities have yet to be determined. While recent legislation provides a formal legal framework, practical management instruments are still lacking, and once they are available, their application will almost certainly be ad hoc and uneven.

Preliminary research on local constituency building, described in this chapter, provides an understanding of differences among potential environmental constituencies in three relatively resource-rich provinces off Java. However, little is known about the other twenty-three provinces, not to mention the approximately 350 districts that are supposed to be the focus of power and resources under the new laws.

This chapter lays out the issues that will be encountered during decentralization of natural resource utilization and environmental management functions to the resource-rich, low population regions off Java. These issues include:

- interpretation of the legal framework for regional governance and finance as it applies to the natural resource sectors and environmental management; and

- the balance to be struck between the political imperative for action and the need for regional capacity and constituency building, so as to optimize the political, economic and technical outcomes of decentralization.

The report is organized in five sections. Section 2 outlines the legal framework for decentralization of natural resource and environmental management, and identifies practical implementation issues and options. Section 3 discusses technical capacity requirements. Section 4 presents results of opinion leader surveys designed to assess the strengths and weaknesses of provincial environmental constituencies, and recommends accountability mechanisms. Section 5 analyzes public environmental expenditures, including shares of these expenditures allocated to the regions, relative to the center. The last section outlines a strategy for decentralization of natural resource and environmental management with adequate safeguards (see also Figure 1).

2. THE LEGAL FRAMEWORK AND SAFEGUARDS

Three recent pieces of legislation, Law 22/1999 on Regional Governance, Law 25/1999 on the Fiscal Balance Between the Central Government and the Regions, and Government Regulation 25/2000 on Government Authority and Provincial Authority as an Autonomous Region comprise the main elements of the post-New Order legal framework for decentralization. While this framework remains to be interpreted, it is useful to consider its broad outlines.

Nevertheless, a caveat is important here. Legal institutions have never been strong in post-independence Indonesia. Legal rights were repeatedly abrogated under the New Order, and courts have seldom been decisive. While laws may set overall parameters, informal exchanges of favors among government officials, businesspersons and local communities often have greater force than law in a particular matter. What happens to the environment will probably be determined mainly by businesspersons,
administrators, police and community representatives, acting informally, rather than by lawyers arguing in court. Moreover, when practical outcomes of decentralization, such as effects on environmental quality or local service delivery, are evaluated, variation by sector and locality will frequently be as important, if not more important, than laws whose system-wide applicability may be more apparent than real.

**Previous regional governance framework.** Except for two brief interludes in the 1950s, weak regional authority has been the norm in Indonesia. However, both interludes continue to serve as benchmarks in public debate over decentralization. The first bench mark was the country’s brief, reluctant adoption of a federal system as a condition of Dutch recognition of Indonesian sovereignty in 1949, which ended with the adoption of a unitary system the following year. A lasting effect of the federal interlude has been the taboo on any mention of federalism as a regional governance option for Indonesia. The second interlude of strengthened regional authority was the attempted secession of several provinces in Sumatra and Sulawesi in 1956-57, which was settled by military force.

Under the New Order, a centralized system of governance was created, in many cases over the objections of regional elites in the Outer Islands. The legal cornerstone of the New Order’s approach to regional governance was Law 5/1974, which confirmed regional executives’ appointment by and accountability to the national government, in particular, the Department of Home Affairs. Law 5/1974 created two parallel structures of regional governance. One, the “regional administration,” was comprised of branch offices of central government departments (kantor wilayah or kanwil) and the governor at the provincial level, and was an extension of central authority, charged with implementing central policies in the regions. In the districts, the kantor departamen or kandep and the district executive (bupati or mayor) were likewise charged with implementing central policies. The other parallel structure, the “regional government,” had its own bureaucratic departments (dinas), which were largely a mirror image of the kanwil or kandep, plus a legislature (a Level I or Level II DPRD) and a regional executive called a level I or level II regional head.5 Under this bifurcated organization, fiscal resources and executive authority were concentrated on the administrative side, and legislative authority was confined to the “autonomous” regional government side, with the Ministry of Home Affairs exercising close oversight of the DPRD.

In practice, implementation of Law 5/1974 emphasized mobilization of the regions in the national development effort, through establishment of a hierarchical administrative structure reaching from the center to villages across the archipelago.6 Despite various ministerial decrees ceding administrative functions to the regions and periodic pilot decentralization initiatives such as the Regional Autonomy Program in the forestry sector, sectoral agencies in the regions remained essentially central “outposts,” hobbled by many restrictions and still largely dependent on “assistance” budget allocations.

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5 This separation of administration and politics was breached in one key respect – that the same person, the governor or bupati, served simultaneously as head of regional administration and regional government. In some regions, the same official served as both kanwil head and head of the corresponding dinas, and reporting both to the governor and the line agency at the center. However, this practice was uneven across sectors and regions. See Michael Malley, “Regions: Centralization and Resistance,” in Donald K. Emmerson, ed., Indonesia Beyond Suharto: Polity, Economy, Society, Transition (M.E. Sharpe), 1999.

from the center. In the mining sector, MME allocated resource use rights, while local
governments and local communities often
learned of new mining concessions after the
fact. Concession boundaries were drawn
without regard for existing land uses or local
communities’ customary rights to resources
within those boundaries.

As Law 5/1974 did not address fiscal
matters, a large share of central funding to the
regions during the New Order was via
INPRES (Instruksi Presiden) – ad hoc transfers
by presidential decree, in the form of general
grants to provinces and districts and funds for
various specific purposes, such as education or
road building. Jakarta appropriated natural
resource revenues from oil and gas, forestry
and mining, income taxes and the value added
tax, and returned only residual shares of
resource revenues to producing regions.
Inferior sources of revenue, such as motor
vehicle registration, were left to the regions.
Through the 1990s, the regions’ capacity to
raise own revenues remained severely limited,
with provinces raising only about one-quarter
and districts about one-fifth of their total
budgets.

Regional governance reform. Law 22/1999
on Regional Governance, enacted in May 1999
under President Habibie and effective in 2001,
abolishes the hierarchical relationship between
provinces and districts/cities and treats the
two levels quite differently. The country’s
approximately 350 districts gain greater
autonomy, with local elections of district heads
no longer subject to higher-level approval, and
new responsibility for a broader menu of local
services, as well as oversight of village-level
government (see Box 1). In theory at least,
Law 22 nurtures democratic accountability at
the district level.

In contrast, the autonomy of the 27
provinces is sharply bounded under Law 22.
Governors remain primarily accountable to the
President and the central ministries. The
provinces become residual service providers,
responsible only for cross-district matters and
whatever services are deconcentrated by the
center or uploaded by the districts. As
bystanders in the decentralization process, the
provinces do not gain improved capacity to
respond proactively to emerging democratic
constituencies under Law 22.

While the district is the default level to which
regional authority is assigned under Law 22,
the law explicitly allocates responsibilities for
natural resource utilization, conservation and
environment across all levels of government.
In fact, the natural resource sectors,
conservation and environment are the only
sectors with functions assigned to more than
one level of government under Law 22.
While natural resource utilization is reserved
to the center, the “regions” (presumably both
districts and provinces) are also authorized to
manage natural resources located in their
area. Similarly, conservation is reserved to
the center, but “environment conservation” is
designated a mandatory function of the

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7 See Hariadi Kartodihardjo, “Policies on Decentralized
Forest Administration in Indonesia and Their
Implementation,” 1999. Dinas, of course, had lesser
functions and resources than the kanwil all along.
8 The two natural resource and environment INPRES,
for Regreening and Replanting, date from the 1970s; the
Protected Areas and Environmental Impact
Management INPRES, date from 1997. See Indonesia –
Environment and Natural Resource Management in a
Time of Transition, Ch. 5, “Environmental
Expenditure.”
9 Law 22/1999 also provides a foundation for
democratic accountability at the village level, which
could have important implications for natural resource
utilization, but full examination of village level
governance of natural resource use is beyond the scope
of this chapter. Articles 93-111 provide two bases for
recognition of adat or long-established systems of
resource utilization, which could support delineation of
community resource use rights under subsequent
legislation. The two bases are genuine elections of
village heads and a village council, and regional powers
over natural resource management, which districts
could devolve to villages.
## Box 1: Provincial versus District Governance Under Law 22/1999

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Retain both administrative and autonomous functions;</td>
<td>- Expand autonomous functions, while shedding administrative ones;</td>
</tr>
<tr>
<td>- Governors are nominated and elected by the provincial DPRD, subject to President’s approval;</td>
<td>- Mayor/bupati are nominated and elected by the district DPRD, without outside approval;</td>
</tr>
<tr>
<td>- The only mandatory provincial functions are cross-district matters, plus whatever functions are “uploaded” by districts or deconcentrated by the center.</td>
<td>- District services are expanded to include 11 mandatory functions(^a) and all other functions not reserved to the center(^b) or uploaded to the provinces.</td>
</tr>
</tbody>
</table>

\(^a\)The 11 mandatory functions for districts are public works, health, education and culture, agriculture, communication, industry and trade, capital investment, environment, land, cooperatives and manpower affairs. See Law 22/1999, Article 11.2.

\(^b\)The 12 central functions are international policies, defense and security, judicature, monetary and fiscal authority, and religion, as well as national planning and macro national development control, financial balance fund, state administration and state economic institutional systems, human resources development, natural resources utilization, strategic high technology, conservation and national standardization. See Law 22/1999, Articles 7.1, 7.2.

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districts, and maintenance of environmental conservation is assigned to the “regions” (again presumably both districts and provinces).\(^{10}\) For an overview of the allocation of functions across levels of government under the main implementing regulation to date, Government Regulation (PP) 25/2000 on Government Authority and Provincial Authority as an Autonomous Region, see Table 2.

This evolving framework for regional governance of natural resource utilization and environmental management raises three practical implementation issues:

- that uncertain and/or uneven application of Law 22 and Law 25 of 1999 could result in a de facto abandonment of environmental safeguards;
- that the new legal framework provides for adjudication and recentralization in the event of failure by district or provincial authorities to maintain national minimum standards, but these provisions require strengthening; and
- that the new framework lacks transition arrangements, particularly with regard to the role of the provinces.

**Safeguards and integrated natural resource management.** The core elements of environmental safeguards are a set of national minimum standards and a transparent, consultative environmental assessment (AMDAL) process. Under national minimum standards, no province or district can legislate standards that are less demanding than the national standards, though they may enact stricter standards. Government Regulation (PP) 25/2000 reserves national environmental standard-setting for pollution, conservation and natural resource utilization to the center, and provides that provincial standards must be based on national standards.

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\(^{10}\) See Law 22/1999, Articles 7.1, 7.2, 10.1 and 11.2.
Table 2. Allocation of Natural Resource and Environmental Management Functions
Under Government Regulation 25/2000, by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Government Authority(^{11})</th>
<th>Autonomous Regional Authority (province as &quot;autonomous&quot; region)(^{12})</th>
<th>Comments/Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
<td>➤ determines forest areas, and changes of status and function;</td>
<td>➤ oversees cross-district forests, including:</td>
<td>Under PP 25/2000, MoFr remains the most centralized of the natural resource sectors.</td>
</tr>
<tr>
<td></td>
<td>➤ manages and grants permits for management of conservation and protected areas;</td>
<td>➤ granting cross-district permits for forest product use and manufacturing;</td>
<td>The center retains two operational roles - determination of forest areas and changes in status and functions, and conservation and protected area management. Another MoFr policy initiative, Perumisasi, would maintain central control of existing forest concession areas. Perumisasi calls for upgrading parastatal Inhutani forest companies to state enterprises (Perum), which would take over existing forest concession leases.</td>
</tr>
<tr>
<td></td>
<td>➤ sets criteria and standards for:</td>
<td>➤ participating in Government's determination of cross-district forest areas and changes of status and function, together with districts;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• forest management;</td>
<td>➤ manages setting and security of forest boundaries; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• establishment of forest exploitation areas, conservation areas;</td>
<td>➤ supervises forest rehabilitation, reclamation, &amp; choice of silviculture method.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• tariff of business permit-holders' contribution for forest use, reforestation funds;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• business licenses for use of forest areas, forest products, environmental services.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>➤ sets business work area criteria;</td>
<td>➤ grants core business permits (exploration and exploitation permits) for cross-district general mining.</td>
<td>Implies that district grants core business permits for within-district general mining, regardless of scale of mining activity. Issue: need to match level of government engaged in negotiation of permit to scale of mining activity.</td>
</tr>
<tr>
<td></td>
<td>➤ sets general mineral exploration and processing standards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>➤ sets standards/guidelines for pollution, conservation, control of natural resources and preservation of environmental functions;</td>
<td>➤ sets environmental quality standards based on national standards;</td>
<td>Implies that district reviews AMDAL of within-district activities. Issue: this is inconsistent with the 1997 AMDAL Regulation, which devolves within-province AMDAL review to Provincial AMDAL Committees (KODAM), but not any lower than the provincial level.</td>
</tr>
<tr>
<td></td>
<td>➤ reviews AMDAL of activities with potentially broad social impacts, covering more than one province and having security implications.</td>
<td>➤ reviews AMDAL of activities covering more than one district.</td>
<td></td>
</tr>
<tr>
<td>Spatial Planning</td>
<td>➤ derives national spatial plan from district spatial plans.</td>
<td>➤ determines provincial spatial plans based on mutual agreement between provinces and districts.</td>
<td>Issue: focus on district spatial plans could conflict with forestry article under PP 25/2000 (Article 2.4c), which vests authority to determine forest boundaries and changes of status and function with Government</td>
</tr>
</tbody>
</table>

\(^{11}\) Government Authority is implementable either at the center or by the province as an administrative function and extension of the center (deconcentration).

\(^{12}\) Authority of the province as an autonomous region is distinct from administrative authority (per ft. 5), and is implemented by the regional head, DPRD and dinas (devolution).
Table 2. Continued

<table>
<thead>
<tr>
<th>Land</th>
<th>➤ Determines:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• requirements for issuance of land rights, land reform and National Cadastral Framework;</td>
</tr>
<tr>
<td></td>
<td>• land administration standards;</td>
</tr>
<tr>
<td></td>
<td>• land service cost guidelines;</td>
</tr>
<tr>
<td></td>
<td>➤ manages “national lands,” including government sites and facilities, national parks and preserves, military lands and forests; and</td>
</tr>
<tr>
<td></td>
<td>➤ develops oversight/ supervision system for performance of decentralized land offices.</td>
</tr>
<tr>
<td></td>
<td>➤ Local Land Office (Dinas Pertanahan):</td>
</tr>
<tr>
<td></td>
<td>• issues land tenure certificates on demand and in “systematic” registration campaigns;</td>
</tr>
<tr>
<td></td>
<td>• issues land acquisition and development location permits in accordance with local master plans;</td>
</tr>
<tr>
<td></td>
<td>• supports local spatial planning;</td>
</tr>
<tr>
<td></td>
<td>• coordinates with land and building tax (PBB) office to prepare integrated cadaster; and</td>
</tr>
<tr>
<td></td>
<td>• coordinates with local forestry office for uniform de... of all lands in local government area.</td>
</tr>
</tbody>
</table>

Regarding the AMDAL (environmental assessment) process, PP 25/2000 assigns environmental safeguards review of activities that have broad social impacts, security implications and/or cover more than one province to the center. This is consistent with the current AMDAL Regulation, which places national-level environmental assessment review under a single Central AMDAL Commission managed by BAPEDAL. PP 25/2000 further specifies that provinces will conduct AMDAL review of activities covering more than one district. As the district is the default level to which authority is transferred under Law 22, this implies that districts will conduct AMDAL review of activities within their boundaries. However, the current AMDAL Regulation devolves within-province environmental safeguards review to Provincial AMDAL Commissions (KODAM), but no lower.

As a transitional measure, AMDAL review of within-district activities could be conducted at the provincial level, as part of a larger provincial training effort for district officials (see “Transition arrangements and the role of the provinces” and Figure 1 below). The resources of provincial capital cities and towns (universities, laboratories, NGOs, constituencies for sustainable resource use, more developed government agencies) could be used as training grounds to develop AMDAL skills and procedures for subsequent devolution to the districts.

The variable allocation of responsibility for natural resource utilization under PP 25/2000 is demonstrated by the forestry and mining sectors, which have proposed quite different allocations of functions among levels of government. Such variation could make cross-sectoral coordination among natural resource sectors, safeguards and spatial planning at district and provincial levels extremely difficult.

In the forestry sector, PP 25/2000 does not devolve two primary functions - determination of forest areas and changes in their status and function (including conversion), nor does it devolve management of various conservation and
protected areas. It places these functions, as well as policy and standard setting, under direct control of the center, and assigns cross-district functions, e.g., granting some cross-district permits, to the provinces. This allocation of most planning and implementation functions to central and provincial levels under PP 25/2000 appears consistent with the new Law 41/1999 on Basic Forestry. However, while the Forestry Law assigns the provinces a relatively significant role, Law 22/1999 casts the provinces mainly as bystanders in the decentralization process.

In contrast, in the case of general mining, PP 25/2000 assigns standard- and criteria-setting functions to the center and cross-district matters to the provinces. All other operations, regardless of scale, are implicitly devolved to the district. Whereas MoFR’s centralized approach appears to be based on Article 7.2 of Law 22/1999, which reserves natural resource utilization to the center, this radical decentralization of general mining under PP 25/2000 is pegged to Article 10.1 of Law 22, which authorizes regions to manage natural resources in their areas, regardless of scale.

In transactions between rural kabupaten and large- and medium-scale mining companies, the most likely outcome, given the districts’ limited technical capacities and likely absence of environmental constituencies, and the mining companies’ resources and significance to the local economy, is a “company town” scenario, in which the district government, beholden to the company for revenues and employment, gives little or no attention to environmental and social impacts of mining operations. When local mineral deposits are depleted, the local resource base, which typically suffers severe soil degradation during mining operations, often can no longer support the local population, and they leave the area. Numerous examples of such dying towns can be found in the mining districts of West Virginia and Pennsylvania in the United States. To avoid the adverse environmental effects of the unequal negotiating position of a district government relative to a medium- or large-scale company, the scale of proposed mining activities should be a factor in allocation of regulatory authority among levels of government, with small-scale mining regulated at the district level, and medium- and large-scale mining regulated at higher levels. However, local government and communities should be consulted and participate in government oversight of mining activities, regardless of which level of government has lead responsibility.

Adjudication and recentralization. Law 22/1999 and PP 25/2000 provide several “checks and balances” to prevent or correct misallocation of functions. For example, a district that will not or cannot implement a mandatory function can seek to “upload,” i.e., to transfer implementing authority to the province, and the province may in turn seek to upload functions it cannot perform to the center. The President may veto regional regulations and decisions by heads of regions. The Law establishes a Regional Autonomy Advisory Board, chaired and co-chaired by the Ministers of Home Affairs and Finance respectively, to advise the President on fiscal relations and allocation of functions between levels of government.14

Good governance in decentralization requires adjudication and “recentralization” mechanisms such as the Regional Autonomy Advisory Board. Two international examples

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13 All mining other than oil and gas.

of central governments retaining and using the recentralization option are relevant. In the United States, the federal government delegates environmental management responsibility to the states, contingent on the states’ performance. Enforcement of national minimum standards may be delegated to states, but not below the state level. State environment agencies must monitor and report to the US Environmental Protection Agency (USEPA), and USEPA can rescind delegation of functions for poor performance. If delegation is rescinded, functions are ordinarily taken over by one of USEPA’s ten regional offices, which are deconcentrated branches of USEPA, similar to Indonesia’s BAPEDAL Regional.

In Korea, the recentralization option has allowed the Ministry of Environment (MoE) to withdraw authority that was prematurely delegated to regional environmental agencies, then redelegate once local capacity improved. MoE originally delegated broad air and water pollution control functions to six regional environmental agencies, which were new and lacked experience, in 1986. In 1992, a toxic spill in the Nakdong River, upstream of Korea’s third largest city, drew national attention to the regional agencies’ weak technical and coordinating capacities, and MoE recentralized many previously delegated functions. Meanwhile, regional and local environment offices worked to build local capacity. Two years later, when a second major spill occurred at the same location on the Nakdong River, MoE determined that regional capacity had substantially improved, and re-delegated the functions that had been withdrawn at the time of the first spill. An important lesson of Korea’s experience is that transfer of responsibilities should be contingent on performance, and recentralization pending improvement of regional capacity should always remain an option.

The structure of the Regional Autonomy Advisory Board established under Law 22 and PP 25 – its multi-level membership, including Ministries of Home Affairs, Finance and other concerned ministries, the Regional Government Association (presumably both district and provincial levels) and representatives of regional legislatures (district and provincial DPRDs) – is sound. However, several additional provisions are needed, to strengthen the Board’s adjudication and recentralization roles, both in general and relative to natural resource and environmental management in particular.

- First, the Board should monitor regional governments’ performance of decentralized functions systematically and proactively, instead of waiting for appeals from regional governments. Such appeals are likely to be infrequent, because governments rarely give up functions and accompanying budget voluntarily, even when their performance is poor.

- Second, a cross-sectoral Natural Resource Council should advise the Board on matters related to natural resource management and environmental safeguards at district and provincial levels. Given the Board’s broad mandate across all sectors, it will require specialist advice. The Natural Resource Council, comprised of government agencies with natural resource mandates (Forestry, Agriculture, Mining and Energy, Environment, River Basin Agencies) at central and regional levels, plus NGOs and other stakeholders, would assess regional performance of natural resource and environmental management functions against national minimum standards, consult with regional stakeholders, and provide technical inputs to the Board’s submissions to the President. The Board and Council should include informed members of civil society who are expert in
natural resource and environmental management.

- Third, local communities at both provincial and district levels should have standing to submit appeals to the Board when regional performance of decentralized functions, including natural resource utilization and environmental management, is inadequate. If failure to comply with national minimum standards is confirmed, recentralization should be an option.

**Transition arrangements and the role of the provinces.** While the goal of the new legal framework – to devolve management of most government services to the districts – is clear, implementation mechanisms and transition arrangements remain to be identified. To reduce confusion in the early phases of decentralization and minimize the need for recentralization, devolution could proceed in stages. (See Figure 1 Strategy for Decentralization of National Resource Sectors with Environmental Safeguards.)

- During the first stage, concerned provincial agencies (BAPEDALDA, BAPPEDA, forestry, mining and other natural resource agencies) would receive intensive safeguards skills training, including training of trainers.¹⁵

- During the second stage, district agencies, anticipating eventual devolution of authority for natural resource utilization and environmental management, would second district environmental and natural resource staff to interim district offices at the provincial level (magang), where the resources of provincial capital cities (universities, laboratories, NGOs, constituencies for sustainable resource use, more developed government agencies) would be used as training grounds to produce both skilled manpower and procedures that would subsequently be devolved to the districts. Provincial agencies would be responsible for providing safeguards training to district officials. Secondment of district officials to the provinces for training would be a condition for transfer of authority to the districts.

- During the third stage, district officials, assisted by provincial agencies, would pilot integrated district planning, permitting, environmental safeguards and monitoring of within-district and small-scale activities at the district level. These temporary measures would satisfy both the objectives of Law 22/1999 and practical requirements for successful decentralization. Authority in the natural resource and environment sectors would be fully decentralized when the Regional Autonomy Advisory Board certifies that a district has developed adequate capacity to handle full decentralization.

Implementing regulations could help clarify expectations under Law 22/1999 and PP 25/2000 by establishing a notional schedule for staged decentralization over a 3-5 year transition period. However, given inherent disparities in the regions' local capacities, natural and human resource endowments, commitment to decentralization, and ability to generate own revenues, uniform decentralization across regions and across sectors is highly unlikely. Assigning differentiated authority to subnational governments based on regional political will, technical capacity, population, resource endowment and the like can alleviate the pressure of having to implement a country-wide uniform decentralization program for natural resource utilization and environmental safeguards. Under the umbrella of

¹⁵See Figure 1 and Sections 3 and 6.
asymmetric decentralization, the pace and sequencing of decentralization in the natural resource and environment sectors can be tailored to local capacity, constituencies and needs, while remaining within the parameters of the notional transition schedule.


As autonomous regions with decentralized authority, districts have their own budgets (APBD). The districts' sources of revenue include: a) own (locally generated) taxes, levies and region-owned enterprises; b) "balance fund" allocations from the State Budget (APBN), which are shared between districts and the center, and include the General Allocation and Special Allocation; c) regional loans; and d) other legal revenues. During the 1990s, districts typically generated only a fifth of their total budgets, and depended on sectoral and INPRES funds from the State for most of their budgets. Under Law 25, INPRES and sectoral allocations from the APBN will be replaced by the General Allocation, Special Allocation and other "balance funds." Two of the three types of balance funds are land and natural resource revenues collected by the center – that is, taxes on land, property and transfer of land and property rights, and shares of forestry, mining, fisheries and Reforestation Fund revenues (see Table 3). The only balance fund not based on land or resource revenues is the General Allocation.

The introduction of resource-based balance funds creates perverse incentives for districts to accelerate or, more passively, condone land conversion and natural resource exploitation in the forestry, mining and fisheries sectors, in order to generate local revenues. As the district head is elected by and financially accountable to the DPRD, these incentives are likely to prove compelling for bupatis in revenue-starved rural districts. In a context of poor implementation of current laws, incomplete national standards, underfunding of environmental services and limited local capacity, the increased pressures on local resources resulting from reliance on resource-based balance funds are unlikely to "rationalize" use of natural resources. While they may fill district coffers, they are unlikely to produce "win-win" results in terms of sustainable use of the local resource base.

The structure and environmental implications of regional finances under Law 25/1999 differ significantly at the provincial level. The provinces' three principal sources of revenue include: a) own revenues, chief of which is the motor vehicle tax; b) allocations from the APBN via the sectoral ministries, which comprise a "deconcentration budget"; c) shares of oil and gas revenues collected by the center and remitted to the provinces; and d) the General Allocation. However, oil and gas revenues are significant revenue sources for the four main oil and gas-producing provinces only (Riau, Aceh, East Kalimantan and Irian). Most provinces will depend mainly on sectoral allocations from the ministries, for which the governor is accountable to the ministries, and the General Allocation. Under these circumstances, the governor's opportunities and incentives to generate provincial revenues by accelerating exploitation of natural resources will be limited relative to the compelling incentives at the district level.

Existing natural resource charges beyond the ones cited in Law 25 include park entrance fees, which are collected by
the center, and irrigation water use fees, which are collected by provincial public works agencies. The Directorate General of Nature Conservation (PKA) is conducting experiments in revenue sharing with local communities and/or local government as a means of improving the sustainability of protected areas located near rural populations. These and other experiments with revenue sharing in buffer zones and protected areas should be encouraged. Potential resource-based charges should be evaluated in terms of their effectiveness in generating local employment and revenues, influencing behavior in environmentally positive ways, and financing environmental services. Districts have recently experimented with auctioning use rights to high-value forest products, such as birds' nests, but the results of these experiments have not been entirely satisfactory in terms of sustainability.

Charges for BAPEDALDAs' AMDAL review and environmental monitoring services could help recover costs at district and provincial levels. Local environment agencies in New Zealand have had quite positive experience with such charges.

<table>
<thead>
<tr>
<th>Type of shared fund</th>
<th>Revenue instrument</th>
<th>Center</th>
<th>Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region's share of natural resource-related revenues</td>
<td>Land &amp; property tax</td>
<td>10*</td>
<td>90**</td>
</tr>
<tr>
<td></td>
<td>Tax on acquisition of land &amp; building rights</td>
<td>20*</td>
<td>80**</td>
</tr>
<tr>
<td></td>
<td>Natural resources: forestry, mining, fisheries</td>
<td>20</td>
<td>80**</td>
</tr>
<tr>
<td></td>
<td>Oil</td>
<td>85</td>
<td>15***</td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>70</td>
<td>30***</td>
</tr>
<tr>
<td>General allocation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>provinces</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>districts</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Specific allocation</td>
<td>Reforestation</td>
<td>60</td>
<td>40****</td>
</tr>
</tbody>
</table>

*shared among all districts;  
**remit to districts of origin;  
***remit to provinces;  
****remit to producer area
Figure 1. Strategy for Decentralization of Natural Resource Sectors with Environmental Safeguards

Role of Provinces and Districts

Building Blocks
- Decentralization should be implemented asymmetrically
- Decentralization support grants to provinces and districts that commit to build:
  - technical capacity
  - environmental constituencies
- Strengthen checks & balances in the legal framework by establishing:
  - proactive Regional Autonomy Advisory Board
  - Natural Resources Council

Role of The Center
- Concerned natural resources agencies (MoFr, MME, MoA, MoMEx and BAPEDAL) provide:
  - training of trainers
  - training to provincial counterparts
  - technical support to NRC
- Ministry of Home Affairs and the Ministry of Finance establish the Regional Autonomy Advisory Board
  - advises President on decentralization across all sectors
  - adjudicates decentralization and re-centralization disputes

Phase One
- Safeguards training for provincial BAPEDALDA natural resource agencies and BAPPEDA
- Provinces BAPPEDA survey opinion leaders on natural resources and environmental knowledge, attitudes and actions

Phase Two
- Districts second BAPEDALDA, natural resource and BAPPEDA staff (magang) to provinces for safeguards training
- Districts conduct civil society leaders join provincial constituency building training and accountability pilots

Phase Three
- Districts conduct safeguards and integrated planning and permitting pilots, assisted by staff of concerned provincial agencies
- Districts conduct constituency building and accountability pilots assisted by provincial constituency members

Local Community
- identify provincial environmental constituency
- provincial constituencies assist districts
- standing to appeal poor regional natural resource and environmental management performance

Spatial Planning
- Monitoring & enforcement
- Amdal
- Adequate Environmental Safeguards
- Natural resource permitting
- Reporting on compliance with national minimum standards
Vesting local property rights in resources such as forests and fisheries can create positive incentives to offset the perverse ones cited above, as well as a local revenue base, but the ongoing national forestry and land policy dialogues are likely to be long and difficult. There is significant risk that by the time these dialogues produce new, consensus-based local property rights, local resource bases may be severely damaged or even exhausted.

Other proposed policy instruments currently under discussion include a performance bond for production forest concessionaires and a reclamation bond for large-scale mining activities. However, even if significant authority and oversight of mining are devolved to the district level, as implied in PP 25/2000, it is important that district leaders understand that the bonds must be held in trust until expiration of the concession or mine closure, and cannot be considered sources of local revenue.

In the short to medium term, districts and provinces will probably have to rely on the center to pay for regional environmental services, at least in part, through earmarked grants. To attract higher-level financing for these services, regional officials and environmental constituencies will need to learn to track environmental expenditures, justify them in terms of results, and lobby for them (see Section 5, Regional Environmental Expenditure).

3. TECHNICAL CAPACITY

At provincial and district levels, the fledgling environmental agencies will no more control decisions on “big ticket” natural resource management issues and pollution control than do their national-level counterparts. Under these circumstances, the strategy guiding technical capacity building for decentralization of environmental safeguards and natural resource utilization needs to:

- define clearly the skill requirements of the safeguards services the provincial and district environment agencies are expected to deliver; and

- articulate the sustainability criteria that need to be mainstreamed into the operations of the line agencies whose “big ticket” decisions most affect the sustainability of the local resource base and local pollution levels. Environmental sustainability has to be part of these agencies’ decentralization calculus.

The core environment agencies. There are three levels of regional BAPEDAL. The first, the 27 provincial BAPEDALDA (BAPEDAL Daerah) are under the “regional government” /”autonomous” side of the provincial organization structure. Like the dinas (bureaucratic departments of the regional government), they report to the governor, and are not directly or hierarchically related to MLH or BAPEDAL at the center. In most provinces, small, low-level provincial Environment Bureaus (Biro Lingkungan Hidup, BLH), in place since the 1980s, were upgraded in 1997-98 to form BAPEDALDAs, which have higher-echelon managers and more direct access to the governor than did the BLH. Some of the largest provincial BAPEDALDA have as many as 50 staff.

Second are the district BAPEDALDAs, which report directly to the mayor or bupati.

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16 For background on the forestry dialogue, see Indonesia - Environment and Natural Resource Management in a Time of Transition, Ch. 2, "Forest Resources."

17 See the description of the previous regional governance framework and organization of the provinces under the new framework in Section 2, the Legal Framework and Standards, above.
District BLH, established in the 1990s, are currently being upgraded by the Ministry of Home Affairs into district BAPEDALDAs, one by one. The larger municipal BAPEDALDAs typically have over 30 staff. Rural districts, particularly in low population areas, are likely to be among the last regions establishing BAPEDALDAs.

The third type of regional BAPEDAL are the four BAPEDAL Regional (previously known as BAPEDAL Wilayah), which are deconcentrated branches of BAPEDAL, located in Riau, Bali, South Sulawesi and Jakarta. Like the regional offices of the USEPA, each BAPEDAL Regional has oversight over a set of provinces. However, the nature of the BAPEDAL Regionals' oversight and technical assistance functions remains to be defined.

Safeguards services the district and provincial BAPEDALDA are expected to deliver include an improved AMDAL process, improved monitoring of compliance with national minimum standards, and enforcement services. The skill requirements will need to be clearly defined, relative to level of government and the mix of environmental issues arising in specific localities.

At all three levels, regional BAPEDAL staff generally have university degrees in non-technical subjects. Most, if not all, staff at all levels have received advanced AMDAL training. As provincial BAPEDALDAs have had the mandate to manage cross-sectoral Provincial AMDAL Commissions for only three years, not all provinces have fully operational AMDAL Commissions. Hands-on AMDAL review experience and implementation monitoring capacities need further strengthening at the provincial level, and safeguards skills such as these should be a top capacity building priority. As noted above, safeguards experience is even more scarce at the district level, where BAPEDALDAs still lack a formal AMDAL review mandate under the existing AMDAL Regulation.

Some regional staff have received training in monitoring methods, and in over half the provinces, BAPEDALDAs have gained industrial effluent monitoring experience through participation in BAPEDAL's PROPER Prokasih industrial water pollution control program. However, training in compliance and enforcement skills such as inspection methods has been limited mainly to central BAPEDAL staff in Jakarta.

Establishing technical credibility with the regulated community is an issue for regional BAPEDALs at all three levels. In Semarang, for example, industrial plant managers surveyed in 1998 generally agreed that municipal Industry and Trade Office staff had better technical skills and were better able to advise on pollution prevention and mitigation than municipal BAPEDALDA staff. The latter, they said, tended to visit plants in response to complaints from the community only, to raise mainly legal issues and to quickly reach the limits of their technical knowledge in discussions with plant managers.

For BAPEDALDAs in resource-rich, low population areas and rural kabupaten, where priority environmental issues are mainly in the natural resource sectors, the technical credibility challenge will be even more acute. Given that BAPEDAL’s

18 Regional BAPEDAL staff with biology or natural resource-related training are few, and engineers are even more rare.

mandate and experience have focused mainly on industrial and urban pollution to date, both BAPEDAL and the regional BAPEDALs at all levels lack knowledge and experience in applying safeguards in the natural resource sectors. The recent establishment of BAPEDALDAs in the resource-rich, low population provinces and rural kabupaten poses a strategic human resource development issue for regional BAPEDALs - to what extent should BAPEDALDAs develop specialized knowledge of environmental aspects of the natural resource sectors, and to what extent should such knowledge be outsourced? If the outsourcing option is chosen, without developing sufficient in-house expertise to oversee natural resource safeguards, regional BAPEDALs' technical credibility could be seriously compromised.

In the 1990s, BAPEDAL developed a large stock of training materials, which have been underutilized to date. Development of a capacity building strategy that uses these available materials and develops additional training materials in the natural resource sectors should be a top priority. Through training of trainers, the center should consider mobilizing the BAPEDAL Regional and provincial BAPEDALDAs to deliver training to the districts.

Natural resource and other agencies. To mainstream safeguards and best practices into their operations, the natural resource line agencies will need sector-specific working knowledge of national minimum standards, AMDAL preparation, types of expected environmental impacts, and prevention and mitigation options in their sectors. Efforts to mainstream environmental assessment review in the major development agencies date from the 1980s. Several ministries, including MME and the Ministry of Industry, have established environmental units at the center. In MME, the Environment and Technology Bureau (Biro Lingkungan Teknik) under the Secretary General's office in Jakarta, in cooperation with donors, has conducted environmental training, mainly for center staff, but including staff from twelve provincial kanwil as well. MME's Mining Inspectorate under the Directorate-General of Mining (DGM), also in Jakarta, is responsible for incorporating environmental criteria into oversight of mining sites and mine closure. In MoFr, the Directorate General in which sustainable forest utilization practices is concentrated, the Directorate General of Nature Conservation (PKA), operates separately from other directorates general, and does not offer environmental training.

Progress in mainstreaming environmental knowledge and good practices in the line agencies has been slow and uneven. A brief review of mainstreaming issues in the mining sector can provide a glimpse of the technical challenges facing the natural resource line agencies as they decentralize.

Under the two parallel structures of regional governance inherited from the New Order, regional governments have had two distinct agencies with responsibility for mining: Kantor Wilayah (Kanwil) Pertambangan, the representative of central government (MME) in each province; and Dinas Pertambangan, the corresponding department of provincial and district governments. Dinas Pertambangan reports to the governor or the district head (bupati) and thus is indirectly under the Ministry of Home Affairs. Each agency has different responsibilities. Kanwil Pertambangan has been responsible for mining in categories "A" (gold, uranium) and "B" (coal, oil, gas). Contracts in these categories have been managed almost entirely by MME Jakarta, ordinarily with little or no consultation with
regional planners, mining, or environmental services. Dinas Pertambangan is responsible for mining in category “C”, which includes sand, gravel, marble, and small gold mines, and has permitting authority for these activities at the local level. Typically, the coordination between kanwil and dinas has been very poor. Whether kanwil and/or kandep and dinas will be merged in the course of decentralization is not yet clear. What is clear is that mainstreaming in the regions will be subject to substantial inefficiencies, unless coordination improves.

Persistent “disconnects” in mainstreaming efforts at the center offer cautionary lessons for mainstreaming in the regions. The disconnect between the feasibility study and the ANDAL under MME’s project approval process is a case in point. The permitting process requires preparation of a feasibility study and (depending on size and type of mine) an ANDAL, which are to be reviewed together. However, a mining feasibility study is often already submitted to DGM and approved before the related ANDAL is begun. The interaction between the preparers of the ANDAL and the feasibility study that should lead to sound recommendations on environmental management does not occur. Moreover, the two studies are not examined by the same reviewer – the feasibility study is approved by the Director General of Mining, whereas the ANDAL is approved by the Secretary General after review by the MME AMDAL Commission, with the Environment and Technology Bureau providing the technical analysis. The Director General and the Secretary General often fail to communicate and coordinate regarding the results of the draft feasibility study and draft ANDAL. As a result, the final feasibility study and the final ANDAL may contradict each other, even to the extent that the ANDAL could recommend against issuance of a permit which has already been approved.

A second disconnect, which follows from the first, is the poor integration between the ANDAL and oversight of mining activities by the Directorate of Technical Mining, and the frequent lack of follow-up on the implementation of the environmental management and monitoring plans (RKL and RPL) that are attached to the approved ANDAL. These failures to communicate and coordinate must be recognized and addressed at the regional level, if the regions are to grasp the greatest short- to medium-term opportunity of the decentralization process, which is integration of planning, permitting, and environmental safeguards at district and provincial levels.

Another persistent cross-sectoral issue at the national level – the endemic and highly problematic conflict between protection or production forestry and mining as prospective uses of the same tract of land – is also a priority concern at the regional level. Many mining locations are pinjam pakai (loaned for use) from the Ministry of Forestry (MoFr). Agreements between the ministries specify that pinjam pakai land should be returned to MoFr in the same state in which it was received. However, a long-standing Presidential Decree gives mining priority over all other land uses, and a recent inter-ministerial decree regarding small-scale mining fails to give MoFr a voice in the permitting process for small-scale mining. Citing the decree for small-scale mining, the provincial Forestry Service of South Sulawesi recently issued 14 mining exploitation permits in a

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20 The single exception is small-scale gold mining, which is under jurisdiction of the Dinas Pertambangan.

21 An ANDAL is a detailed environmental impact report, which is required for larger, more complex projects, and is not to be confused with AMDAL, the environmental impact assessment process.
geologically unique karst area of South Sulawesi that is under protective forest status. Given cases such as this and the rudimentary state of reclamation plans and their implementation, the requirement that land “borrowed” for mining should be returned in its original state lacks credibility. Another participant in the regions’ efforts to resolve cross-sectoral conflict should be the Regional Planning Agencies (BAPPEDA) at provincial and district levels. The BAPPEDAs have the mapping and overlay skills that are key to development of integrated planning, permitting, environmental safeguards and monitoring practices at both levels. The BAPPEDAs have already conducted provincial joint planning exercises – called paduserasi – with MoFr in the 1990s, but pending forestry reforms, paduserasi has produced limited results. To facilitate integrated regional planning, managed by the BAPPEDAs, forestry reform is critical.

The most urgent environmental challenge for regional mining agencies under decentralization is likely to be artisanal and small-scale mining (ASM). Although regional Dinas Pertambangan already had permitting authority over Category “C” mining activities, including small-scale gold mining, prior to the current decentralization, they are unprepared to address the exponential growth of small-scale mining that has accompanied the economic crisis. Small-scale miners typically take no environmental precautions. The environmental damage associated with ASM, including sedimentation of water bodies, mercury pollution and total lack of land reclamation after closure, is well known. However, with the exception of approximately 400 legal traditional small-scale mining sites designated by DGM, ASM is essentially unregulated. The inaction of the Dinas Pertambangan is partly due to larger issues – specifically, the sweeping political changes and uncertainties surrounding decentralization, which have given rise to new claims by local communities over resource use rights and revenues from mining projects. Additional factors include powerful interests’ support for substantial ASM operations, and a general sympathy for anyone trying to survive the crisis. Under these conditions, it is unlikely that the end of the crisis will bring a decline in ASM. Instead, ASM activities seem likely to increase over the medium term.

While small-scale mining may increase rural incomes in the short term, increased reliance on mining relative to agriculture combined with significant environmental damage during the mining phase may have lasting impact on the potential for a more balanced rural development in mined-over areas. Better practices and available, affordable technologies can greatly reduce mercury use and health impacts in the case of artisanal gold mining, and several donor assistance initiatives are being considered to reduce or eliminate mercury use in gold processing in Indonesia.

The recent entry of mining issues into the national environmental agenda and the pressing need to address the health risks associated with ASM offer an opportunity to make the mining sector a model for sustainable decentralization of authority and responsibility in the natural resource sectors, with adequate environmental safeguards. Using past capacity building initiatives as a foundation, MME’s environmental units at the center should proactively train trainers in environmental safeguards and best practices at the provincial level. Partnerships with BAPEDAL to disseminate environmental safeguards and with health agencies and NGOs to spread knowledge of the health and occupational risks of mining to the
district level and below should be actively pursued.

4. ENVIRONMENTAL CONSTITUENCIES AND ACCOUNTABILITY

Whether decentralization delivers positive environmental outcomes or causes lasting damage to regional resources will depend not only on the legal framework and regional technical capacity, but on what regional leaders and their constituencies know, think and do to influence natural resource utilization in their regions. In countries around the world, emergence of environmental constituencies armed with knowledge of environmental cause and effect, well-articulated pro-environmental attitudes and willingness to act on their convictions has been an essential precondition for adoption of well-conceived environmental policies and their full implementation. Japan and the United States in the 1970s and Korea in the 1990s are only a few of the many countries where environmental constituencies have spearheaded decisive public action to turn destructive environmental trends around.

With logging activity far exceeding annual allowable cuts and artisanal mining activity pushing natural resource exploitation to unprecedented levels in many regions of Indonesia, it would not be surprising to find no environmental constituencies in resource-rich regions off Java. The strong incentives for regional leaders to ignore environmentally destructive practices of forest and mining concessionaires during the New Order might still prevail.

Alternatively, regional leaders, acutely aware of simmering local resentment of the center’s control of natural resources during the New Order, might either condone, facilitate or even lead redress of the perceived injustices of the New Order by reasserting claims to local forests, land and surface mineral deposits. And, as noted above, the new fiscal arrangements under Law 25 could create perverse incentives for regional leaders to accelerate natural resource use in order to generate regional revenues. On the other hand, experience has shown that urban areas, with their institutional infrastructure (universities, laboratories, NGO branches, relatively well-trained officials and political leaders with a broader world view) are ordinarily the earliest incubators of environmental constituencies. If emerging environmental constituencies are present at all off Java, they would likely be found in the capital cities of the largest provinces.

Constituency survey. To provide an empirical foundation for this discussion of the role of environmental constituencies in Indonesia’s decentralization process, a survey of 122 opinion leaders in three relatively resource-rich provinces off Java was conducted between May and July 1999. Selection of the respondents – 40 in East Kalimantan and 41 each in Riau and West Kalimantan – was based on their reputations as influential leaders across a range of sectors and occupations, including provincial and district officials, military/police officers, business-persons, academics, and NGO, community and religious leaders. The survey results, presented below, are necessarily preliminary, in light of the difficult data gathering conditions surrounding the June 1999 election. Because local political leaders had not yet been elected, that critically important group could not be included in the sample, and nothing is known of their environment-related predispositions and behaviors (or lack thereof).

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The survey targeted provinces with three characteristics: i) relatively resource-rich, diverse, export-oriented economies, including a substantial forestry sector; ii) relatively small populations; and iii) recent experience of high forest loss rates. Forest cover loss in East Kalimantan topped all provinces in Indonesia during the period 1985-97 (331,200 ha annual losses), West Kalimantan ranked third (165,600 ha annually), and Riau ranked eighth (72,000 ha annually).23

The survey documented opinion leaders' perceptions of natural resource depletion and pollution levels, sources of resource depletion and environmental damage and government's management of environmental issues in their provinces. It also asked respondents whether they had engaged in specific actions to influence the environment-related behavior of officials and/or natural resource users, and examined the link between pro-environmental attitudes and pro-environmental actions.

Analysis of opinion leaders' responses revealed statistically significant variation along several dimensions, with potentially important implications for the decentralization process. Based on their perceptions of the state of environmental and forest management in their provinces, they divided into three statistically significant groups:

- a “core environmental constituency,” comprised of the 30 respondents (25 percent of the sample) who scored high on general environmental sensitivity and high on forestry issues sensitivity. These respondents expressed strong pro-environmental attitudes on a range of issues, and could be appealed to on both general and forestry sector-specific concerns;24

- a “non-environmental group,” comprised of the 37 respondents (30 percent of the sample) who scored low on general environmental sensitivity and low on forestry issues sensitivity. These respondents were likely either to be neutral or actively oppose environmental policies and practices, particularly those that require internalization of environmental costs by polluters and/or natural resource users; and

- a middle group, comprised of the 55 respondents (45 percent of the sample) who scored high on environmental issue sensitivity but low on forest issues sensitivity (“general environmental constituency”), or scored high on forest issues sensitivity but low on environmental issue sensitivity (“sectoral constituency”). Members of these groups would support or reject environmental policies, depending on the particular issue.

There was variability in opinion leaders' views of government's environmental performance, as well. Asked whether they thought MoFr's ability to monitor forestry concessions and enforce the terms of concession agreements had declined since the

23 D. Holmes, "Deforestation in Indonesia: A Review of the Situation in Sumatra, Kalimantan and Sulawesi," Table 1. Rates of Forest Loss. The 72,000 ha/year figure for Riau is a conservative lower bound. The same report also offers an additional annual forest loss estimate of 151,600 ha for Riau.

24 In this case, in which damage to forests was the local environmental issue most or second most frequently cited by respondents in all three provinces, the sector-specific focus is forestry. Seventy-seven percent of respondents in East Kalimantan cited forest damage as a very serious issue, 71 percent in West Kalimantan, and 80 percent in Riau. Obviously, other sectors can be accommodated in this model-industrial pollution in West Java or mercury contamination from gold mining in South Kalimantan, for example.
crisis, a majority of respondents viewed MoFr’s performance mostly favorably, with 62 percent stating that MoFr Jakarta was doing the same or better job as before the crisis. However, members of the core environmental constituency were significantly more likely to say MoFr was showing decreasing capacity to monitor and enforce or had never had such capacity (57 percent of core environmental constituency members said MoFr’s capacity was decreasing or non-existent versus 30 percent of the other groups).

When opinion leaders were clustered by occupation into two groups – a “government-business” cluster, comprised of local officials, police/military and businesspeople, and a “civil society” cluster, comprised of academics, NGOs, and community and religious leaders, there was a strong and significant relationship between leadership cluster (government-business versus civil society) and constituency membership. Respondents in the civil society cluster were four times more likely to belong to the core environmental constituency than were respondents in the government-business cluster (45 percent vs 10 percent). Conversely, government-business respondents were three times more likely to hold non-environmental attitudes than were civil society respondents (42 percent vs 14 percent).

Variability among provinces was also significant. When the distribution of pro- and non-environmental constituencies was compared across the three provinces (see Fig. 2), the core environmental constituency was largest in West Kalimantan, where it accounted for 39 percent of respondents. Only 17 percent of respondents in West Kalimantan were classified as non-environmentalists, which was the smallest cohort of non-environmental opinion leaders among the three provinces. The constituency for the environment was weakest in East Kalimantan, where only 10 percent of respondents were found among the environmental core, and 50 percent of respondents were classified as non-environmentalists. In Riau, the core environmental constituency and non-environmental group were evenly matched – each 24 percent.

These provincial variations meant that opinion leaders in West Kalimantan were nearly four times as likely to hold core pro-environmental attitudes as opinion leaders in East Kalimantan (39 percent versus 10 percent). Conversely, the views of the non-environmental group – i.e., that forest damage is not very serious, there is no illegal logging in the province, and concessionaires are making a serious effort to ensure healthy forests for the next generation, were two to three times more frequent among East Kalimantan opinion leaders than among their counterparts in Riau and West Kalimantan (50 percent in East Kalimantan versus 24 and 17 percent in Riau and West Kalimantan respectively).

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25 The strong relationship between leadership group and environmental constituency categories remains significant when controlled for individual characteristics, including level of influence, education, media exposure, and local vs. newcomer status.

26 Part of West Kalimantan’s apparent pro-environmental strength undoubtedly results from undersampling the business community in that province. See J. Aden, “Demand-Side Decentralization in Indonesia,” Appendix 2 - Sample Frame.
it affects capacity to mobilize support for environmental policies and practices. An inclusive core constituency that mixes civil society, government and/or business members, as in West Kalimantan, is more likely to succeed in mobilizing support from government and business opinion leaders outside the core constituency. An exclusive core constituency that lacks government and business members, as in East Kalimantan, is less likely to succeed in mobilizing government and business leaders.

Two dimensions on which respondents did not differ significantly should also be noted. One is widespread and adamant demand for decentralization. When asked which level of government should be responsible for specific forest management functions, few respondents wanted Jakarta to continue its current responsibilities and practices. Not surprisingly, opinion leaders' overwhelming preference was for an expanded local role, with or without Jakarta sharing responsibility, in negotiation of future land use on expiration of concessions, revenue collection and allocation, reporting arrangements with concessionaires, and monitoring, inspection and enforcement functions (see Table 4).

The second shared trait was the weak link between pro-environmental attitudes and behaviors to improve environmental quality, across all respondent groups. While half of respondents said they had taken some action, e.g. awareness-raising activities and raising environmental issues with a government

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27 Substantial numbers of respondents say these functions should be carried out entirely at the local level, completely excluding Jakarta. Twenty-nine percent call for local governments to negotiate future use of concession areas after concessions expire; 43 percent say local governments should collect and allocate forestry revenues; 43 percent want technical reports on forest concession operations to go to local governments; and 90 percent want local governments to be responsible for inspection of forest concessions.
official, those with the strongest pro-environmental attitudes (the core constituency) were not systematically more likely to have engaged in environmental actions. The weak action measures in the survey questionnaire reflected the virtual absence and/or poor functioning of formal mechanisms for pro-environmental actions by government officials and the public at the regional level. To strengthen the link between attitudes and actions, local officials need essential tools (such as, a menu of incentives and penalties against environmentally destructive behavior), administrative authority to apply such tools, and regional political will, in the form of consistent support from the regional head.

The survey findings lead to several conclusions:

- constituency building should have top priority for BAPEDAL, the BAPEDALDAs and other agencies and stakeholders with environmental responsibilities. Campaigns to spread environmental knowledge, build pro-environmental attitudes, and forge links between attitudes and actions should be targeted on districts and provinces;

- focusing constituency-building efforts on provinces first, given that they are more likely to have the kind of institutional infrastructure that ordinarily leads to the early emergence of environmental constituencies, makes sense. Provinces could provide the foundation and training ground, from which second-stage efforts to build district-level constituencies could be launched; and

- the significant variation in core environmental constituencies’ size relative to non-environmental groups and composition across provinces flags the need to factor these important dimensions into the speed and sequencing of decentralization in the natural resource and environmental sectors. Provinces with the strongest pro-environmental constituencies would be
Table 4. Preferences for Level of Government to Take Lead Responsibility

<table>
<thead>
<tr>
<th></th>
<th>Negotiating future land use when concessions expire</th>
<th>Collecting and allocating concession revenues</th>
<th>Receiving concessionaires' reports on timber output, log prices and operations</th>
<th>Monitoring, inspection and enforcement of terms of concession agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>MoFr Jakarta should continue its current responsibilities and practices</td>
<td>14%</td>
<td>9%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>MoFr Jakarta and local government should share responsibility</td>
<td>56%</td>
<td>48%</td>
<td>36%</td>
<td>45%</td>
</tr>
<tr>
<td>All responsibility to be assigned to local government</td>
<td>30%</td>
<td>43%</td>
<td>43%</td>
<td>33%</td>
</tr>
</tbody>
</table>

the best candidates for early devolution of authority over safeguards. Conversely, provinces and districts where opinion leaders show no concern or willingness to take action for environment should receive new authority later, rather than sooner.

Evaluation of fledgling environmental constituencies’ strength and composition is needed, to enable targeting of constituency building efforts. A champion of constituency assessment and strengthening efforts is also needed. A Natural Resource Council, in collaboration with PKA, MLH, BAPEDAL, the regional BAPEDALs and interested donors, could perform this function.

**Accountability.** Environmental constituencies and accountability, defined as the degree to which government has to explain or justify what it does or fails to do, are two sides of a single coin. The formal foundation of accountability is regional election of regional officials. Under Laws 22 and 25/1999, this foundation is strongest at the district level, where selection of the bupati or mayor is no longer subject to higher-level approval, and the district head is financially accountable to the DPRD. It is somewhat less strong at the provincial level, where the governor continues to be selected in consultation with the President, and the governor’s primary financial accountability is to the President and central ministries. However, elections are blunt instruments, exercised only at intervals and providing only the broadest citizen control over government.

The heart of accountability is a two-way exchange between local communities and government, in which regional officials’ engrained habits of seeking higher-level approval and largely one-way communication with local communities are replaced by two-way communication, in which the official is prepared to explain and justify government performance and use of public resources. Similarly, old habits of passivity on the part of local communities
should be replaced by more proactive, participatory community engagement in decisions affecting the common good. The AMDAL process is specifically designed to provide environmental constituencies with information about proposed natural resource utilization and its potential impacts, and to ensure that officials responsible for granting natural resource utilization permits are held accountable for potential adverse impacts of activities for which they grant permits. However, unless environmental constituencies and accountability mechanisms are functioning properly, environmental safeguards cannot function properly.

One way for bupatis, mayors and governors to begin building accountability is to hold informal, regularly scheduled “open door” sessions at their offices, at which any member of the local community can raise issues and receive a response. For additional accountability mechanisms that have been successfully applied in developing countries, see Box 2. Donor assistance in the natural resource sectors should be required to include funds for the awareness raising and constituency building that will be needed, to activate mechanisms such as these.

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**Box 2. Accountability Mechanisms**

In addition to local elections, citizens need more discriminating instruments to reinforce accountability. Examples of available instruments employed in developed and developing countries include:

- NGO-led workshops and seminars, which can inform and help articulate local communities’ reaction to local government and lobby officials to be responsive;

- opinion surveys to assess and publicize public opinion about service delivery;

- public meetings, which can be an effective mechanism for encouraging citizens to express their views and obliging public officials to answer them. The *cabildos abiertos* (open consultations) held in many Latin American countries are a good example. Another is the “open budget sessions,” held during preparation of public expenditure budgets, that are being piloted in some countries. In some settings, such meetings may be little more than briefing sessions, but in others they can be effective in getting public officials to defend their actions; and

- formal redress procedures, which have been included as an accountability mechanism in some decentralization initiatives. *Bolivia* probably has the most elaborate instrument along these lines, with its municipal Vigilance Committees that are based on traditional local social structures, are charged with monitoring elected councils, and are encouraged to file actionable complaints with higher levels and/or advisory boards (for example, the Regional Autonomy Advisory Board), if needed.

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28 For further discussion of accountability in the context of decentralization, see www-wbweb.worldbank.org/prem/prmps/decentralization/accountability.htm.
5. REGIONAL ENVIRONMENTAL EXPENDITURE

Public environmental expenditure trends are an important indicator of political will to support adequate regional safeguards. Analysis of public expenditure data for the period FY94/95-FY98/99 points toward two broad conclusions, with policy implications for decentralization in the natural resource sectors.

The first is that public expenditure on environmental activities is extremely low in Indonesia, in terms of percentage of GDP, percentage of government expenditures and per capita expenditure level. In FY98/99, the first full fiscal year after the onset of the financial crisis, expenditure of domestic resources on development projects with environmental objectives was only about a third of the level in FY94/95. From FY97/98 to FY98/99, environmental expenditure fell from 0.9 percent of the overall development program to 0.5 percent and from 0.04 percent of GDP to less than 0.02 percent. These percentages were already generally lower than in other East Asian crisis countries before the crisis, and remained so in FY98/99—on the order of US$0.08 per capita in Indonesia, as compared to US$0.53 in Malaysia, over US$3 in Thailand and nearly US$20 in Korea.29 Additional funding is needed to keep pace with major increases in pressure on Indonesia’s forests, biodiversity stock and land affected by mining operations, and as well as urban and industrial pollution. Yet the recent environmental expenditure trend at an aggregate level has been the opposite.

The second conclusion is that environmental expenditures at regional levels have suffered especially deep cuts since the crisis, and the share of the total environmental budget allocated to activities at the center relative to regional activities has increased. In light of decentralization, the share of environmental expenditures in the regions needs to increase significantly, relative to environmental expenditures at the national level. Improved local environmental management will not be possible without increased provision of human and financial resources. The three types of environmental expenditure that will be needed at district and provincial levels include core expenditures (for example, funding for safeguards capacity building, protection of local conservation areas and enforcement of national minimum standards), mitigation expenditures (such as expenditure on erosion control during road construction and maintenance), and incidental expenditures (such as water supply projects to reduce exposure to contaminants in existing water sources).

Regional government officials and civil society, who are about to assume increased authority and responsibility for natural resource management for the first time, need to be aware of the implications of environmental expenditure trends and options for their jurisdictions. Whether regional budgets include environmental expenditures commensurate with increasing pressures on regional resource bases will be a critical indicator of regional political will. However, in any case, central budget support for a substantial share of the environmental and sustainable natural resource management activities conducted at the regional level will be essential.

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6. CONCLUSIONS AND RECOMMENDATIONS

Whether Indonesia’s drive to decentralize leads to more efficient, sustainable resource use or invites serious environmental deterioration will depend to a large extent on whether decentralization goes forward with or without adequate environmental safeguards at the regional level. With safeguards, regional commitment, a transparent, consultative AMDAL process and consistent application of national minimum standards will improve the likelihood that this generation will bequeath a sustainable resource base to future generations. Without safeguards, newly empowered regional authorities are likely to condone or even invite more uncontrolled resource use to boost regional income and revenues, without regard to potential long-term and perhaps irreversible impacts on the regional resource base.

This report recommends a practical approach to decentralization of the natural resource sectors with adequate safeguards, which emphasizes:

- **First, a two-track program of technical capacity and constituency building:**
  
  - a technical capacity building program including training in environmental aspects of the natural resource sectors should be a top priority. Strengthening of safeguards capacities of natural resource agencies and BAPPEDAs (Regional Planning Boards) is also needed. Available technical capacity and constituency-building resources – in particular, the generally stronger institutional base for building capacity and constituencies at the provincial level – should be used to strengthen safeguards capacity for the benefit of the districts, in particular, rural districts. District staff could be seconded (magang) to provinces for training and piloting; and

  - a constituency building campaign to spread environmental knowledge, build pro-environmental attitudes, and forge links between attitudes and proactive behaviors to improve environmental quality should be targeted on key decision-makers in the regions. Constituency-building should be accompanied by “accountability pilots,” in which regional officials explain and justify government performance and use of public resources related to natural resource and environmental management.

- **Second, strengthening the “checks and balances” in the legal framework to prevent or correct misallocation of functions among levels of government.** The adjudication role of the Regional Autonomy Advisory Board should be strengthened, by mandating proactive and systematic monitoring of regional performance of decentralized functions generally, and relative to natural resource and environmental management in particular. A cross-sectoral Natural Resources Council should be established, to provide technical advice to the Board on natural resource management and environmental safeguards at provincial and district levels. The Board and Council should include members from all levels of government and civil society, and local communities should have standing to appeal when regional natural resource and environmental management performance is inadequate.

- **Third, additional funding to keep pace with the major increases in pressure on Indonesia’s natural resources since the 1990s.** Expenditures are required to rehabilitate degraded forests, expand replanting programs, improve forest fire...
management, protect and manage parks better, conduct mine inspections, manage mine reclamation bonds, establish credible environmental databases, build technical capacity in government agencies, and support constituency building programs. Regional government officials and civil society, who are about to assume increased authority and responsibility for natural resource management for the first time, need to be aware of the implications of environmental expenditure trends and options for their jurisdictions. As decentralization proceeds, the regional share of public environmental expenditures should increase.

- Fourth, an asymmetric approach, which recognizes that some regions will be ready for natural resource and environmental management sooner than others. Assigning differentiated authority to regional governments based on political commitment, constituency strength, technical capacity, population, revenues and environmental expenditure levels can alleviate the pressure of having to implement a country-wide uniform decentralization program. Decentralization support grants to provinces and districts that demonstrate commitment to capacity building, constituency building, environmental expenditures and regional implementation of safeguards could be a mechanism to facilitate decentralization, while recognizing the need for an asymmetric approach.

Table 5 summarizes the suggested roles of each level of government, cross-level bodies and local communities in decentralization of the natural resource sectors.
Table 5. Decentralization of Natural Resource Utilization and Environmental Safeguards Functions by Level of Government

<table>
<thead>
<tr>
<th>Responsible Level</th>
<th>Functions</th>
</tr>
</thead>
</table>
| Center            | - Provide legal framework that defines clearly responsibilities and services to be provided at central, provincial and district levels, how each level will generate revenues, and how their performance will be evaluated. Set minimum national standards. Specify a notional timeframe for transition, recognizing that implementation will necessarily be asymmetric.  
- Set policy and get out of operations, except where functions are specifically reserved to the center or activities cross regional boundaries (e.g. central responsibility for cross-provincial activities), and reorganize central agencies and fiscal balance accordingly.  
- Deliver training (mainly training of trainers to provinces), to build knowledge of minimum standards and service delivery capacity.  
- Monitor compliance with national minimum standards (mainly provincial compliance during early decentralization), and be prepared to recentralize functions where compliance is lacking.  
- Perform provincial natural resource utilization and safeguard functions, if “uploaded” from provinces and/or recommended by Regional Autonomy Advisory Board. |
| Cross-level Management Mechanisms | Regional Autonomy Advisory Board  
- Evaluate regional service delivery and performance, to determine readiness for decentralization, and need for recentralization in case of regional failure to meet national minimum standards.  
- Conduct consultation with all levels of government and civil society regarding natural resource utilization permitting, environmental safeguards and monitoring.  
- Advise Regional Autonomy Board on permitting, environmental safeguards and monitoring. |
| Natural Resource Council |  
- Develop and implement integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization, for cross-district and mid-size activities.  
- Deliver transitional on-the-job training to district officials, temporarily seconded to provincial agencies, to prepare for eventual full district autonomy. Working with district officials, assist pilots of integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization to within-district and small-scale activities at district level.  
- Self compliance monitoring and reporting to community organizations and center.  
- Build accountability to provincial community and upward.  
- Asymmetric transfers of authority and sharing of responsibility, based on different natural resource endowments, population, capacity and constituencies.  
- Perform district natural resource utilization and safeguard functions, if “uploaded” from districts and/or recommended by Regional Autonomy Advisory Board. |
| Province |  
- Build capacity to deliver natural resource utilization and environmental management services.  
- Build accountability to local community and upward.  
- Pilot integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization for within-district and small-scale activities.  
- Self compliance monitoring and reporting to local community and upward to province and center.  
- Asymmetric transfers of authority and sharing of responsibility at district level, based on different natural resource endowments, population, capacity and level of constituency development. |
| District |  
- Constituency building, moving from passive acceptance of government’s actions to insistence on consistent delivery of services tailored to local needs, and accountability of district and provincial officials. |
| Local community |  
- Build capacity to deliver natural resource utilization and environmental management services.  
- Build accountability to local community and upward.  
- Pilot integrated regional planning, permitting, environmental safeguards and monitoring of natural resource utilization for within-district and small-scale activities.  
- Self compliance monitoring and reporting to local community and upward to province and center.  
- Asymmetric transfers of authority and sharing of responsibility at district level, based on different natural resource endowments, population, capacity and level of constituency development. |
Bibliography


Burki, Shahid Javed et al., Beyond the Center: Decentralizing the State, 1999.

Caldecott, Julian and Ernst Lutz, "Decentralization and Biodiversity Conservation," n.d.


Government of Indonesia, Law 22 of 1999 Concerning the Regional Governance.


Government of Indonesia, Government Regulation Number 25 of 2000 Concerning Government Authority and the Provincial Authority as an Autonomous Region.


EASES Publications

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