FOREST LAW ENFORCEMENT AND GOVERNANCE (FLEG) IN EASTERN EUROPE AND NORTHERN ASIA (ENA)

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Forest Law Enforcement and Governance Process for Europe and Northern Asia (ENA-FLEG)

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Abbreviations and Acronyms

AAC  Annual Allowable Cut
AI   Annual Increment
ALB  Albania
ARM  Armenia
AZE  Azerbaijan
the Bank  The World Bank
BEEPS Business Environment and Enterprise Performance Survey
BIIH Bosnia and Herzegovina
CBD Convention on Biological Diversity
CCD Convention to Combat Desertification
CIF  cost, insurance, and freight
CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora
ECA  Europe and Central Asia
ENA-FLEG Europe and North Asia, Forest Law Enforcement and Governance
EU European Union
FAO Food and Agriculture Organization of the United Nations
FCS Federal Customs Service of the Russian Federation
FFA Federal Forestry Agency of the Russian Federation
FISP Forest Institutional Support Project
FOB free on board
FTS Federal Tax Service of the Russian Federation
G-8 Group of Eight
GDP gross domestic product
GEF Global Environment Facility
GEO Georgia
GTZ German Agency for Technical Cooperation
ha hectare
ILAP Illegal Logging Action Plan (of Armenia)
KGZ The Kyrgyz Republic
m³ cubic meter
MDA Moldova
MEPNR Ministry of Environmental Protection and Natural Resources
MOIA Ministry of Internal Affairs of the Russian Federation
NFP National Forest Program
NGO Nongovernmental organization
NRMPRP Natural Resources Management and Poverty Reduction Project
PRSC Poverty Reduction Support Credit
SCEPF State Committee of Environmental Protection and Forestry
SDC Swiss Development Cooperation
SER Serbia
SIDA Swedish International Development Cooperation Authority
TACIS Technical Assistance to CIS Countries (of the European Union)
TJK Tajikistan
UK United Kingdom
UNCCD United Nations Convention to Combat Desertification
UNDP United Nations Development Programme
UNEP United Nations Environment Program
USAID United States Agency for International Development
UZB Uzbekistan
WWF World Wide Fund for Nature
Acknowledgments

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Introduction

Poor governance in the forest sector is a generalized and significant problem in many countries. Forest harvesting, processing of wood, and trade of forest products often take place in unauthorized ways and involve many illegal operators. Achieving a reasonable measure of sustainable forest management will likely remain an unattainable and distant objective unless governments are able to reach an acceptable degree of legal compliance.

Increasing awareness of the gravity of illegal activities in the sector is motivating governments to devise strategies to improve the level of compliance with the law. Given that some of the factors that motivate and induce illegal logging and trade operate through international markets, these strategies require international as well as national initiatives.

The Forest Law Enforcement, and Governance process (FLEG) is a multilateral, multistakeholder strategy for improving governance and legal compliance through the organization of corrective actions at both national and international levels. FLEG is a major multinational effort involving governments of interested countries and multilateral and bilateral donors focusing on combating illegal acts affecting forest resources. After the G-8 countries launched its Action Program on Forests in 1998, various institutions—including the World Bank, the UK Department for International Development, the US State Department, the Swiss State Secretariat on Economic Affairs, and others—designed a process involving ministerial meetings at the regional level to develop political commitment to set up a common framework for regional actions. The FLEG initiatives focus, at least in the initial stages, on illegal logging and trade of timber and processed timber products.

This process is now under way, involving countries of East Europe and North Asia (ENA). The present document aims at providing a reference framework for facilitating communication and enriching the FLEG debates and processes in this region, covering the Russian Federation, Central Asia, and the Balkans. It should be noted that the new European Union (EU) Member Countries from Central and Eastern Europe—the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia—were excluded from the analysis because with their recent accession to the EU, their forest management and trade aspects will change fundamentally in the coming years.

The paper is organized as follows: Chapter 1 presents a brief overview of the main features of the forest sector and its management in ENA countries. Chapter 2 presents the results of estimates of the magnitude of illegal logging and illegal trade in the region as well as a discussion of their economic, social, and environmental consequences. Chapter 3 describes the main underlying motivations for illegal logging and trade, as well as the national and international governance factors that appear to contribute to the occurrence and proliferation of these illegal activities. Chapter 4 is dedicated to an analysis of how governance factors discussed in chapter 3 operate in the forest sector of the ENA countries. Finally, chapter 5 uses the findings of the analysis of underlying motivations and contributing factors to outline the components of a strategy for improving legal compliance in the forest sector of the ENA countries.
Forest Resources in the ENA Region

1.1 Forest Resources: Extension and Economic Importance

Forests cover a substantial share of the ENA region’s land area, although the distribution by country is highly skewed (see table 1.1). In Belarus, Bosnia and Herzegovina, Georgia, and Russia, forests extend over more than 40 percent and as much as half of the national territory, while in Armenia, Azerbaijan, Kazakhstan, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan, less than 15 percent of the land area is covered by forests.

The relative abundance of forest resources is reflected in their contribution to the GDP. This share ranges from a high of 2 to 3 percent in Bosnia and Herzegovina, Russia, and Serbia and Montenegro, to a low of 0.5 percent in Armenia and the Kyrgyz Republic. However, these figures paint an incomplete picture of the economic importance of the forest sector in the national economies of the countries. For instance, they do not fully include the magnitude of rural employment or the value of fuelwood supplied by forests. Furthermore, figures recorded in national accounts fail to include the economic value of most non-timber forest products and of the forests’ environmental services. In many countries, the economic importance of these products and services is higher than that of wood forest products.

The relative abundance of forests is also translated in different dominant uses in the various countries (see table 1.1):

- In some countries, commercial forestry is the dominant economic use of forests, although they also have a major role in providing fuelwood and non-timber products for the rural population, and in particular for the rural poor (for example, in Bosnia and Herzegovina, Bulgaria, Russia, and Serbia and Montenegro).
- In other countries, forests serve primarily a social and environmental function, but some commercial forestry is also practiced (for example, in Albania, Armenia, Azerbaijan, Georgia, Moldova, and Ukraine).
- Finally, other countries import most of their commercial forest products, dedicating their relatively scarce forest resources mainly to social and environmental functions (for example, in Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan).

These country differences have considerable implications for the incidence and nature of illegal logging and trade. They suggest that strategies to control illegal acts will need to be tailored to the specific circumstances of each country.

The ENA region also includes areas where conflict timber\(^1\) appears to be produced, such as in Armenia and Azerbaijan (Mountain Karabagh), Georgia (South Ossetia, and Abkhasia), and Moldova (Trans-Nistria). Although reliable information is not available, there is some evidence of massive forest harvesting in these areas.

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1. For definitions of terminology, please refer to annex 8.
<table>
<thead>
<tr>
<th>Country</th>
<th>Forest area (ha)</th>
<th>Percentage of land area</th>
<th>Forest types</th>
<th>Ownership</th>
<th>Allowed forest use categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>1,057,000</td>
<td>36</td>
<td>60% mountain forests, 40% in the plains</td>
<td>73% of forests owned and managed by the state, 26% under community management, 1% restituted to private owners</td>
<td>Both commercial and protection</td>
</tr>
<tr>
<td>Armenia</td>
<td>350,000</td>
<td>12</td>
<td>70% broadleaved high forests, 22% coppice forests, 7% shrub forests</td>
<td>All forests owned by the state</td>
<td>Only improvement and sanitary felling; commercial logging forbidden</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>1,090,000</td>
<td>13</td>
<td>Mainly mountain forests</td>
<td>All forests owned by the state</td>
<td>Only improvement and sanitary felling; commercial logging forbidden</td>
</tr>
<tr>
<td>Belarus</td>
<td>9,402,000</td>
<td>45</td>
<td>70% predominantly spruce forests</td>
<td>All forests are owned by the state</td>
<td>Sanitary fellings and final cuttings</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>2,273,000</td>
<td>45</td>
<td>Mainly mountain forests, 47% high forests, 22% coppice forests</td>
<td>80% of forests state owned, 20% by a large number of private individuals</td>
<td>60% classified as production forests, 40% as not available for wood supply</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3,400,000</td>
<td>32</td>
<td>62% broadleaved, 38% coniferous forests</td>
<td>66% of forests owned by state, 20% by municipalities; large number of small private owners</td>
<td>65% for commercial use, 35% for protection and recreation</td>
</tr>
<tr>
<td>Croatia</td>
<td>1,783,000</td>
<td>32</td>
<td>Broadleaved productive forests</td>
<td>80% of forests state owned by “Croatian Forest” Enterprise, 18% owned by smallholders</td>
<td>80% production forests, 2% protected area forests</td>
</tr>
<tr>
<td>Georgia</td>
<td>2,988,000</td>
<td>43</td>
<td>Mountain forests, 80% broadleaved, 20% conifers</td>
<td>All forests owned by the state</td>
<td>Industrial logging: final cut, and thinning Fuelwood: special cut</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>12,148,000</td>
<td>4</td>
<td>70% conifers</td>
<td>All forests owned by the state</td>
<td>Sanitary fellings and final cuttings</td>
</tr>
<tr>
<td>The Kyrgyz Republic</td>
<td>864,900</td>
<td>4</td>
<td>Mainly mountain forests</td>
<td>All forests owned by the state</td>
<td>All forests have protection status prohibiting industrial logging</td>
</tr>
<tr>
<td>Macedonia</td>
<td>906,000</td>
<td>36</td>
<td>Broadleaved forests, beech and oak</td>
<td>92% state owned, 8% privately owned</td>
<td>5 enterprises are managing protective forests, 3 national parks</td>
</tr>
<tr>
<td>Moldova</td>
<td>362,700</td>
<td>11</td>
<td>98% broadleaved</td>
<td>90% of forests owned and managed by the state, 10% by local governments, some 400 ha are private property</td>
<td>All forests having exclusively environmental protection functions</td>
</tr>
<tr>
<td>Romania</td>
<td>6,448,000</td>
<td>28</td>
<td>69% broadleaved, 30% conifer</td>
<td>92% under national forest administration, 8% private forests</td>
<td>54% special production forest, 46% production and protection forests</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>764,000,000</td>
<td>50</td>
<td>All boreal and temperate forest types</td>
<td>All forests are owned by the state, lease arrangements possible</td>
<td>Both commercial and protection, large areas unaffected by industrial use</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2,887,000</td>
<td>28</td>
<td>91% deciduous forests, 6% mixed forests</td>
<td>56% of forests owned by the state, 44% in private smallholder ownership</td>
<td>Predominantly commercial</td>
</tr>
<tr>
<td>Ukraine</td>
<td>10,780,000</td>
<td>16</td>
<td>52% deciduous, 40% softwood, 8% mixed forests</td>
<td>All forests owned by the state: State Forestry Committee, 68%; Ministries of Agriculture 27%; Others, 5%</td>
<td>50% restricted use, 14% protected forests</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2,200,000</td>
<td>5</td>
<td>Mountain forests and desert/steppe shrub lands</td>
<td>Mainly central government owned, some forest allocated to regional governments and agricultural enterprises</td>
<td>All forests classified as protection forests, industrial logging forbidden</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>410,000</td>
<td>3</td>
<td>Mainly mountain forests</td>
<td>All forests owned by the state, about 50,000 ha managed by collective farms</td>
<td>All forests classified as protection forests allowing only sanitary felling</td>
</tr>
</tbody>
</table>

Russia is overwhelmingly dominant in the region. The country controls more than one-fifth of the world’s forest area (box 1.1). In contrast, most countries in Central Asia as well as some in the Balkans have a relative scarcity of forest resources and suffer from a chronic shortage in domestic supply for fuelwood and timber.

**Box 1.1 Forestry in Russia**

Russia is by far the most important forested country in the ENA region. Extending from the Baltic Sea to the Pacific Ocean, Russia has 22 percent of the world’s forest area. By comparison, the next largest forested countries are Brazil with 16 percent, Canada with 7 percent, and the United States with 6 percent of the world’s forest cover. The most often quoted figure for Russia’s total forested area is 764 million hectares (equal to about 1.9 billion acres). Thus, Russia’s forests are of global importance, both ecologically and economically. They are generally little disturbed, especially in Siberia and the Far East. Industrial and agricultural expansion into these regions has been difficult due to climatic conditions and related difficulties of cultivating the land. Significant decline in biological diversity has occurred in the northern Caucasus, in the Volga region, in Central-European Russia, and in southern Siberia.

The forests serve Russia, other Commonwealth of Independent States (CIS) countries, China, Japan, the Republic of Korea, and the European Union, in particular, as a major source of timber, as a reserve of biodiversity in temperate and boreal regions, and as an important sink of carbon. According to Global Forest Watch (Web site accessed October 2005), about 26 percent of the world’s last frontier forests are in Russia. The UNEP–World Conservation Monitoring Centre estimates that over 11,000 species of vascular plants, of which 461 are classified as endangered in the Red Data Book (but some 2,000 are estimated as being under threat), 320 of mammals (64 endangered), more than 700 of birds (109 endangered), 75 of reptiles (11 endangered), about 30 of amphibians (4 endangered), and 270 of freshwater fish (9 endangered) can be found in Russia.

The Federal Forest Agency of Russia (Rosleskhoz) manages nearly 94 percent of the total forest land area in Russia, with another 6 percent belonging to agricultural organizations defence and other state bodies.

The annual growth of the Russian forests is nearly 900 million m³. However, much of this potential cannot be used even by the forest industry due to the remoteness of forests from domestic and international markets, the absence of a transportation network, and technological limitations. The economically exploitable forests comprise approximately 55 percent of the forested areas under Rosleskhoz. The annual official roundwood harvest from Rosleskhoz is estimated at 175 million m³, averaged over the past five years.

The basis of forest legislation was issued in 1993, to be replaced in 1997 by the new Forest Code. The 1993 reform enabled some progress to be made toward establishing market relations. According to the 1993 Forest Law, forest leasing and auctions of standing timber were allowed, and forest leasing is the main element of market relations. Any person, including a foreigner, can be a leaseholder. The Russian forest harvesting and timber processing industry is completely privatized, but forests largely remain under state control. A new draft Forest Code, developed mainly by the Ministry of Economic Development, is currently in an extended hearing process in the state Duma. The proposal deals with further reform processes in forest governance, harvesting control and utilisation of forest products.

Forest leasing contracts are used in all major forest zones in Siberia, the Far East, the Urals, and in north and northwest Russia. The leaseholders are typically formerly state-owned logging companies. In such regions as Arkhangelsk, Vologda, Kostroma, Primorsk, Khabarovsk, and in the southern part of the Komi Republic, practically all economically accessible and profitable forests have been given to leaseholders. According to the new Forest Code, the right to grant licenses belongs to the regional authorities. The licenses are granted by direct negotiation, auction, or tender, often in a non-transparent way. By the end of 2004, all leaseholders combined possessed an allowable annual cut of 85 million m³, about half of the estimated total annual cut in the country.

These countries also experienced a severe disruption in energy supply in the 1990s as a result of the breakup of the Soviet Union, leading to high pressure on wood resources (for example, Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan). The peak of logging for fuelwood took place in the early to mid-1990s, and the dependence of rural people on fuelwood as a primary source of energy continues to be one of the main unresolved forest sector issues. Adjustment programs (as in Azerbaijan) and the reduction of subsidies on other sources of energy, such as natural gas and electricity, have contributed to intensifying fuelwood shortages.

In all countries of the ENA region, the state is the main forest resources owner. In most countries different tiers of government (federal, state, or local) own or control all forest resources. Private ownership is found only in the Balkans—a substantial proportion of the forest resources in Serbia and Montenegro is in private hands—and it is concentrated in a large number of individual small landholdings. Illegal logging takes place mostly in areas controlled by the state except perhaps in a few countries in the Balkans (in Serbia and Montenegro, for example).

### 1.2 Trade in Forest Products

Both regional imports and regional exports of forest products show an increase over the last decade, with exports well in excess of imports. After a temporary slump in 2003, the value of regional exports had reached some US$9 billion in 2004 (see figure 1.1). These aggregate numbers mask the rather large differences between countries (see table 1.2). In some countries, international trade is insignificant. As expected, countries with relatively scarce forest resources export little, with imports being several times the value of exports.

**Figure 1.1 International Trade in Forest Products, ENA Countries** (Source FAOSTAT)
In contrast, forest-rich countries have exports that exceed imports several times over. The regional picture is dominated by Russia, which exports almost three-quarters and imports about a third of the regional totals. Russia exported in 2004 a total of 41.5 million m³ of round wood, 13.1 million m³ of sawn wood, 1866 tons of pulp and 2590 tons of paper and paper boards (Russia Forest Service, 2005).

Table 1.2 Characteristics of Forest Products Trade in Selected ENA Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>2000</th>
<th>2002</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (US$ million)</td>
<td>Imports</td>
<td>Exports</td>
</tr>
<tr>
<td>Albania</td>
<td>15,793</td>
<td>5,867</td>
<td>13,892</td>
</tr>
<tr>
<td>Armenia</td>
<td>7,828</td>
<td>885</td>
<td>11,791</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>31,500</td>
<td>1,126</td>
<td>27,857</td>
</tr>
<tr>
<td>Belarus</td>
<td>177,380</td>
<td>173,070</td>
<td>190,882</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>23,986</td>
<td>65,335</td>
<td>23,986</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>126,069</td>
<td>130,459</td>
<td>154,259</td>
</tr>
<tr>
<td>Croatia</td>
<td>286,957</td>
<td>275,004</td>
<td>242,512</td>
</tr>
<tr>
<td>Georgia</td>
<td>5,043</td>
<td>10,228</td>
<td>5,086</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>87,995</td>
<td>42,225</td>
<td>113,770</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>12,173</td>
<td>577</td>
<td>13,270</td>
</tr>
<tr>
<td>Moldova</td>
<td>29,253</td>
<td>3,748</td>
<td>29,253</td>
</tr>
<tr>
<td>Romania</td>
<td>189,591</td>
<td>516,060</td>
<td>288,678</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>388,111</td>
<td>3,791,653</td>
<td>717,235</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>182,243</td>
<td>83,447</td>
<td>123,355</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>3,983</td>
<td>80</td>
<td>3,983</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>3,880</td>
<td>501</td>
<td>3,880</td>
</tr>
<tr>
<td>Ukraine</td>
<td>232,032</td>
<td>127,229</td>
<td>464,052</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>37,231</td>
<td>130</td>
<td>37,231</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,841,048</strong></td>
<td><strong>5,227,624</strong></td>
<td><strong>2,464,972</strong></td>
</tr>
</tbody>
</table>

Source: FAOSTAT

Russia exports values in 2004 were as follows: industrial logs, US$2.4 billion, over 90 percent of regional exports; sawn wood (US$1.5 billion, around 60 percent of the regional total); and paper products (US$1.2 billion, over 70 percent of the regional total)\(^2\).

The above characterization of the forest sector offers the following insights into the vulnerability of different countries to illegal logging and trade practices:

- There are countries that have very limited forest resources. In these countries the absolute importance of illegal logging and trade is in all probability low (although it may be considerable when measured in relative volume and values). In contrast, there are other countries with abundant forest resources, particularly Russia. Even if a small harvesting proportion takes place in illegal ways in these countries, the absolute volume and value would be large.

- In all countries, forests are owned mainly, and in some cases exclusively, by the state. Private ownership of forest resources is limited to a few countries and to a relatively small proportion of the national forest resource area. Thus, remedial strategies to control illegal logging, such as the risk of forest expropriation in serious cases of infringement of the law, cannot make much use of instruments that only operate in a context of private property. The range of potential strategies

\(^2\) Of particular importance are the timber trade patterns between Russia Far East and China. This important aspect is described in detail in a number of studies published by Forest Trends (www.forest-trends.org), see bibliography.
to combat illegal logging will likely be very different in those few countries where private ownership is present.

- International trade has the potential of both offering powerful incentives to engage in illegal operations and implementing remedial actions to control those illegal operations. The value of illegal exports is high in some countries, reaching several billion dollars per year and much of that takes place in the form of rough industrial logs. “Cut and run” operations are easier to carry out if unprocessed logs are exported and there are no substantial associated investments in costly, visible, and stationary industrial processing plants that can be subject to expropriation. International trade, however, also provides options that can help producer governments control trade-driven illegal logging.

- Official figures are in some cases unreliable and may therefore not give a clear idea of the potential illegal amounts logged and traded. Unrecorded exports of logs, for example, may be substantial. However, official figures give at least an idea of the magnitude of potential values, should a proportion of economic activity take place in illegal ways. We come back to this issue in chapter 3, where the incidence of illegal logging and trade are estimated, to obtain an idea of the order of magnitude and the possible differences between official figures and estimates of volumes logged and traded.

2 Magnitude and Impact of Illegal Logging and Illegal Trade

2.1 Basic Concepts and Definitions

2.1.1 Diversity of Concepts

Initiatives to combat illegal acts in the forest sector must have a common understanding of what these illegal acts are. This apparently banal definitional requirement turns out to be critically important in organizing actions to improve legal compliance. A clear operational definition facilitates prompt identification of what is understood as legal and illegal. In contrast, vagueness about these terms creates confusion and uncertainty in choosing corrective measures and difficulties in implementing them.

However, a widely accepted definition that would allow fast and unambiguous segregation between legal and illegal acts is difficult to establish (UNECE 2004). Simply stated, an illegal act is one that does not conform to the law; but “the law” may have different meanings depending on the context. It may include international, national, or local laws and regulations. Or it may include the forestry law and also related legal bodies such as conservation laws, or those that protect laborers’ or indigenous people’s rights. Thus, the forest law may prescribe cutting cycles, species that can be harvested, and with what intensity. Conservation laws may restrict logging near rivers or on steep slopes or at the head of watersheds. Labor laws may specify a minimum age for manual workers, degree of training required, maximum hours of work, minimum salary, and various safety requirements. Indigenous rights laws may prohibit logging in traditional lands or require previous consent to do so from indigenous communities. Infringement of any of these laws or regulations could result in a forest operation—logging, for example—and the resulting products being branded as illegal.
Furthermore, the relevant body of law varies from country to country, and sometimes within countries, and there are elements of forest legislation that are not universally shared. For instance, some countries sanction deforestation as a way to establish property rights, while others prohibit that practice. Some recognize traditional tenure and ownership, while others do not. Conflictive legislation within countries relates to the lack of harmonization of, for example, land tenure law with forestry law, with environmental and conservation law, with labor laws, and so forth.

Laws are not static, but evolve over time. Conditions vary, demanding constantly new or modified government interventions and regulations. For example, some countries impose temporary log export bans and, as a result, a log entering the export market may be sanctioned as legal one year and illegal the next. In this way, forest products may periodically drift in and out of the world of “legality.”

Thus, as a matter of practical convenience countries adopt narrower specific dimensions of legality as the basis for their law enforcement duties. International bodies have also attempted to clarify the definitional aspects of illegal logging. These national and international definitions are discussed below.

### 2.1.2 National Definitions

In broad terms, main violations associated with illegal logging and trade can be divided into eight groups:

- theft of wood
- unauthorized harvesting
- noncompliance with regulations related to timber harvesting
- noncompliance with the procedure of timber sales or concession award
- manipulation of timber data
- evasion of taxes and fees
- noncompliance with regulations concerning transport or export of timber
- noncompliance with labor laws

In the ENA countries, explicit definitions for illegal logging are usually not available. However, in practice, definitions can be derived from such violations of the law as reported in national statistics concerning illegal logging (see table 2.1). This does not necessarily mean that other types of violations would be ignored; they may simply be recorded under different headings.

Typically, the statistics on illegal logging in the countries involved in the study refer to violations involving tree theft, unauthorized harvesting, and noncompliance with cutting regulations. Corruption in connection with timber harvesting is not recorded under illegal logging unless it involves physical removal of trees.

Based on interviews with various stakeholders, noncompliance with labor laws is perceived to be only weakly linked to illegal logging. Sector-specific records are not maintained and the forest administration is not involved in relevant enforcement activities.
Table 2.1 Concept of Illegal Logging in Selected Countries of ENA Region

<table>
<thead>
<tr>
<th>Types of illegal logging</th>
<th>ALB</th>
<th>ARM</th>
<th>AZE</th>
<th>BIH</th>
<th>GEO</th>
<th>KGZ</th>
<th>MDA</th>
<th>RUS</th>
<th>SER</th>
<th>UZB</th>
<th>TJK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
</tr>
<tr>
<td>Unauthorized harvesting by forest owner or concession holder</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>(►)</td>
</tr>
<tr>
<td>Noncompliance with regulations related to timber harvesting</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>►</td>
<td>(►)</td>
<td>(►)</td>
</tr>
<tr>
<td>Noncompliance with procedures of timber sale or concession award</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(►)</td>
<td></td>
</tr>
<tr>
<td>Manipulation of timber and financial data, shadow pricing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evasion of taxes and fees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noncompliance with regulations concerning transport of timber</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noncompliance with labor laws</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Limited resources prevented a detailed analysis of all forest-related legislation; therefore, the assessment is to some extent a subjective interpretation by the authors of this report. Arrow in parentheses: no conclusive assessment possible, but elements are covered in the law.

a. In Serbia and Montenegro, illegal logging is associated with “forest devastation.” However, according to current legislation, unauthorized harvesting that does not result in forest devastation is not a criminal act. Competent authorities can also authorize an act resulting in forest devastation. In practice, such authorizations are issued rarely and explicit justification for them is required.

2.1.3 International Definitions

The international community has proposed a number of definitions for illegal logging (see annex A3). Most of them are based on national legal frameworks but there are also those that link illegal logging to “unsustainable logging.” In practice, the lack of operational definitions for “sustainability” reduces the applicability of such formulations.

Another aspect where international definitions differ from national definitions is in scope. While national definitions often apply a narrow scope limited to illegalities directly related to logging, the international definitions often require that all activities even indirectly related to logging also be legal. For example, in keeping with this notion timber originating from forest lands that have been acquired with illegal proceeds could be considered illegal, even if the enterprise had followed all rules and regulations related to forest management and logging.

Thus, the apparently simple question “what is illegal?” has no easy answer. The concept can be understood in a broad or narrow perspective. There is no fast, objective, universally accepted, and comprehensive method to identify what law or set of laws should be the indisputable standard needed to pronounce an activity—logging, for instance—legal or illegal.

If too broad a concept is adopted, it is entirely possible that a close scrutiny of operations would reveal infringement of some law, even in advanced countries. In addition, broad definitions run the risk of not being operational, because they may exceed enforcement capacity and go beyond national perceptions of where to draw the line between illegal logging and other illegal activities. This implies that, to be relevant in most or all countries, a universal definition would need to have a rather narrow scope. In general terms, the law enforcement mechanisms in ENA countries in the forest sector seem capable and willing to tackle illegalities that are directly related to production and trade of logs until they are delivered to the end user or the processing unit. The obvious alternative to adopting a
universally valid definition is to formulate national definitions in collaboration with the
stakeholders to match conditions prevailing in each country. (For suggestions on that
approach, see annex A6.)

2.2 Magnitude of Illegal Logging and Trade

2.2.1 Methodological Aspects

No matter what definitions are adopted, the magnitude of illegal logging and trade in most
countries is not known with certainty. Most assessments available to date are based on
anecdotal information. Given the poor quality of monitoring systems in most countries and
the secretive nature of illegal acts, their magnitude is difficult to establish unambiguously.

Illegal logging. The method to estimate the magnitude of illegal logging usually starts with
estimates of national consumption of home-grown logs, which are then compared with the
authorized harvest. If the estimated national consumption is higher than the authorized
harvest, the difference is attributed to illegal logging.

The “apparent” national consumption of logs is based on an estimate of their harvest minus
exports plus the volume of imported industrial roundwood and the roundwood equivalent of
imported forest industrial products.

Methodological problems make estimates of illegal logging rather imprecise. While estimates
of industrial production (paper, wood-based panels, sawnwood) are generally deemed to be
more reliable than estimates of harvested wood, such estimates still may be affected by
“leakages.” There are, for example, incentives to under declare industrial production as a way
to avoid taxes.

Furthermore, in most countries there is just a vague idea of the national consumption of
fuelwood, which generally is by far the use that consumes the greatest volume of wood.
Finally, estimates of national consumption and of illegal logging also rely on trade statistics,
which themselves are plagued by inaccuracies, as discussed below.

Illegal trade of wood and trade of illegally sourced wood. There are at least two ways in
which trade can be linked to illegal acts in the forest sector. First, trade can involve logs that
have been illegally sourced. In this case trade procedures may be followed strictly,
authorizations to export and import obtained, and taxes paid but the origin of wood is tainted
by illegality. Unless trading partners demand evidence of legal sourcing, the whole operation
appears legal and in this way, trade provides an attractive outlet for commercializing illegal
logs.

Second, trade itself can be illegal, no matter the legality of the origin of logs. For example,
logs can be smuggled from one country to another. Or volumes can be understated to avoid
paying export or import taxes. In this case, official figures do not reflect reality.

Thus, there are a number of pitfalls in adequately estimating discrepancies between official
trade figures and estimated numbers that are calculated using various conversion factors.
Some of these discrepancies can be legitimate, such as those arising from different
conventions employed to classify species and to measure volumes (see box 2.1). Because it is
difficult to differentiate between “normal” (legitimate) discrepancies and “abnormal” ones, the estimates of illegal logging and trade tend to be inexact. Furthermore, some of the illegal logging and trade never emerge in any kind of statistic and therefore go completely undetected. Examples are log smuggling and abuse of transfer pricing.

<table>
<thead>
<tr>
<th>Box 2.1 Factors Contributing to Discrepancies in Trade Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal Activities that Result in Trade Statistics Discrepancies</strong></td>
</tr>
<tr>
<td><strong>Primary normal factors</strong></td>
</tr>
<tr>
<td>Product valuation (FOB versus CIF)</td>
</tr>
<tr>
<td>Time lag between export and import</td>
</tr>
<tr>
<td>Exchange rate fluctuations</td>
</tr>
<tr>
<td>Declaration of destination (transshipments)</td>
</tr>
<tr>
<td><strong>Secondary normal factors</strong></td>
</tr>
<tr>
<td>Conversion of product weights to volumes</td>
</tr>
<tr>
<td>Differences in log scaling methods</td>
</tr>
<tr>
<td>Volume conversions from standard to metric</td>
</tr>
<tr>
<td>Product valuation method</td>
</tr>
<tr>
<td>Combined shipment of mixed products</td>
</tr>
<tr>
<td>Different product classification systems used</td>
</tr>
<tr>
<td>Poor government policies or policy implementation</td>
</tr>
<tr>
<td>Type of national accounting system used for trade</td>
</tr>
<tr>
<td>Unintentional data collection and processing errors</td>
</tr>
<tr>
<td>Unreported export or import data</td>
</tr>
<tr>
<td><strong>Abnormal or Illegal Activities that Result in Trade Statistics Discrepancies</strong></td>
</tr>
<tr>
<td><strong>Abnormal factors</strong></td>
</tr>
<tr>
<td>Under invoicing product value or volume</td>
</tr>
<tr>
<td>Misspecification of product type or characteristics</td>
</tr>
<tr>
<td>Misspecification of species or grade</td>
</tr>
<tr>
<td>Transfer pricing</td>
</tr>
<tr>
<td>Fraudulent trade data</td>
</tr>
<tr>
<td>Smuggling</td>
</tr>
</tbody>
</table>


Nevertheless, there are cases where the magnitude of discrepancies is hard to explain using legitimate reasons or possible estimation errors. This, together with the abundance of anecdotal information, provides sufficient ground to assert that, although the precise scale of illegal logging and trade may generally not be known, orders of magnitude are often significant.

Keeping these caveats and considerations in mind, the next two sections present estimates of the magnitude of illegal logging and illegal trade in the ENA countries, and the discrepancies between estimated logging and trade figures and those from official statistics.

### 2.2.2 The Magnitude of Illegal Logging

Based on official statistics, the volume of illegal logging in the countries involved in the study varies considerably (table 2.1). The lowest proportions have been recorded in Bosnia and Herzegovina, Moldova, Serbia and Montenegro, and Ukraine, where illegal logging volumes account for 0.2 to 2.2 percent of the legal national timber supply. At the other end of the scale are Azerbaijan and Tajikistan, where official illegal logging amounts to 20 to 30 percent of legal supply. In Kazakhstan, illegal logging occurs along the border with China and Russia. In such areas, wood cutting is far beyond what is permitted by harvesting licenses. In Russia, the latest official estimate indicates that illegal logging represents some 11 percent of legal logging. In northwest Russia, the proportion is 6 percent while in the Far East, the share is
estimated at 18 percent. In absolute terms, the Russian figure, 9.8 million m³, is of a different order of magnitude compared with other ENA countries.

Table 2.2  Estimated “Official” Data on Illegal Logging

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Estimated volume of illegal logging (m³)</th>
<th>Legal logging (m³)</th>
<th>Illegal logging as % of legal logging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>2002</td>
<td>28,400</td>
<td>304,800</td>
<td>9.3</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>1988–2005</td>
<td>20,600*</td>
<td>65,000*</td>
<td>32.0</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>2003*</td>
<td>41,159</td>
<td>1,850,938</td>
<td>2.2</td>
</tr>
<tr>
<td>Georgia</td>
<td>2004</td>
<td>60,846</td>
<td>640,957</td>
<td>9.5</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>2002–4</td>
<td>2,500*</td>
<td>33,000*</td>
<td>7.5</td>
</tr>
<tr>
<td>Moldova</td>
<td>2004</td>
<td>3,479</td>
<td>422,000</td>
<td>0.8</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2004</td>
<td>6,500,000</td>
<td>88,200,000*</td>
<td>11.0</td>
</tr>
<tr>
<td>- NW Russia</td>
<td>2004</td>
<td>2,000,000</td>
<td>38,000,000</td>
<td>6.0</td>
</tr>
<tr>
<td>- Far East</td>
<td>2004</td>
<td>4,500,000</td>
<td>25,500,000</td>
<td>18.0</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2004</td>
<td>9,136</td>
<td>3,250,000</td>
<td>0.3</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>n.a.</td>
<td>1,340–2,010</td>
<td>6,700</td>
<td>20.0–30.0</td>
</tr>
<tr>
<td>Ukraine</td>
<td>2004</td>
<td>30,000</td>
<td>12,395,000</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: SAVCOR reports and Intercooperation
Note: n.a. = not available.

a. Annual averages for the period.
b. Data available from only four cantons of Bosnia and Herzegovina: West Herzegovina, Central Bosnia, Kupres, and Zen-Doboj.

In an alternative approach, the recorded legal supply from forest areas can be compared to estimates of actual consumption of nationally produced commercial timber and fuelwood. The amount exceeding legal supply is likely to be illegal timber. In some cases, these estimates were obtained from previous studies (for example, in Russia and Azerbaijan). If several differing estimates were available, the range of these estimates is presented.

The picture emerging from this comparison is less encouraging than that given by official statistics. In all countries actual harvest appears to be larger than legal supply, and in many of them the difference is large. The difference is somewhat larger for fuelwood than for industrial timber (table 2.3).

3. The official estimate is 10 percent of total logging volume; 5 percent in northwest Russia and 10 percent in the Far East (Lesnaja Gazeta 2005). The figures in the text were converted to correspond with the reference point used in other countries, that is, the ratio of illegal logging volume to legal logging volume.

4. The estimates on industrial timber production are based either on existing investigations or were derived taking advantage of existing statistical data on consumption. It was assumed that the share of commercial timber coming from outside the forest areas is negligible. The starting point for assessing fuelwood production was the available estimates on fuelwood consumption. To ensure comparability with legal supply, an attempt was made to exclude the amounts harvested outside forest areas (for details, see country studies). It is stressed that owing to shortcomings in basic data, the estimates are indicative. Exports and imports were considered where relevant (Bosnia and Herzegovina).

5. It should be kept in mind that official figures on legal supply of commercial timber may be underestimated because of data manipulation; industrial timber may be recorded as fuelwood.
Table 2.3 Estimated Production and Legal National Supply of Industrial Timber and Fuelwood

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Industrial timber</th>
<th>Fuelwood</th>
<th>Ratio of estimated actual harvest to legal supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Estimated actual harvest from forest areas</td>
<td>Legal supply from forest areas</td>
<td>Expected actual harvest to legal supply</td>
</tr>
<tr>
<td>Albania</td>
<td>2002</td>
<td>444</td>
<td>83</td>
<td>5.3</td>
</tr>
<tr>
<td>Armenia</td>
<td>2003</td>
<td>150</td>
<td>20</td>
<td>7.5</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>2004</td>
<td>11–456</td>
<td>1</td>
<td>very large</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>2003</td>
<td>3,106</td>
<td>2,714</td>
<td>1.1</td>
</tr>
<tr>
<td>Georgia</td>
<td>2004</td>
<td>550</td>
<td>70</td>
<td>7.9</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>2002–4</td>
<td>n.a.</td>
<td>11b</td>
<td>n.a.</td>
</tr>
<tr>
<td>Moldova</td>
<td>2004</td>
<td>n.a.</td>
<td>44</td>
<td>n.a.</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2004</td>
<td>98,000</td>
<td>83,000–79,000</td>
<td>1.2–1.4</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2004</td>
<td>1,995+</td>
<td>1,900</td>
<td>1.05+</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Ukraine</td>
<td>2004</td>
<td>1,600</td>
<td>1,500</td>
<td>1.07</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2004</td>
<td>n.a.</td>
<td>8</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Source: SAVCOR reports and Russian forest Service, 2005

Note: n.a. = not available.

a. May include a minor portion originating from outside forest areas.
b. Annual averages for the period.
c. Total harvesting volume including also fuelwood representing possibly up to one-fourth of total volume.
d. Stakeholder opinion, the majority estimated that illegal logging is 5 percent or more of legal supply.

For industrial timber, the gap between actual harvest and legal supply was estimated to be widest in Armenia, Albania, and Georgia. In these countries the harvested volumes are five to eight times larger than the officially recorded supply. In Azerbaijan, the available estimates on actual production vary widely but it is clear that the true harvested volumes are much larger than the negligible legal production.

A number of organizations have derived independent estimates on illegal logging in Russia. Most of these sources estimate that between 20 and 30 percent of the total Russian harvest is illegal because of improper or nonexistent felling licenses or cutting in excess of permitted volumes. Some nongovernmental organizations (NGOs) place the estimate of illegal logging at 50 percent in some parts of the country. An International Finance Corporation project estimated that in northwest Russia, illegal logging would represent only 5 percent of the total (Shestakov and Pulliainen 2004). One of the most recent analyses was conducted in a study commissioned by the American Forest and Paper Association, which estimates that on average 15 to 20 percent of the (industrial) harvest in Russia may be “illegal” (Seneca Creek Associates, LLC and Wood Resources International, LLC 2004). Thus, compared to legal supply (the yardstick for other ENA countries) the volume of illegal timber is 20 to 40 percent, depending on the source of the estimates.
In absolute terms, the volume of illegal timber in Russia is overwhelming, compared with all other countries in the ENA region. In 2004, the total harvested volume in Russia was estimated at 98 million m$^3$. According to the illegal logging volume would be 15 to 29 million m$^3$.

In several countries, the production of fuelwood exceeds the legal supply by a large margin. In Albania, Armenia, the Kyrgyz Republic, and Tajikistan fuelwood harvest is estimated to be more than 10 times larger than the amount indicated by official data. In Georgia, the official supply would have to be multiplied by a factor of seven to arrive at the magnitude of illegal fuelwood extraction.

### 2.2.3 The Magnitude of Illegal Trade

Some of the negative impacts of illegal logging may “leak” abroad through illegal exports. There is limited information available on illegal exports of wood products from the ENA countries; but looking at legal exports, Bosnia and Herzegovina, Georgia, and Russia, and possibly Serbia and Montenegro, all ship significant volumes abroad, and it is likely that these countries are also the main sources of illegal exports (table 2.4). In other countries, the resource base is so limited and domestic consumption so large that the volume of illegal exports is likely to be minimal. However, illegal exports from those countries may include some high value products (for example, walnut burls [wood knobs] are exported illegally from the Kyrgyz Republic).

#### Table 2.4 Estimates of legal and Illegal Exports of Wood Products of Selected ENA Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Legal exports</th>
<th>Illegal exports</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Roundwood</td>
<td>Sawnwood</td>
<td>Firewood or charcoal</td>
</tr>
<tr>
<td>Albania</td>
<td>2002</td>
<td>–</td>
<td>95</td>
<td>12,000 tons</td>
</tr>
<tr>
<td>Armenia</td>
<td>2002</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>2003</td>
<td>221</td>
<td>927</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2002</td>
<td>9</td>
<td>330</td>
<td>6</td>
</tr>
<tr>
<td>Georgia</td>
<td>2004</td>
<td>–</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>1998–2004</td>
<td>2$^a$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2003</td>
<td>45,000</td>
<td>10,000</td>
<td>n.a.</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2002</td>
<td>33</td>
<td>n.a.</td>
<td>1</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2002</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SAVCOR reports

*Note: n.a. = not available. - = no data.*

a. Annual average for the period.

Russia is clearly the main timber exporting country in the ENA region with its exported volume being significantly larger than the combined export volume of all other countries.

---

6. There are conflicting official estimates regarding total harvested volume. The State Statistics Committee reports that harvest in 2002 was only 91 million m$^3$, while the Ministry of Natural Resources reported a harvest of 165 million m$^3$ (Seneca Creek Associates, LLC and Wood Resources International, LLC 2004).
combined. In 2003, the total Russian log export volume was reported at 45 million m$^3$. The destinations receiving the bulk of Russian log exports include China, Finland, Japan, and Sweden. In contrast, sawnwood is shipped to a more diverse clientele. The Arab Republic of Egypt, Japan, and the United Kingdom are the main clients but together they receive less than a quarter of the total export volume (Seneca Creek Associates, LLC and Wood Resources International, LLC 2004).

Illegal log exports from Russia are estimated at about 25 percent of total log exports, but for Russian exports to China, the proportion is probably higher, reaching 40 percent. For sawnwood exports, the share of illegal softwood products is estimated at 15 percent and that of hardwood products at 20 percent (Seneca Creek Associates, LLC and Wood Resources International, LLC 2004). The close relationship between exports and illegal logging is implied by the assessment made by the Federal Forest Resource Agency, according to which the forests most affected by illegal logging are those in export zones adjacent to Europe and Finland and, in the Far East, near China and Japan (Illegal Logging 2005).

A proportion of exports from Russia, Serbia and Montenegro, and possibly Bosnia and Herzegovina, go to environmentally sensitive markets; this offers an option to introduce demand-based incentives to legal logging, such as those for independent forest certification. Nearly 80 percent of Russian hardwood log exports are destined to markets that can be considered environmentally sensitive, such as Finland, Japan, and Sweden. Softwood logs shipped to these countries account for about 40 percent of total volume. In sawnwood exports, various Western European countries represent about 20 percent of the total volume. The value of Serbian wood exports shipped to Italy and Germany was nearly US$40 million in 2004. Data from Bosnia and Herzegovina are not available but the value is likely to be substantial.

2.3 Impacts of Illegal Logging and Trade

Illegal logging and trade are generally undesirable activities because they cause various negative impacts on the economy. Illegal logging and trade reduce government income. Illegal logging may also introduce perverse economic signals leading to misallocation of investment and other economic resources.

Because forest regulations are intended to ensure the protection and environmentally sound management of forest resources, illegal forest activities result in environmental loss and degradation. Illegal logging and trade are also associated with a number of detrimental social impacts. These impacts are discussed below.

2.3.1 Economic Impacts

*Impact on government finances.* In countries where the volume of illegal logging is large, the value of illegally logged wood commands a substantial market value. If this wood has been stolen from state property, government losses can be considerable. In countries for which data was available, the estimates range from US$4.8 million per year in Moldova to US$48.2 million (the higher estimate) in Azerbaijan (table 2.5). In Albania, Bosnia and Herzegovina, Bulgaria, and Georgia, the estimates are between US$11.4 million and US$22 million. In Azerbaijan, the lower estimate puts the value at US$14.4 million. WWF (2004) estimates that
the Russian government loses US$1 billion (a billion is 1,000 million) a year due to illegal logging.

Table 2.5 Estimated Market Value of Illegal Logging

<table>
<thead>
<tr>
<th>Country</th>
<th>Market value estimates of illegal logging (US$ million)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Industrial</td>
<td>Fuelwood</td>
<td>Charcoal</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>7.9</td>
<td>3.5</td>
<td>n.a.</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Armenia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1.1–3.6</td>
<td></td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>9.4–14.2</td>
<td>2.4–31.4</td>
<td>2.6–2.6</td>
<td>14.4–48.2</td>
<td></td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>15.0–22.0</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>8–11</td>
<td>5</td>
<td>n.a.</td>
<td>13.0–16.0</td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>650b</td>
<td>n.a.</td>
<td>n.a.</td>
<td>650b</td>
<td></td>
</tr>
</tbody>
</table>

Note: n.a. = not available.

a. Timber theft value between 1997 and 2001 was approximately 20–30 million levs (US$15 million to US$22 million equivalent).

b. Russia: own estimate (based on various references)

Improving legal compliance would stop these losses, although it would not generate immediate government financial revenue.

Elimination of illegality and corruption in logging and trade may yield other important revenues contributing directly to the income of public and private forest owners. If corrupt practices were eliminated, the result would show in higher revenues. Unfortunately, there are no estimates available on the financial losses caused by corruption in any of the countries involved in this study. However, in several countries stakeholders expressed the view that the impact of corruption probably equalled or was higher than losses caused by theft.

Reducing incentives to sustainable forest management. Illegal logging and trade may have a depressing effect on timber and wood products prices making it difficult, or impossible, for legal operators to compete in markets. There are two principal mechanisms depressing prices:

- Illegal operators may have lower costs than legal operators. While illegal loggers and traders sometimes need to pay bribes and incur costs to avoid detection, they have the advantage of forgoing taxes and stumpage fees. They can also ignore environmental and other regulations that can be complex and expensive to satisfy. In fact, if there were no such reduced costs and net financial advantages, illegal logging and trade would be much less of a problem.

- Expanded timber supply resulting from illegal logging may drive timber prices down. This effect is important if the share of illegal products in the market is substantial and if the elasticity of price-demand for the products is relatively high.

Changes in the volume and composition of long-term investment. The reduction in product prices resulting from illegal logging and trade will tend to divert investment away from legal forest harvesting and management. Legal entrepreneurs may be progressively displaced as illegal and environmentally harmful operations dominate the market.

Responsible investors tend, in fact, to shy away from countries where the rule of law is weak and investment risks are high. However, unscrupulous investors find this kind of environment
advantageous for their operations. Thus, over time it is likely that corporations that engage in illegal cut-and-run operations will dominate the forest sector in these countries. A compounding factor is that the financial proceeds of these illegal operations tend to be sent abroad, thus reducing the potential multiplier effect derived from the economic activity associated with illegal logging.

Even if illegal logging activities seem to have some positive effects in fuelling economic growth in the short term, one can only underline that such effects are obtained at high risks and at the cost of reduced future production. Illegal actors focus exclusively on short-term profits and are bound to disregard the long-term sustainable production capability of forests. Illegal logging is associated with boom-and-bust economic sequences.

2.3.2 Social Impacts

The impacts of illegal activities on the rural poor are complex. Illegal logging may provide them with a source of employment, and in many cases illegal logging is a necessity to obtain fuelwood and construction timber for household needs. However, these benefits may be short-lived if illegal logging is unsustainable and leads to exhaustion of fuelwood and timber supplies.

In some cases, strict enforcement may disproportionately hurt the poor (Kaimowitz 2003). Where the rural poor have individual or community ownership of forest resources, legal sustainable forest management prescriptions, including the preparation of complex forest management plans and periodic reporting, are simply beyond the reach of the poor that do not have the technical capacity, access to information, and financial resources needed for compliance. If the woodlots are small, the cost of compliance may also be disproportionate to the expected benefit.

The net result of these interactions depends on the context in which they take place. In regions where the small state forest enterprises (leshozes, lishops7) struggle to survive through “improved sanitary cuts” and other illegal activities, social hardship will increase in the short term, simply because the leshoz structures cannot be maintained in their old form as “socially oriented” production units. The intensity and the type of illegality finally affect the poor rural population in different ways. In these and other situations of widespread disregard for the law, it is common that the most powerful groups do not waste time in getting the upper hand, further depriving populations that are already destitute of their means of subsistence. The increase in rural poverty is one of the most certain results of increased illegal activities in forestry.

2.3.3 Environmental Impacts

Illegal logging has the most damaging environmental impact in situations where it results in the total harvested volume exceeding the maximum level considered sustainable. In most countries, this sustainable limit has been set by defining an Annual Allowable Cut volume (AAC). In Azerbaijan, Georgia, and Uzbekistan, the methodology to determine the AAC is still under development and in Serbia and Montenegro the main reference point is the Annual Increment of the forest mass (AI).8

7 State forest enterprises, in Russian and Ukraine
8 In Serbia and Montenegro, the majority of forest areas have been classified as production forest and can be reasonably well accessed from the road network. Thus, the maximum sustainable harvesting level is considered
As table 2.6 shows, in the majority of countries involved in the study, the total annual logging volume exceeds the AAC. In Armenia, the Kyrgyz Republic, Tajikistan, and probably in Azerbaijan, the sustainable level is surpassed by a large margin. In Moldova, the margin is not wide but is still significant.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total annual logging volume</th>
<th>AAC or AI</th>
<th>Total production as percentage of AAC or AI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>2002</td>
<td>2,746</td>
<td>1,152 (AAC)</td>
<td>250</td>
</tr>
<tr>
<td>Armenia</td>
<td>2003</td>
<td>737</td>
<td>30 (AAC)</td>
<td>2,460</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>2003</td>
<td>3,106</td>
<td>6,873 (AAC)</td>
<td>45</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2000–3</td>
<td>6,800</td>
<td>12,000 (AI)</td>
<td>45</td>
</tr>
<tr>
<td>Georgia</td>
<td>2004</td>
<td>2,550</td>
<td>3,900 (AI)</td>
<td>65</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>2002–4</td>
<td>330</td>
<td>40 (AAC)</td>
<td>825</td>
</tr>
<tr>
<td>Moldova</td>
<td>2004</td>
<td>750</td>
<td>450 (AAC)</td>
<td>167</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2000–4</td>
<td>111,300</td>
<td>559,000 (AAC)</td>
<td>20-25</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2004</td>
<td>4,195+</td>
<td>6,650 (AI)</td>
<td>63</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>2004</td>
<td>90</td>
<td>7 (AAC)</td>
<td>1,290</td>
</tr>
</tbody>
</table>

Source: SAVCOR, Russian Forest Agency

Countries where the actual harvesting levels are well below sustainable levels are Bosnia and Herzegovina, Bulgaria, Georgia, Russia, and Serbia and Montenegro. In Russia, the current harvesting level is about 20 percent of AAC. It can be estimated that current harvesting in Bosnia and Herzegovina is about half of AAC, and in Serbia and Montenegro is less than 70 percent of AI.

Excessive harvesting due to uncontrolled logging jeopardizes the future flow of environmental services of forests. Even if the total aggregate harvest is less than AAC, illegal extractions can lead to forest fragmentation, because easily accessible forests might disappear in the short term. Forest fragmentation may contribute to the extinction of large mammals and specific habitats for different plant and animal species. Recorded examples are the disappearance of wild herbs in Albania (Leigh 2003) and risks associated with the loss of specific endangered timber species (for example, Munika black pine in Bosnia and Herzegovina, Karelian birch and chestnut in Russia, walnut and juniper in the Kyrgyz Republic and Tajikistan) and with the loss of the last examples of rare habitats, which may have large detrimental impacts (the last remaining walnut–fruit tree forests in southern Kyrgyz Republic). Forest fragmentation may also lead to substantial localized environmental damage.

to be close to the AI. The situation is similar in Bosnia and Herzegovina, where the difference between AAC and AI is not very large.
3 The Role of Good Governance

Understanding the causes that shape illegal logging and trade is key to designing measures to control those activities. Here we examine the motivations that induce actors to commit illegal acts and the role of governance in creating the conditions and incentives to reduce and control illegal logging and trade.

Figure 3.1 Factors Influencing Forest Governance

Illegal logging and trade occur because of two basic motivations of actors engaging in such activities. The first one arises from the need to satisfy basic demands for fuelwood and construction materials of the rural and urban poor who have limited or no possibilities to satisfy the demand in other ways. The second important motivation is the drive to obtain commercial profits.

Motivations are pursued and satisfied with different intensities, depending on the governance conditions actors face. These conditions either facilitate forest illegal acts if governance is poor, or constrain them if the quality of governance is high. The governance factors that influence the occurrence and frequency of illegal activities can be divided into those that are external to the forest sector and those that are directly linked to the forest sector itself. The first group of factors is defined by the governance conditions of the country and of the international governance environment in general. Both national (external to the forest sector) and international governance environments set the conditions and act as external drivers for changing the specific aspects of forest sector governance (see figure 3.1). These governance factors and interactions are discussed below.
3.1 Poverty and Illegal Logging

Poverty-driven illegal logging emerges where poor people have little other choice. The harvested quantities are typically small—sufficient for subsistence consumption. In the countries of the former Soviet Union as well as in Albania, the fall of the communist regime led to abolishment of energy subsidies and an abrupt rise in the cost of alternate energy sources, which rapidly increased the demand for fuelwood. Because the legal supply of fuelwood was insufficient, illegal procurement expanded as people scrambled to meet their basic needs. In the Balkans, the current situation is less clear. People are probably less dependent on fuelwood than in many of the other ENA countries, but fuelwood is still the main source of energy for a large part of the population.

Illegal logging carried out by the poor is individually low in volume, but the number of individuals may be large. In some countries, this is the most important type of illegal logging for total volumes extracted and possibly also for environmental impact.

Poor rural populations seldom participate actively in large-scale commercial logging, although in some cases they may carry out logging for industrial operators.

3.2 Profit-Motivated Illegal Logging and Trade

The second force is related to the desire to maximize commercial profits in national and international markets. Commercial illegal logging may involve both industrial timber and fuelwood. For fuelwood, the main commercial markets are in poor urban areas. However, in most cases industrial timber is the predominant commercial product. Individual operations tend to be larger and the number of operators smaller than for poverty-driven illegal activities.

Those that engage in illegal commercial operations do so mainly because of the higher profit potential of illegal acts and the low probability of detection and prosecution. As mentioned in chapter 2, higher returns are possible because legal compliance carries costs that are not present with illegal logging. These costs may be high if regulations are intricate and bureaucratic processes to obtain certification of compliance are complex and time-consuming. The greater the difference between the expected financial returns of illegal versus legal logging and trade, and the lower the probabilities of detection of illegal acts, prosecution, and conviction, the greater will be the financial incentives to engage in commercial illegal logging and trade.

3.3 The General Governance Context of the Country

The quality of governance in the forest sector is heavily influenced by the quality of governance in the country in general. Therefore, corrective measures to improve legal compliance in the forest sector will need to be tailored to the prevailing national context.

There are various ways to measure the governance quality in different countries. We have used the World Bank indicators of governance because, in our opinion, they provide a comprehensive picture of the governance environment in the ENA countries. The World Bank indicators of general governance levels include three dimensions with two more specific
measures for each dimension that define the requirements for good governance. These dimensions and associated components are:

- **The process by which governments are selected, monitored, and replaced, composed of**
  - Voice and external accountability, including various aspects of the political process, civil rights, and civil liberties. It refers to the government’s preparedness to be externally accountable through citizen feedback and democratic institutions, including a competitive press.
  - Political stability and lack of violence, crime, and terrorism, which relates to the perceptions of the probability that the government may be overthrown by possibly unconstitutional or violent means.

- **The capacity of the government to effectively formulate and implement sound policies, composed of**
  - Government effectiveness, including quality policy making, independence of the civil service from political pressures, the quality of the bureaucracy, and public service delivery.
  - Lack of regulatory burden, particularly affecting the private sector, but also various government units. The burdens include the incidence of market-unfriendly policies and excessive regulation.

- **The respect of citizens and the state for the institutions that govern economic and social interactions among them, composed of**
  - Rule of law, including the confidence of citizens in the rules of society, the effective protection of property rights, and judiciary independence.
  - Control of corruption.

These six indicators for the ENA countries are displayed in figure 3.2.

**Figure Note:** The figures depict the percentile rank on each governance indicator. Percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error). Countries are presented on the chart ranging from “best” (top of the chart) to “worst” (bottom of the chart) for 2004. Comparator (if any) is depicted by the lower bar for each country. In the bar chart, the statistically likely range of the governance indicator is shown as a thin black line. For instance, a bar of length 75 percent with the thin black line extending from 60 percent to 85 percent has the following interpretation: an estimated 75 percent of the countries rate worse and an estimated 25 percent of the countries rate better than the country in questions. However, at the 90 percent confidence level, only 60 percent of the countries rate worse, while only 15 percent of the countries rate better. Higher values imply better governance ratings. Each chart color pattern follows a simple quartile distribution (for illustrative purposes): the best quartile (over 75th percentile) is in green (with top 10th colored in darker green), the second best (over 50th) is in yellow, the third (over 25th) is in orange, and the fourth is in red (with bottom 10th in darker red). Note that this simple color coding does not account for the size of the confidence intervals; it is based solely on the point estimates for mapping into quartiles. Note also that if you selected to depict the average income category comparator, such data applies worldwide for each income category, irrespective of the region of the selected country.

Figure 3.2 Governance Indicators for Selected ENA Countries

![Graph showing governance indicators for selected ENA countries](source_url)

These indicators show that there is great variation between the countries included in this survey, with some rating systematically low compared with the rest of the world, while others score relatively well. For example, most of the ENA countries rank low in the effectiveness of their efforts to control corruption, and governments have recognized corruption as a problem. Forestry is sometimes mentioned among sectors where action needs to be taken (for example, in Moldova, see box 3.1 below). However, in general these broader efforts to improve governance have limited impact on peripheral sectors such as forestry.

Box 3.1  Forest Governance in the Broader Context: Moldova

Moldova inherited weak institutions and has not yet succeeded in building a modern state. As a consequence, opportunities for corruption abound. The civil service is politicized, the management of public funds has improved but still lacks transparency and efficiency, local governments have limited capacity to carry out their extensive mandates, the judicial system is not trusted, and civil society has yet to emerge as a significant voice in the country. Not surprisingly, corruption in Moldova is perceived as being very high. The Business Environment and Enterprise Performance Survey II (BEEPS) reports that nearly 60 percent of respondents consider corruption to be a “moderate” or “major” constraint to business, the highest in the region. Agenda 21 of Moldova identified the forestry sector as one where corruption is rife and eradication measures need to be undertaken. However, this proposal was not adopted in subsequent sector plans prepared by the forest administration.

Source: Savcor Indufor Oy 2005f.

3.4  The International Forest Governance Context

3.4.1  Multilateral Agreements

There are a number of international agreements and conventions that attempt to provide commonly agreed frameworks for the management of natural resources and forests (for example, the Convention on Biological Diversity, the UN Convention to Combat Desertification, and others), and that are therefore related to forest sector governance. There are specifically forest sector–related international processes as well (the United Nations Framework Convention on Climate Change, the Ministerial Conference on the Protection of Forests in Europe). However, illegal logging and trade are not discussed in the context of the implementation of these international agreements (that is, illegal logging is not seen to have a direct impact on their implementation). Consequently, these conventions and international frameworks provide limited support to the efforts to combat illegal activities in forestry and in the wood processing sector. An important exception is the Convention on International Trade in Endangered Species of Wild Fauna and Flora, CITES.

CITES is legally binding and is an instrument with global reach—at the time of this writing 166 countries had signed it. CITES provides different levels of protection to species listed in its three appendixes. Appendix I includes a list of species threatened with extinction. Trade involving these species can only be allowed under exceptional circumstances. Appendix II contains species that, although not threatened with extinction, need to be protected by controlling trade that may eventually lead to extinction. Appendix III includes species that are protected in at least one country that has asked another CITES signatory to cooperate in controlling trade.
Parties are asked to report every two years on measures taken to implement the convention and penalize trade in violation of the convention. CITES requires that parties keep records of all transactions involving protected species and these records must be made available every year to the CITES Secretariat to keep data of international movement of species current. According to the appendix category, different documents must be presented by trading partners but, in all cases, traded species must have a documented legal origin.

CITES is a worldwide mechanism that can be used to control international trade of illegally sourced wood. The convention has contributed to stopping the illegal trade of certain species but its overall effectiveness for the broad problem of illegal activities in the sector is limited. The convention only covers species that are either already threatened or expected to be endangered in the near future, and it has been designed to control international trade, not domestic trade of illegally sourced species. Because CITES lacks a permit monitoring and tracking system, it cannot control the use of false documentation. Although the convention is legally binding, it does not have the force that national laws have. It does not have a comprehensive enforcement mechanism, and thus depends on the political willingness and commitment of trading partners to control illegal international transactions. Nevertheless, CITES has elevated the visibility of illegal trading of endangered species and therefore is creating indirect pressure on governments to act accordingly.

In 2005, the European Commission formally adopted a Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan. The plan sets out a new and innovative approach to tackling illegal logging, which links the push for good governance in developing countries with the legal instruments and leverage offered by the EU’s own internal market. The core components of the action plan are support for improved governance in wood-producing countries, and a licensing scheme to ensure only legal timber enters the EU. This licensing scheme will be implemented on a voluntary (but binding) basis, through a series of bilateral agreements with wood-producing countries.

Another important international agreement referred to in discussions with forest sector stakeholders is the Convention on Access to Information, Public Participation in Decision Making, and Access to Justice in Environmental Matters (the Aarhus Convention), obliging governments to provide access to environment-related information. Reference is often made to this convention in the context of discussions on illegal logging. Many ENA countries have ratified or accepted the convention (table 3.1). Nevertheless, important countries, such as Bosnia and Herzegovina, Russia, Serbia and Montenegro, and Uzbekistan have not yet signed the convention.
### Table 3.1 Participation of ENA Countries in the Aarhus Convention

<table>
<thead>
<tr>
<th>Country</th>
<th>Aarhus Convention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>✓</td>
</tr>
<tr>
<td>Armenia</td>
<td>✓</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>✓</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>✓</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>✓</td>
</tr>
<tr>
<td>Croatia</td>
<td>✓</td>
</tr>
<tr>
<td>Georgia</td>
<td>✓</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>✓</td>
</tr>
<tr>
<td>Moldova</td>
<td>✓</td>
</tr>
<tr>
<td>Romania</td>
<td>✓</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>✓</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>✓</td>
</tr>
<tr>
<td>Ukraine</td>
<td>✓</td>
</tr>
<tr>
<td>Ukraine</td>
<td>✓</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Source: [www.unece.org/env/pp/ctreaty.htm](http://www.unece.org/env/pp/ctreaty.htm)*

The UN Convention against Transnational Organized Crime provides a framework for signatory countries to cooperate in the fight against organized international crime, including the creation of frameworks for mutual legal assistance, extradition, cooperation in law enforcement, and technical assistance. The convention focuses on activities normally linked to organized crime such as money laundering, corruption, and obstruction of justice. To the extent that illegal logging and trade is carried out in the context of organized international criminal networks, interested countries can find mutual support by participating in this convention.

These international agreements attempt primarily to reduce markets for illegally sourced products, strengthen law enforcement internationally, and create a level playing field for all trading partners. They also help exporting countries to organize their control of internal efforts by providing technical as well as financial support. Their effectiveness, however, will depend to a great extent on their ability to block substantial flows of imported illegal products to main markets, and to help control the diversion of such products to less discriminating markets that may be less concerned with the legality of imported products.

#### 3.4.2 Bilateral Agreements

Some importing countries, including the United Kingdom and the United States, in addition to participating in multilateral agreements, are also beginning to enter into bilateral agreements with exporting countries. These schemes aim at helping exporting countries to control exports of illegally sourced forest products by establishing restrictions on imports that are similar to those of multilateral agreements. Again, their effectiveness is limited by the possibility of exporters diverting their illegally sourced products to less discriminating markets.

#### 3.4.3 International Technical and Financial Cooperation

Increasingly, international assistance agencies are focusing on helping countries control illegal logging and trade. Today, nearly all international organizations that deal with natural resource use have programs aimed at improving legal compliance in the forest sector.
The World Bank Forests Strategy prominently includes actions aimed at reducing illegal activities and corruption in the sector. The Bank has a specific FLEG programme, and hosts the Program on Forests (PROFOR), a multidonor initiative established in 1997, which aims, among other things, to enhance accountability in the forest sector and contribute to a better understanding of forest law enforcement by supporting empirical research to fill information gaps and to assess possible tools to facilitate enforcement. The Bank supports forest sector development and the adoption of good governance practices and structures by the ENA country governments (for example, Albania, Armenia, Bosnia and Herzegovina, Georgia, and Russia). The most important Bank-supported projects are listed in annex A2 according to country. Relevant projects are not confined to the forest sector but include those supporting broader governance reforms.

Other important external supporters include the EU in the Kyrgyz Republic; Finland in Russia; the Swedish International Development Cooperation Authority (SIDA) in Armenia; the German Agency for Technical Cooperation (GTZ) in Uzbekistan; the Swiss government in Bulgaria, the Kyrgyz Republic, Russia, and Ukraine; and Austria in Serbia and Montenegro. Also, the United Nations Development Programme (UNDP) and the U.S. Agency for International Development (USAID) are supporting forest or agroforestry-related activities in the region (for example, in Uzbekistan and Bosnia and Herzegovina) through agriculture development, and environmental and conservation–related projects and programs. Further, the UN Food and Agriculture Organization (FAO) National Forest Program (NFP) Facility has initiated support for national forest program processes in several countries (Armenia and Georgia).

These international organizations can assist governments in rationalizing their policy and legislative frameworks; in providing training to staff responsible for planning, monitoring, and enforcement; or by providing technical assistance programs aiming at improving the levels of governance in the forest sector.

4 Forest Sector Governance in ENA Countries

4.1 Forest Policies

Since the 1990s, ENA countries have largely shed the forest policies of the previous socialist model (see main policy features in annex A1). Yet, policy implementation has been generally slow, except in those countries that receive external support in policy formulation and implementation. Stakeholder consultation, agreement, and participation in policy processes have been largely absent. As a consequence, they tend to solely reflect the views of government officials. Perhaps because of the prevalence of top-down approaches, policy formulation exercises have seldom adopted multifunctional development targets that may be of relevance to other stakeholders, and thus continue to be based on traditional and narrow forest conservation and timber production approaches.

For example, although the provision of energy for local consumption is, at least by volume, one of the most important outputs of forests in a number of countries, forest policies do not adequately recognize the key role of wood in energy consumption, particularly for underprivileged groups. From the rural populations’ standpoint, the provision of affordable fuelwood should be a key policy objective of a government concerned with the well-being of disadvantaged populations. Similarly, social objectives related to local use and management
of forests are seldom stated in policy formulations. Under such circumstances one may argue that, paradoxically, illegal logging is often a necessity and makes a significant contribution to meeting pressing social needs (supply of fuelwood, generation of employment).

In the Balkans, private forests have emerged as a result of restitution. Elsewhere, the role of the government as the owner and manager of forests prevails, although some countries (Albania, Russia, and Tajikistan, for instance) are taking steps to transfer management responsibility for limited forest areas or for degraded forest and pasturelands to local communities and to the private sector. Other countries (Georgia, for example) have created the legal basis for such transfers, but have not yet taken action to fully implement them. Reticence appears to be largely due to a generalized belief within governmental agencies and among forest experts that communities and the private sector will not be able to assume the responsibility of effectively managing forest resources. Thus, in all ENA countries reviewed in this report, forest governance tends still to be seen largely as the business of the government. The notion of multistakeholder governance is either not yet widely understood or is resisted by government executives.

Forest policies seldom explicitly and comprehensively address illegal logging. If at all, illegal logging is covered under the general term “forest protection.” Strategies or action plans specific to illegality focus on theft, circumvention of regulations by persons operating in state forests without appropriate permits, or in some countries on offenses committed by private forest owners. Joint strategies and actions by several ministries are proposed in some countries (Albania and Bosnia and Herzegovina), but in most countries this issue is mainly perceived as a sector issue to be handled exclusively by forest authorities (that is, forest guards). Measures to combat corruption in forestry, such as obtaining logging permits through corrupt means, exist but are usually not clearly recognized as part of the efforts to halt illegal logging. Policies make little differentiation, if any, between poverty-driven illegal cutting and large-scale illegal commercial forest exploitation. On the whole, forest strategies seldom address policy issues related to corruption.

Efforts to improve the demand-supply balance of forest products are advocated in some policies, but these are usually not directly linked to illegal logging problems nor to an increased provision of fuelwood for the rural population. The policies instead contain abstract directives (such as the final objective of such efforts) aimed at the establishment of forest plantations by government agencies to expand the forest cover of the country.

There are a few notable attempts to address issues related to illegal logging in a more comprehensive manner. These include the Armenian Illegal Logging Action Plan (ILAP) (box 4.1) and a similar approach in Russia (box 4.2). Their broad scope illustrates the complexity of the illegal logging issue. The case of Armenia is of particular interest, because the proposed activities range from institutional reform and improving monitoring systems to providing alternative energy sources to alleviate rural poverty. However, a potential weakness of both the Russian and Armenian plans results from the fact that neither appear to be linked to broader efforts to reduce high-level corruption. Unless major progress at a broader level is achieved, the risk remains that the impact of measures proposed in the action plans will be limited, because appropriate regulations can be circumvented if corrupt government officials, at a sufficiently high level, are involved.
Box 4.1 Illegal Logging Action Plan in Armenia

The Illegal Logging Action Plan (ILAP) adopted a phased approach in which the activities start with the implementation of pilot projects, the most successful of which will be used for replication. It was considered essential that all programs be adaptable and able to change according to circumstances and able to build on acquired experience. A total time frame of seven years is proposed for implementation. The first year will be used to undertake detailed project design, technical analysis, environmental and social assessments, and to finalize funding arrangements. Following these preparatory activities the plan will be implemented over a six year period.

The activities included in the plan will be linked with other initiatives such as institutional reform, the restructuring of Hayantar, (Armenia’s main forestry agency, which will also receive support from the Forest Institutional Support Project [FISP]), and increasing the natural gas supply to more towns and homes. Any single project may have a positive impact, but for the success to be replicable it must be coordinated across sectors. Links will be set up with international processes to combat illegal logging such as the Forest Law Enforcement and Governance initiative.

As with any initiative, it is important to build consensus and involve a cross-section of stakeholders in the solutions. Possible solutions have been developed to address the issue from the supply side (that is, what can be done to reduce illegal supplies but increase those that are legal) and the demand side (that is, reduce demand for illegal wood products). The solutions presented here have followed the same basic order as the problems highlighted above: overall, community consumption, commercial demand, and monitoring and control. Recommended components of the action plan include the following:

- Increasing public awareness
- Alleviating rural poverty
- Instituting community forestry programs
- Exploring alternative fuel supplies
- Increasing supply of legitimate wood products
- Restructuring forest institutions and capacity building
- Improved monitoring and control
- Developing forest certification

An inter-ministerial task force has been set up to supervise the implementation of ILAP.


4.2 Limitations to Good Governance and Institutional Development

Over the past 15 years, there has been progress in improving the general framework of governance and advancing institutional reforms in most of the reviewed ENA countries. On the whole, one can state that in the countries where new forest policies have been established (in the Kyrgyz Republic and in Russia, for instance), there are visible trends for introducing new modes of forest governance (leasing of forest land, decentralization of certain decisions to a lower level, and so on).

Especially in Russia, but in other countries as well, the environmental NGOs (especially Greenpeace, WWF, and Silver Taiga) have forcefully articulated the urgent need to find solutions for curtailing the extent of illegal logging. They are important actors pressing for more transparency in decision making and for the introduction of effective certification systems. This progress is still slow and with limited impact. Official reform measures tend to maintain conventional systems of top-down command and control. There is an important gap between rhetoric and reality, which results in a dual system whereby a rigid bureaucratic
command-and-control approach coexists with new and largely unregulated practices based on the concept of a market economy.

In most institutional reform activities undertaken until the present, not enough attention has been paid to intersectoral links. It is true that in the Kyrgyz Republic and Russia, for instance, forest policy has been redefined providing for goals and means that go beyond simple sector issues. But the reform process of the forestry sector has been such an enormous task that links between forestry development and other sectors have been considered a second priority. In addition, decentralization, when introduced on the basis of devolution to local authorities, has quite often led to confusing decisions. Decentralization has had a rather negative impact on the conservation of forest resources. This in return has led again to centralized sectoral management, severely limiting the functioning of local development institutions and the promotion of new and vigorous initiatives of the private sector.

Measures taken by the public forest departments to introduce immediate and effective institutional reforms to improve sector governance have been slow in many cases. Instead they have advanced by defining empirical solutions by trial and error as a compromise between the necessity of forest administrations to adapt to political change, and their intentions to retain power and expertise in formulating and implementing forest policy decisions. New objectives—such as the overall goal of sustainability, the involvement of nonstate actors, and coherent support to private initiatives of the rural population and in the wood-processing sector—have usually been introduced only when external pressure has become strong enough to induce change. The same applies to the use of new forest policy instruments such as incentives and means for information dissemination, new modes of participatory governance, monitoring and control of actual results, and evaluation of the effectiveness of new policy directions.

A number of national environmental NGOs have emerged that contribute increasingly to forest policy making and promote a more comprehensive participation of the sector’s stakeholders in forest governance processes. However, there are also examples (for example, Albania, Kazakhstan, Ukraine, and Uzbekistan) indicating that participation was considered by national forest services largely to be an obligation to inform the concerned stakeholders after the fact on the activities undertaken, or as a means to legitimate the transfer of work to local levels without clear responsibilities being delegated at the same time. There is still a lot of progress to be made to establish firmly participatory processes that really ensure the regular and substantive involvement of all stakeholders, the elaboration of functioning partnerships, shared public and private responsibilities in managing the forest resource, as well as a reasonable repartition between the necessary investments for protecting and increasing the productivity of the resource and the benefits from goods and services that result from sustainable use of forests.

Altogether, none of the forest services in the ENA countries under review have yet been able to carry out institutional changes that would fully allow the implementation of the principles of sustainable forestry development and good governance. There is still a trend to build on the institutions of the past using market control mechanisms and to refrain from multistakeholder involvement in resource management. However, there is no unique model for accomplishing the necessary changes. These have to be developed together with and at the pace of the general constitutional, political, and socioeconomic reforms of each country. The lack of an appropriate institutional framework of governance, the lack of public participation and
transparency, as well as the slow advancement in effective reforms, have played an important role in facilitating the development of illegal activities in the forest sector.

**Box 4.2 Forest Governance in Russia**

Many of the new regulations in Russia do not take into account the rich diversity of Russia; the same rules are applied to widely different forest and landscape types, which finally results in lack of compliance. In addition, the powers and responsibilities of federal, state, and local governments are not clearly defined. This leads to conflicting regulations passed by federal and regional legislatures and to serious governance problems.

The Federal Forest Service still has a double role in forestry. In addition to managing nearly all forests in Russia, it is also responsible for about one-fifth of all timber harvesting in the country, through intermediate and sanitary loggings. The Federal Forest Service is thus both an independent controller of forestry and a competitor of the forest harvesting companies, leading to serious problems in the control of forestry and the development of federal forest policy. Another problem is caused by the nontransparent information policy of the Federal Forest Service. Because no detailed information about forestry is publicly available, verification of the actions and claims of forest authorities is not possible. For example, the official figure for the proportion of areas reforested after clear-cutting was 40 percent in the late 1990s. Other studies, including one by Greenpeace Russia, estimated the reforested area to be only 2 percent.


**4.3 Regulatory Quality**

Since 1990 the regulatory framework for protecting and managing forest resources and the adherent body of forest legislation has been revised in most European countries (Schmithüsen, Herbst, and Le Master 2000). Major changes in forest law have occurred and still occur in the countries of Central and Eastern Europe (Abrudan, Schmithüsen, and Herbst 2005; Le Master, Herbst, and Schmithüsen 2003; Mekouar and Castelein, 2002; Schmithüsen, Trejbalova, and Vancura 2004). In transition to an open civil society, in building democratic institutions, and in transition to an open market economy, these countries have the difficult task to develop entirely new public regulations addressing agriculture and forestry, nature conservation, and environmental protection. As shown in table 4.1, the ENA countries under review in this paper followed this trend and started the process of adopting new forest laws during the 1990s. The process of revision or adopting new regulations still continues with varying degrees of change toward a market economy.

In addition to regulations of the forest law addressing forest offenses and prosecution, the control and prevention of illegal logging and trade may be regulated through other legislation such as laws on nature and landscape protection, and environmental protection; laws on social protection; laws on local government organization and functioning; as well as legislation concerned with the prosecution of administrative and criminal offenses, corruption, and bribing. Which of these laws apply to illegal logging depends to some extent on the definition of illegal logging that is used.
Table 4.1 Year of Approval for Main Forest Laws in Selected ENA Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Forest law</th>
<th>Year approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Forest law</td>
<td>2005</td>
</tr>
<tr>
<td>Armenia</td>
<td>Forest code (new law in preparation)</td>
<td>1994</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Forestry code</td>
<td>1997</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Forest law</td>
<td>2002</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Forestry law</td>
<td>1997</td>
</tr>
<tr>
<td>Georgia</td>
<td>Forest code</td>
<td>1999</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>Forest code</td>
<td>1999</td>
</tr>
<tr>
<td>Moldova</td>
<td>Forest code</td>
<td>1996, 2004a</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Forest code (new law in preparation)</td>
<td>1997</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>Law on forests</td>
<td>1996</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Forest code</td>
<td>1993</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Forest code</td>
<td>2005b</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>Law about forests</td>
<td>1999</td>
</tr>
</tbody>
</table>

Source: various national laws
b. Under consideration by the parliament.

Generally speaking, the current forest laws show a number of comprehensive new provisions, notwithstanding that in some countries (the Kyrgyz Republic, Russia, Tajikistan) the transition toward a market economy in the forest sector will still be difficult without further changes in forest legislation. A significant example is the separation of the of the control and commercial management functions within the public forest administration (box 4.3).

Box 4.3 Shortcomings in the Legal Framework in Tajikistan

The main shortcoming in the legal framework is that responsibilities for controlling forest use, selling use rights, and monitoring illegal activity are in the hands of one organization—the State Committee of Environmental Protection and Forestry (SCEPF). This occurred when the Ministry of Environmental Protection was merged with the Tajik Forestry Production Association into SCEPF. Now all forest functions are carried out within one organization. In effect, SCEPF controls the supply of timber, is able to determine the outcome of tenders, and has the power to decide which entrepreneurs will be considered legal and which ones will be considered illegal.

Source: Savcor Indufor Oy 2005h.

The most important constraint preventing the countries from making progress in sustainable use of forest resources is their still severely limited capacity to implement the newly adopted forestry regulations. Another impeding factor is the lack of support and incentives that would enable people to satisfy their basic needs. Procedures for allowing harvesting in private forests, for instance, involve excessive bureaucracy, inviting people to circumvent or ignore the applicable forestry rules. Other reported obstacles to implementation of the law concern the capacity of prosecutors and the courts to effectively handle illegal activities in the forest sector. Although in most countries there seems to be an external ombudsman or some other independent mechanism to respond to public complaints, in some cases these positions are not responsive to complaints related to logging. This weakness is especially critical when addressing illegal logging related to corruption.
The legal procedures on subsistence consumption of fuelwood are often cumbersome, in some countries outright restrictive. In Azerbaijan, the harvesting of firewood and production of charcoal by companies and individuals is totally prohibited. The collection of dead wood and cutting of branches for fuelwood is normally allowed, and in some cases legally cut fuelwood is provided by the government authorities for local use (in Albania). However, as indicated earlier, these legal quantities are inadequate to satisfy the needs of the rural people. Moratoriums on logging have been implemented in several countries (Albania and Georgia) but their effectiveness is being questioned. In several cases the continuation of industrial forest operations are reported even after the moratoriums have been declared (box 4.4).

### Box 4.4 Stakeholder Views on the 2004 Logging Moratorium in Georgia

“Although moratorium required sawing workshops to be shut down, two of them continued operating. They said they were implementing government’s orders. Having seen that, other sawing workshops renewed unlicensed operations.” (a Borjomi Democratic Institute employee)

“About 50 cases were filed with the court against sawing workshops. A deputy governor’s truck was detained on several occasions. But some people with mini-buses still manage to pass through the border with impunity…” (a Ministry of Environment Protection staff member)

“Under the moratorium, officers that had to be on duty day and night at the checkpoint were paid 20 lari (11US$) a month. Under such conditions it’s hard to sacrifice oneself.” (a Borjomi Public Opinion Council member)

“The moratorium never worked. Every night at least five trucks without license plates passed through the checkpoint. We followed one truck with hidden camera. Nobody even tried to stop it…” (a Media Development Association member)

“Yes, they collect fines, but they may fine just one truck out of ten.” (a forester from Akhaldaba)

“The moratorium hit the most vulnerable ones. A three-month break can do no harm to major industries.” (a Forest Research staff member)

“The moratorium can not stop illegal cuts. Healthy trees are still being cut down, diseased ones stay upright and the State Budget gets nothing.” (a Biosphere NGO staff member)

*Source*: Savcor Indufor Oy 2005h.

Efforts to design measures to control corruption in the forest sector are extremely difficult if the regulatory framework is faulty, allowing for excessive discretionary decisions based on subjective judgment or personal interpretations of regulations. The task is easier in countries where laws and regulations are clear, allowing transparent involvement and participation of civil society in monitoring governmental activities. Appropriate normative actions to improve legal compliance in the forest sector thus require multiple interactions among different sectors, as well as effective communication among public and private actors.

### 4.4 The Rule of Law and the Significance of Ownership

Russia and most Central Asian countries define forest resources exclusively as state property. The management responsibility may be divided between different central-level state agencies, local government, and state enterprises. Albania and Tajikistan are taking initial steps in transferring the responsibility for land management to non-state parties, mainly communities. In Albania, degraded forest lands may be transferred; in Tajikistan, degraded pasturelands may be used for tree planting. In the Kyrgyz Republic and Uzbekistan, community forestry is
being experimented with, so far to a rather limited extent, through long-term leases on state forestlands. This applies especially to lands given to communities for rehabilitation and protection. In Georgia, similar concepts are recognized in the law, but in practice they have not yet been applied. In Armenia, 10-year forest agreements with local communities are provided for in the Forest Code, and there is an incipient process to implement such agreements. The Balkan countries have both public (state and communal) as well as private ownership of forestlands.

It appears that forests managed by former *kolkhozes* (collective agricultural farms) and *sovkhозes* (State agricultural farms) (in Georgia and Tajikistan, for example) or by municipalities (in the Kyrgyz Republic and Moldova) are more vulnerable to illegal logging than state forests, despite the problems state forests are experiencing. First, the municipal and kolkhoze or sovkhoze forests lack staff to protect the forest against theft and, second, they seldom benefit from responsible managers interested in managing the forests on a sustainable basis. Lack of transparency and accountability in the management structures does not allow the communities to control their activities.

The Russian government has introduced long-term forest leases with a lease period of 49 years. Detailed information on the extent of leased forest area is unavailable but it is apparently substantial. Potential risks include theft or abuse by leaseholders, but available information does not allow conclusions on whether leased forest areas differ from others with respect to their vulnerability to illegal logging.

In Albania the government is experimenting with a model in which degraded forest lands are transferred to local communities under their management. In Tajikistan, degraded pasture areas with tree-growing potential are being transferred to non-state parties. There are indications that these forest lands are somehow better protected against theft than other forest areas. The difference results probably from the fact that the community forest areas have significant development potential for local use, which induces the population to protect them more closely. The effectiveness of this model will be truly tested once the communities get engaged independently in the management of these forests. They will then have to develop an efficient way to share costs and benefits, and to make critical choices to ensure that the resources are managed sustainably for the long term.

Privately owned forests exist at present only in the Balkans. For instance, in Serbia and Montenegro local experts assume that the largest volumes of illegal timber come from private forests (no hard data is available). To some extent, this is due to the fact that private woodlots are small (on average, less than 0.5 ha) and the owners have limited interest and resources to protect them against theft. Another possible reason is that private forest owners need to circumvent regulations to avoid excessive bureaucracy. Harvesting itself may not necessarily violate regulations but the transaction cost of obtaining harvesting permits is regarded as excessive considering the limited amount and value of harvested firewood and timber.

### 4.5 Monitoring and Control Systems

An effective monitoring and control mechanism consists of several components including institutional structure, availability of resources, and efficient implementation processes. Not all components have the same importance in each particular case, but for the entire system to be effective all three components have to be in place and function adequately. Most
important, any monitoring and control system can only be effective if the overall governance situation does not obstruct (favoring imprecise land tenure structures or high-level corruption, for instance) but supports such efforts. Overall, the monitoring and control systems are still weak in the countries involved in the study.

4.5.1 Conflicts of Interest within Forest-Related Administration

Under the former communist governments, the competences for both forest management and control were usually vested in the same administrative body. Following the fall of communist regimes, the idea of establishing independent control functions took hold and some forestry administrations in the region moved in this direction. In Armenia, the inspection body is in a different ministry than the state forest enterprise. In Russia, a similar arrangement has been proposed. An intermediate solution is one where the inspection function is outside the state forest enterprise but under the same ministry. This arrangement is in place, for instance, in Azerbaijan and is to be introduced in Bosnia and Herzegovina. In other ENA countries under review, controlling and monitoring competences are still vested in a single public administration. There is usually an inspection body at the ministerial level charged with controlling the state forest enterprise, but its capacity is typically quite limited.

4.5.2 Effectiveness of Control Procedures

Control procedures alone can do little to eliminate illegal logging but appropriate procedures are a prerequisite and a necessary foundation for other efforts.

Timber sales from state forests. The main weaknesses of the systems of awarding concessions and of selling timber from public lands seem to be in ensuring that there is more than one bidder when timber is sold, in making the bids public after the bidding, and in having the sales procedure supervised by an independent entity. The main issues that need monitoring and supervision for timber harvesting and sales from valid concessions are the publicity of concession contracts and the regular updating of forest inventories and management plans.

Controlling harvesting in private forests. The transparency of timber sales from private forests is only relevant to the Balkan countries. In these countries the procedures seem to be in place, but their actual implementation cannot be verified.

Controlling timber transport, processing, and export. Most countries have procedures in place for controlling the transport of timber. Despite this, massive amounts of illegal timber are being transported, which indicates that the paper-based systems used for control and verification of legality are not foolproof. There is sufficient outside interference in the system to make it nonoperational, at least in part.

Financial management. Procedures for financial audits, as well as special government bodies responsible for financial audit, exist in all countries, but their effectiveness is hampered by the fact that audits do not necessarily verify that revenue collected matches logging volumes and areas under production.

Refinement of controlling procedures can do little in a situation where the impact of any technical improvement is effectively diluted by corruption (box 4.5).
Box 4.5 Typical Ways to Circumvent Control Procedures

According to Mostovi Online, a Bosnian Web magazine, there are many ways to go about illegal logging in Bosnia and Herzegovina, including the following:

- The police are unable to cross check the validity of forged documents and stamps.
- Forestry guards do not report new forest roads, clear cutting, and areas that have been illegally harvested.
- Forestry officials and loggers falsely classify quality timber as cheap low-quality timber.
- Forestry officials do not fill in dispatch notes correctly, allowing loggers to use them repeatedly.
- Forestry inspectors, guards, and police allow loads up to double what is declared on the dispatch note.
- Forestry inspectors allow dealers to cut up to twice as many trees as they have paid for from one area.
- Cantonal Forestry Companies issue false documents to logging companies and dealers to cover up illegal activities.
- Politicians take bribes from forest management companies and use their influence to enable illegal activities.

Source: Adapted from Mostovi Online 2004.

4.5.3 Quality of Information Management in the Public Forest Sector

The available information on forest management and timber trade is fragmentary and inconsistent, and much of the basic data remain unprocessed. The information management systems are outdated; use of computerized systems is expanding but is still limited. Lack of adequate data is a major hindrance for law enforcement, especially with respect to corruption-related illegal logging. In Serbia and Montenegro, however, the forest administration maintains a reasonably well-functioning information system including some technical innovations. Russia is progressively implementing satellite detection and aerial surveillance in the struggle against illegal logging. The objective is to establish satellite detection for 100 percent of forests by 2006 from the current (2003) 60 percent coverage, providing high-resolution photographs twice per day similar to those used by the military (Illegal Logging 2005). In addition, a broad information management system is being planned (figure 4.1).
4.5.3 Availability of Resources for Law Enforcement

The law enforcement staff generally have limited resources (such as means of transport and communication, and operational budgets) and their salaries are low. Lack of resources is a major hindrance for effective law enforcement, especially against theft and unauthorized harvesting by nonstate forest owners. However, increasing resources for transportation and communication would have little impact against corruption-related illegal logging, which often relies on data manipulation and abuse of authority (see the example given in box 4.6). For these problems, the main issue is to assess whether the available funds are spent on appropriate activities, that is, whether financial audits should be favored over field monitoring, or whether the institutional setup for the monitoring system should be changed.
Box 4.6 Troubled Law Enforcement in Northwest Primorsky Krai, Russia

… [K] was informed that “someone” had come in during the night with “documents,” so the local police chief ordered the impounded trucks released. When K asked what documents could possibly justify someone logging in the middle of the Roshchinsky Lespromkhoz lease area, and asked to see the documents, the police chief reportedly “blew up,” and told K that he had no right to question his authority.

K informed me that he estimated the value of the two truckloads at about US$7,000 in the local market. Given that policemen’s salaries are reportedly about US$200 per month, the temptation to supplement their salary is obvious. His assumption was that in fact the district police had intended to “arrest the trucks,” and impound the illegal logs. After paying off the loggers and truck drivers (estimated at perhaps a total of US$1,000), the two district police would then share the difference once the logs were sold. And of course, once the police sell impounded timber, it becomes perfectly legal, including the documentation regarding origin. There would then be no problem at all in selling the logs to an exporter.


Higher salaries for enforcement staff could reduce the incentive for petty corruption but would not be effective in a fight against corruption involving high-level officials. For them, the potential gains from illegal activities are often much larger than from any reasonable salary in public administration.

To the extent that illegal logging is poverty-related, full implementation of existing laws is often next to impossible, even if resources were substantially increased. Where illegal logging is carried out to meet basic human needs little can be done to stop it. Law enforcement staff often condone illegal logging if they consider it to be the result of poverty (as in the Kyrgyz Republic and Moldova).

The resources needed for adequate law enforcement may be high compared to the direct and immediate financial benefits from improved forest management. For instance, in Armenia the establishment cost and the recurrent cost of an improved monitoring system was tentatively estimated at US$5 million (Mitchell 2004); in 2003 the value of timber sales from state forests was US$1 million to US$1.5 million (Savcor Indufor Oy 2005c). Much of the justification for increasing resources for law enforcement would have to come from improved protection and supply of non-market benefits such as environmental protection.

4.6 Linking the Forest Sector to the Broader Context of Good Governance

Initiating effective measures to stop illegal logging cannot be achieved through the efforts of one single sector of the public administration. What is needed is strong support of the public forest service from higher levels in the hierarchy as well as effective cooperation from other public services. There is also a need to transcend narrow approaches to controlling and monitoring based exclusively on public sector management, by establishing joint efforts and working links between the government, the private sector, the environmental NGOs, and civil society institutions. At least in some regions effective measures of control cannot be the exclusive domain of government action but need to involve the press, private enterprises,
local communities, and the public in general. In Albania, for instance, the government has established a high-level task force involving representatives from several government agencies to supervise the fight against illegal logging. In the Kyrgyz Republic, a special parliamentary commission was established to investigate illegal logging of walnut trees, the most valuable forest resource in the country.

Involvement of civil society in monitoring endeavors hinges crucially on the transparency of public administration activities. In countries in which the forest administrations provide poor access to information, even other government agencies may have trouble obtaining relevant information and data. Even if the national legislation should not specifically require that public institutions provide access to adequate information for stakeholders and the public, the Aarhus Convention, signed by most European countries, will provide a legal basis for it. The extent to which civil society has a definite interest in obtaining information and in participating directly in forest sector monitoring may vary considerably. In countries where illegal logging is considered a major threat to the environment (in Moldova and Russia) the interest in being informed and to intervene, especially of the environmental NGOs, is immediate. Another example is Georgia, which has recently joined the Forest Integrity Network, a partnership of national and international advocacy organizations promoting independent forest monitoring.

A well-functioning judiciary is an integral part of good governance. Conversely, ineffective prosecution and courts are a major bottleneck for law enforcement. Problems include the length of juridical procedures of criminal cases in overburdened courts, inconsistent prosecution, and poor preparation of law suits. In Albania in 2000, for example, there were 370 criminal cases related to illegal forest acts. In 208 cases the offenders were identified, 40 among them were found guilty, but none of the verdicts were implemented. Less serious administrative violations are usually punishable with fines and the perpetrators are required to pay compensation for damage; but during the period 1999 to 2001 only 1 to 2 percent of the payments due were effectively collected. In Russia it has been reported that only seven convictions were made from 8,000 breaches of the forestry law in 2004, due mainly to lack of evidence (Illegal Logging 2005). The situation is not quite as grim in all countries but in general the deterrent effect of the judicial system is limited.

## 5 Framework for Action

### 5.1 Focusing Action

A first step in organizing strategies for improving legal compliance in the forest sector is to agree on a focused operational definition of illegal actions. This implies deciding on what forest-related actions and what legal parameters will be included. For instance, if the strategy focuses on illegal logging, a definition of what operations related to forest harvesting can be classified as illegal needs to be produced. This will also require agreement on the legal scope to be covered by these definitions, that is, what laws will serve as reference to achieve a practical definition. If a large number of legal links to related activities are taken into consideration, the concept of illegal logging can be exceedingly broad. Too broad a definition of illegal logging (such as including all possible violations of laws that can take place within enterprises carrying out timber harvesting and transport) can create confusion among stakeholders, weaken the commitment of some, and make operational control difficult.
In the ENA countries, national definitions have a narrower scope than most international definitions; they usually comprise theft and circumvention of regulations by forest owners or managers and focus on the physical removal of trees. Other types of illegal activities are covered under different laws and are not reported as illegal logging but as other types of legal transgressions.

It seems evident that at a minimum, definitions should cover the basic harvesting operations as well as corruption. However, the legal structure of each country is different and therefore legal definitions will have to be tailored to each particular situation.

It may be advisable to arrive at a commonly agreed operational definition through a participatory process involving not only government specialists but also other key groups, such as industrial operators, community groups, and consumers.

5.2 Identifying Potential Measures

5.2.1 Different Contexts Require Different Corrective Measures

Actions for improving the rule of law in the forest sector depend on the specific context predominating in countries. The national forest-related governance context is remarkably dissimilar between countries of the ENA region. ENA countries show comparatively large differences in dimensions of national governance, such as effectiveness in controlling corruption, extent to which citizens can express their priorities and participate in public decision-making processes, and the soundness and coherence of their legal environments. Furthermore, and specifically related to illegal activities in the forest sector, some have extremely abundant forest resources and others are characterized by relative scarcity. In most, public ownership is dominant, while in others private control is beginning to develop. Some are large exporters and for others, international trade is relatively unimportant.

The causes of illegal activities in the forest sector are numerous and therefore corrective measures focusing on one or few dimensions such as improving the legal framework or the capacity of the forest police to enforce regulations will, in all probability, not produce satisfactory results. A comprehensive set of corrective activities on various fronts and adjusted to the specific conditions that may be faced in a country will have a greater chance of being effective.

Therefore, while sharing wide strategic principles, programs to control illegal logging and illegal trade need to be tailored to the socioeconomic, political, and governance situation of each country. Simply stated, there are no “magic bullets” that would solve the problems of illegal logging and illegal trade everywhere. However, there are some general strategic principles that can be applied with perhaps different intensities and different combinations of actions depending on the strength of the detected underlying causes of illegal logging and trade. These principles are discussed below.
5.2.2 Creating the Basic Conditions for Legality in the Forest Sector

In the short term. Access to information is a precondition for the involvement of civil society, both as a partner and as an independent watchdog providing checks and balances in the forest sector. Access to data and information contributes to making the actions of decision makers transparent, and facilitates other types of governance reforms by intensifying informed dialogues and stakeholder participation, including the establishment of civil society networks and lobby groups to influence governance reforms.

In the longer term. Resolving key issues related to forestland tenure is necessary to create responsibility among forest resources managers for long-term interest in the sustainability of the resource base, and capacity to effectively control and manage these resources. Lack of effective enforcement creates a situation where state forests are de facto open access areas, where illegal logging can be practiced almost with impunity. Privatization and community ownership of forests can be one solution, as could be the involvement of a responsible private sector with long-term contracts (leases) for forest management and utilization. Clearly defined and secure tenure arrangements are necessary not only for sustainable management of natural forests but also for the creation of sufficient security for investment in tree planting and management of tree plantations (whether small scale or larger scale).

Development in rural areas and increasing rural incomes, and urban development resulting in migration from rural areas to urban centers for better paying employment, are critical factors in reducing the demand for fuelwood and other forest products used for subsistence consumption. Building rural infrastructure and supporting agricultural development and small-scale enterprise development can be as or more effective in improving the fuelwood demand-supply balance as investing in tree plantations or other activities within the forest sector.

Moving toward improved governance in society as a whole is a precondition for good governance in the forest sector. Weaknesses of the judicial system are often crucial, because they permit even detected illegal loggers to go unpunished, but such problems go beyond the forest sector and need to be addressed through broader programs. Most countries have ongoing programs to address governance-related issues in society; however, these efforts often seem to have limited impact on peripheral sectors such as forestry. Measures to develop forest-sector governance should be closely linked to these broader reform processes, and should also make full use of the conditions created by such reforms. The forest sector is seldom able to initiate necessary reforms because top management is often among beneficiaries of corrupt practices.

5.2.3 Improving the Demand-Supply Balance of Essential Forest Products

Subsistence use. In most of the countries involved in the study, the chronic imbalance in the legal supply and demand for fuelwood, and lack of affordable alternative sources of energy, forces the rural poor into illegality. In the long term and with the improvement of economic conditions in rural areas, and economic development in general, the demand for fuelwood is likely to decline to more sustainable levels. However, in the short term and in the absence of substantial rural development or massive migration to cities, the extraction of fuelwood—even beyond the levels estimated as sustainable—will continue. In these circumstances, measures to increase fuelwood supplies would reduce incentives for illegal logging.
Furthermore, revision of energy subsidy policies can have a major impact on illegal fuelwood consumption. This potential impact should not continue to be ignored in the design of adjustment policies by ministries of finance and by international financing institutions, as it is at present.

In the longer term the options to increase fuelwood supplies include creating the conditions for (a) ensuring the natural regeneration of forest and bush lands, and (b) intensifying farm and community level plantations. Because the effectiveness of these actions depends on land tenure arrangements and their security, it is unlikely that any significant results can be achieved in the absence of supporting reforms in land policy and legislation. Most actions of this type need fairly broad-based efforts combining the provision of inputs (seedlings, nursery materials, and so forth) for free or at subsidized prices, awareness campaigns, and other activities, and it is not evident that most of the countries involved in the study will be able to carry these out without external support. In addition, it is not certain that plantations would in fact increase fuelwood supply; examples in other countries show that communities may opt for more valuable species and products that yield higher returns.

Measures outside the forest sector can also contribute directly to improving the demand-supply balance of fuelwood. These include gasification of rural areas, provision of solar and wind energy, and rural electrification. Establishing coherence and synergies between forest policy and energy policy is crucial to achieving a balanced and realistic approach to the future supply of rural energy. The national forest programs initiated or planned in most of the countries offer a good opportunity for this.

Commercial use. A growing imbalance in the legal supply and demand for commercial timber, combined with the high cost of imported timber is increasing the attractiveness of illegal logging in many of the countries involved in the study. In some countries with abundant forest resources, it may be possible to increase the legal allowable cut, which could also increase government revenues and thus improve capacity for law enforcement. To be effective, this strategy needs to be accompanied by measures for improved governance, especially to curb the high-level, corruption-related illegalities that can effectively block any improvements at the lower levels in controlling illegal activities in the forest areas and the supply chain.

Lowering import duties may also play a role in increasing wood supply and reducing the demand for illegal domestic logs. However, this strategy may also result in moving illegality from one country to other.

5.2.4 Measures for Improved Governance in the Forest Sector

Effective control of illegal logging requires various integrated actions by the forestry administration and by other agencies of government, the public sector, and civil society acting in partnership. Furthermore, it also requires improvements to the policy and legal framework to eliminate those factors that force some actors to act illegally and to improve legal coherence.

Legal framework. As mentioned in chapters 3 and 4, the quality of the regulatory framework is key to the organization of effective strategies to control illegal logging and trade.
Regulations should be limited in number, and simple. They also should be realistic, demanding feasible actions from stakeholders and forest operators, and fair in the sense that they do not violate human rights or deeply rooted customary rights.

When substantial illegal logging and trade are detected, the widely observed tendency is to regulate more rather than less, to constrain the space for illegal logging and illegal trade by increasing the number and level of detail of rules. However, this approach regularly backfires. In most countries regulations are already numerous and complex, so much so that in some cases, going around the rules is the only way to operate. Regulatory proliferation also normally leads to bureaucratic complexity. Abundance and complexity of rules also increase the opportunities for discretionary interpretation of regulations and for corrupt behavior. In fact, some regulatory systems are designed by some unscrupulous government officers to open opportunities for corruption. The multiplication of rules tends to increase the costs of compliance.

Thus, reduction in the number of rules and their simplification is an important step in combating illegal logging and illegal trade and governments genuinely interested in improving the quality of governance in the sector would do well to give priority to reforms of the sector’s regulatory architecture.

Furthermore, the rather obvious concept that the law will be respected only if compliance is feasible, is frequently ignored. Requiring main actors to perform impossible tasks, such as asking small operators to produce complex and expensive forest management plans, generates strong incentives for these actors to operate illegally. Governments should therefore strive to base their actions on regulations that are well within the capability for compliance by various stakeholders.

The regulatory framework should also avoid trampling basic human rights or ignoring customary rights. Such actions will only be perceived as unfair by negatively affected actors and will thus feed a strong resistance to complying with the law.

In many cases, laws include unrealistic penalties for those that act illegally. Ideally, penalties should be commensurate with the gravity of offenses committed and high enough to provide an effective deterrent. Further financial penalties need periodic revision to keep pace with inflation.

Forest monitoring and information systems. One of the most effective ways to reduce illegal logging and trade is to increase the general knowledge of the condition of the nation’s forest resources, how they have been managed, and the consequences of illegal logging on the quality of resources, the environment, the economy, and the condition of the rural poor. Without this knowledge there is little reason for anybody to be concerned with illegal acts and it is also difficult to form coalitions of interests or to mobilize public opinion. In the absence of satisfactory information on forest resources, political leaders may not perceive illegal logging as important enough to deserve their attention and effort.

An essential element for detecting and suppressing illegal logging and trade is an adequate baseline of information to be used for monitoring the evolution of the forest; the movement of forest products; and the consistency of production, consumption, and trade data. Unfortunately, there is little systematically updated information on forest resources in the ENA countries. In Russia and most of the Caucasus and Central Asian countries, the last
comprehensive forest inventories were carried out in the 1980s, before the breakup of the
Soviet Union. To provide more than patchy and fragmentary information regarding timber
harvesting and trade, it is necessary to develop comprehensive information systems.
Transparent procedures, enabling data access by third parties, also are recommendable.

Independent monitoring of forest concessions and logging and transport of timber is
necessary, with a focus on the incidence and modalities of corrupt acts. The options include
(a) strong and independent government institutions with capacity to conduct intensive
financial and field audits, and (b) capable and independent civil society organizations. The
former is effective if high-level corruption is not pervasive, the latter may be the only feasible
approach in the most difficult situations.

Monitoring technologies that could be used widely in ENA countries are developing at a fast
pace and becoming more effective, affordable, and easy to use. Modern remote sensing tools
and Global Positioning Systems can provide a wealth of information on forest resources and
real time information about variations in forests’ condition and integrity, such as the illegal
construction of roads or the occurrence of unauthorized mining operations in forest areas.
Modern product-tracking technologies can help trace movement of forest products from logs
to industrial processing and transportation to national or international markets.

Illegal logging that is difficult to detect at the forest can be identified at successive stages of
transport, industrial processing, and trade. An efficient information system relying on sound
statistics can detect how logs are processed and traded in national and international markets,
thus creating powerful deterrents for such illegal practices as false declarations of logged
volumes and species.

**Forest administration reform.** Forest administrations in the ENA countries suffer from a
number of weaknesses that create favorable conditions for the proliferation of illegal acts.
First, the public forest administration seldom has a proper balance between its responsibilities
and its financial and human resources and authority to properly satisfy those responsibilities.
Second, there are a number of institutional difficulties in coordinating actions with related
sectors and institutions, such as the judiciary, the police, conservation agencies, and so on.
Third, bureaucratic procedures to obtain logging and other types of authorizations are often
cumbersome and lack transparency.

Effective strategies for controlling illegal logging and trade must achieve an adequate balance
between the responsibilities entrusted to the forest public administration and its financial and
human resources, as well as the commensurate authority to deploy them.

The administrative procedures used in granting logging licenses have to stay in proportion to
the economic value of the products. Bureaucratic procedures that are excessively
cumbersome, as well as regulations that disregard basic human needs, encourage illegal
activities. This is especially important for fuelwood cutting and other subsistence uses of
forests, where the capacity of people involved with these activities to comply with
bureaucratic requirements is extremely low. Laws and regulations need to be assessed based
on implementation experience and adjusted as needed to reduce the cost of compliance.

Furthermore, a clear separation between production and monitoring of forest functions,
preferably into different ministries, is a precondition for any effective system for monitoring
and preventing illegal logging. However, effective strategies must rest on appropriate ways of
coordinating action between these various institutions of government. The enforcement system is only as strong as its weakest link. Each link in the chain, from detection of illegal activities to prosecution, conviction, and enforcement of penalties, must be effective for the whole chain to be effective; one weak link may offset the impact of all other links. In many countries, the court system is the weak element in attempts to contain illegal logging through enforcement. The systems suffer from overburdened courts, inconsistent penalty codes and their application, and corruption. As a result, a major portion of those guilty of illegal logging go unpunished.

The processes used for the sale of timber and awarding of concession and logging contracts given to private companies in government forests are not yet fully transparent. Moving to a publicly transparent system of competitive bidding with clearly specified criteria as well as making the contracts public and allowing interested parties to challenge the award of such contracts can be powerful tools to enhance transparency of government operations and combat corrupt practices.

Commercial theft and unauthorized illegal logging can be fought with improved organization and increased resources, but corruption requires approaches in which improved institutional arrangements and transparency play a key role. The most damaging form of corruption involves high-level officials. The financial losses are significant. The fight against high-level corruption should be prioritized because it catalyzes a chain reaction; eliminating high-level corruption will also reduce opportunities for petty corruption. Working in the opposite direction does not have the same catalytic effect.

*Multistakeholder governance structures.* The public forest administration and other government agencies can establish associations and cooperative arrangements with other civil society and private sector institutions that can contribute to the implementation of some of the key tasks of law enforcement. Coalitions can strengthen political determination and long-term commitment to combat illegal logging and trade and can contribute to changing cultural values and the way the general public thinks about forest resources and their management. The establishment of multistakeholder forums for dialogue on key issues of forest policy and policy implementation, such as illegal logging, could provide a major tool to improve the governance of the sector and open it up to a wider set of views and values. The national forest programs can offer such forums and provide a focus for debates on forest governance issues. In the absence of such comprehensive planning processes, thematic and more ad hoc forums could be set up, for example, to discuss and find solutions to the problem of illegal logging. In addition to interministerial task forces or committees set up in some of the countries, parliamentary committees could help increase the political profile and status given to forest governance issues.

Various independent NGOs have proven effective in monitoring forest activities and identifying illegal logging. Independent certification could be a powerful tool for improved forest governance and control of illegal logging in exporting countries or countries that could be exporting wood products to the European and other more discriminating markets. While independent certification is not greatly effective for countries that have limited or nonexisting exports, or in cases where exports can be easily diverted to less environmentally sensitive countries, certification is nevertheless one of the many mechanisms that can contribute to ensuring a greater degree of legality in the forest sector.
Furthermore, in various cases governments can promote the adoption of corporate codes of conduct by key corporations engaged in processing and trade of forest products. By adopting codes of conduct corporations either independently or as members of industry associations commit themselves to following certain principles of responsible operations, including compliance with the laws of the counties in which they operate. Responsible corporations and industry associations are voluntarily organizing such initiatives.

These coalitions are not easy to form and sustain. Those that are more stable focus on causes of illegal logging and trade rather than on issues, stress cooperation rather than confrontation, and strive to avoid antagonizing the political regime of the country. They also aim at incremental change rather than drastic reforms (Kpundeh and Johnston 2001). In practice this translates into a focus on positive incentives to fight illegal logging and trade rather than on imposing top-down, government-inspired command-and-control measures that are difficult to monitor and enforce.

5.2.5 The Role of International Governance and Partners

International conventions and agreements give leverage and gravity in presenting demands to governments by referring to international legal backing. The most important conventions and agreements are not necessarily those directly related to the forest sector; for example, the Aarhus Convention is a key international agreement referred to when demanding transparency and freedom of information.

Regional processes can increase awareness and help develop common approaches to forest governance issues. Networking with international organizations and NGOs can also contribute to this goal.

Partnerships with external actors in the private sector (local-foreign partnerships for forest concessions, for instance) may offer a way to strengthen the capacity for control and sustainable management in the forest areas, especially if supported by such instruments as forest certification. Supporting broader rural development programs may, in some of the countries, be a more effective means for addressing illegal logging than strictly sectoral measures.

5.3 Developing Strategies for Specific Contexts

For general remedial measures to be effective, they must be prioritized and, in some cases, implemented in strict sequence. Priority measures depend on the context defined mainly by the type of illegal logging that is prevalent and the existing governance situation. Commercial illegal logging tends to concentrate in forest-rich countries whereas in countries with limited forest resources, poverty-driven illegal logging is often the predominant or only type.

In ENA countries, there are three typical contexts of illegal logging requiring different approaches:

- **Context:** Top officials in the forest administration or at higher levels of government abuse their authority to enable large-scale commercial illegal logging. Petty corruption involving officials at lower levels of forest administration reinforce this trend. Often, illegal logging
results in total harvested volumes exceeding sustainable levels. Monitoring and enforcement systems are weak, focused on theft, and unable to eliminate corruption.

*Recommended approach:* For illegal commercial logging, the most effective responses are likely to be, in countries with the most difficult overall governance situation, on tackling high-level corruption that allows the perpetrators to circumvent lower level actions for control. The tools include increasing the transparency of activities in the forest sector through the provision of independent information, strengthening civil-society participation, and promoting elements of good governance in general. The forest sector is usually unable to solve the problem on its own; instead, it must benefit from cooperation with related government sectors (for example, the police and the courts) as well as from the highest levels of government and public administration.

It is stressed that most of the potential measures will be fully effective only if corruption, especially at the high level, is brought under control; otherwise there is a risk that resources will be used ineffectively and serve only as window dressing. In particular, one should be careful not to focus on petty corruption, thereby diverting attention from the battle against high-level corruption.

The appropriate mix of other measures depends on the country but improving monitoring and information systems, eliminating conflicts of interest in the structure of forest administration, and strengthening law enforcement are generally necessary.

- **Context:** Poor people suffer from an inadequate wood supply, mainly fuelwood, and resort to illegal harvest to meet their basic needs. Law enforcement does not have, nor can it be expected to have, the capacity to eliminate this type of illegal logging.

*Recommended approach:* The strategies to counteract poverty-driven illegal harvest are less dependent on the institutional structure than on policies and legal norms. The institutional setup has little relevance in a situation in which policies are flawed to such an extent that they cannot be implemented. The fundamental conflict is between environmental protection and satisfaction of social needs; in many cases it is difficult to achieve both. The existing legal frameworks are founded on strict principles of environmental protection and, as a result, the legal supply of fuelwood is often grossly inadequate to satisfy people’s basic needs.

The approach must be able to effectively close the huge gap between supply and demand that exists in many countries. The activities need to be part of all broader policies, strategies, and plans for rural development and energy provision. There are two basic options: (a) decrease demand by providing alternative sources of energy at low or no cost for the rural poor, and (b) increase supply by legalizing currently illegal fuelwood cutting, by amending the legislation, and by considerably increasing the allowable cut over current levels.

- **Context (applies to the Balkans):** Small, privately owned woodlots are being pillaged by theft committed by outsiders, or woodlot owners themselves fail to comply with forest management regulations. Woodlots are too small and scattered to be effectively guarded by law enforcement staff. Forest owners themselves live far from the plots, and have limited interest in their management.
Recommended approach: In private woodlots, illegality often results from failing to follow the administrative procedures, not the forest management regulations themselves. The bureaucratic burden should be reduced to be in line with the value of economic benefits, true environmental risk, and enforcement capacity. For instance, for very small woodlots, the requirement to apply for a harvesting license beforehand could be changed to notification after harvesting.

To better contain the threat from theft, forest owners could be encouraged and supported to participate in surveillance activities. In some Eastern European countries, private forest owners have shown interest in forming patrols to detect illegal activities and bring them to the attention of law enforcement staff. More systematic control procedures by the regular law enforcement agencies could also improve the situation.
## Annex A1. Characteristics of Forest Policies in Selected ENA Countries

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<tr>
<th>Country</th>
<th>Key forest policy goals</th>
<th>Explicit mention of illegal logging as a problem</th>
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<tbody>
<tr>
<td>Albania</td>
<td>Macro goals influencing the sector</td>
<td>Specific measures suggested through the ILAP, including an inter-ministerial task force, and improvement of law enforcement (including third-party assessment)</td>
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<tr>
<td></td>
<td>• Reorientation toward a market-based economic system</td>
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<td></td>
<td>• Privatization and restitution of forest lands</td>
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<td></td>
<td>• Redefinition of the role of state agencies, devolution of management and control rights to nonstate actors</td>
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<td></td>
<td>2004 Strategy for the Development of the Forestry and Pasture Sector</td>
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<tr>
<td></td>
<td>• Clarifying the government’s position on the privatization of forest land</td>
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<td>• SFM by improving management planning</td>
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<td></td>
<td>• Transition to market-driven economy in the forest sector, promoting small-scale entrepreneurship</td>
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<td></td>
<td>• Transfer of management responsibility to rural communities</td>
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<td></td>
<td>• Improved state management of production forests and summer pastures</td>
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<td></td>
<td>• Development of nature-based tourism and recreation</td>
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<td></td>
<td>Energy strategy deals with fuelwood issues but not coordinated with forest strategy, no specific policy on fuelwood</td>
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<td>Armenia</td>
<td>Declared strategy goals of Forest Policy 2004</td>
<td>Illegal logging analyzed and policy recommendations made Specific measures suggested through the ILAP intended to address rural poverty, public awareness, community consumption, commercial demand, and monitoring and control Interministerial Task Force created to supervise implementation</td>
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<td>• Reforestation, development of beneficial features of forests, and sustainable forest management</td>
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<td></td>
<td>• Institutional strengthening and capacity building for sustainable forest utilization, as well as establishment of forest conservation and protection services; seed, nursery and hunting farms; education and training centers and network</td>
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<td></td>
<td>• Creation of scientifically proved, sustainable forest management plans (short and long term)</td>
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<td></td>
<td>• Provision of nonwood forest products on a sustainable basis</td>
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<td></td>
<td>• Improvement of legal basis for sustainable forest management including scientifically proved mechanisms (methodology, criteria, and so on) taking into account international experience</td>
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<td>Azerbaijan</td>
<td>Main objectives (defined in various policy documents) focus on</td>
<td>Not specifically addressed, but implementation of improved control by the government emphasized</td>
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<td>• Implementation of state control, and organization of state registry of the forest fund</td>
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<td></td>
<td>• Provision for the rational use of forest resources through planning and implementation of forest management and rehabilitation activities</td>
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<td></td>
<td>• Conservation and protection of forest resources including watersheds, recreation, and other functions of the forests</td>
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<td></td>
<td>• Implementing international cooperation in the area of forest use, protection, and conservation</td>
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<tr>
<td>Bosnia and Herzegovina</td>
<td>No officially formulated forest policy exists, Poverty Reduction Strategy Paper provides some policy guidance to the sector</td>
<td>Not specifically addressed, guidance relates to information management and transparency</td>
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<td>• Sustainable use of forest resources for employment and the development of rural areas</td>
<td>Several interministerial action plans adopted to combat illegal logging</td>
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<td>• Reforestation, forest rehabilitation, identification of protected areas, promotion of the use of non timber forest products</td>
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<td></td>
<td>• Privatization of forestry activities</td>
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<td>• National forest inventory, monitoring, forestry information system</td>
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<td></td>
<td>• Civil society participation</td>
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<tr>
<td>Country</td>
<td>Key forest policy goals</td>
<td>Explicit mention of illegal logging as a problem</td>
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| Bulgaria            | 2003 National Forest Policy and Strategy (NFPS), approved by the Council of Ministers, not yet approved by the national parliament, with goals, among others:  
  - To improve the condition of forest resources and to achieve compliance with internationally adopted principles, criteria, and indicators for sustainable management  
  - Significant improvement in the protection of forests and forest resources from violation  
  - To create all necessary economic, regulatory, technological, and organizational conditions for optimal use of timber and non-timber production potential  
  - Conservation and restoration of the components of biological and landscape diversity  
  - To increase social benefits from forests and the revenues for their owners, as management practices applied are based on the principles of respect of ownership, equal rights of consumers, and social justice  
  - To ensure transparency, accountability, and opportunities for public participation at each level in the decision-making process | It is mentioned that 71 percent of the population of Bulgaria regard illegal logging as the most serious issue for the forests. Scope of violations is explained and elaborated.  
NFPS suggests a number of strategic actions to address illegal operations, including introduction of a new safeguarding model. |
| Georgia             | 2002 Main Principles of Government Policy for Forest Sector Development:  
  - Conservation of forest biodiversity and improvement of forest productivity  
  - Ensuring conservation of the virgin forests and endemic, relic, and other valuable species  
  - Increasing soil productivity and protection against erosion  
  - Ensuring sustainable utilization of natural resources  
  - Developing ecotourism and hunting to solve social problems through economic effects  
Commitment to develop a comprehensive forest policy and strategy (NFP – with support from FAO). | Not specifically addressed but moratoriums have been declared on logging and wood exports several times                                             |
| Kyrgyz Republic     | 1999 Forest Code gives protection status to all forests and prohibits industrial logging. The 1998 Presidential Decree and the 2004 Forest Sector Development Conception give the following strategic directions:  
  - Forest and biodiversity conservation  
  - Technical norms for sustainable forest management  
  - Delegation of part of production functions to the private sector  
  - Rationalizing forest service structure  
  - Fiscal reform and increased effectiveness of the forest financing system  
  - Promotion of status of forest sector workers  
  - Forest science and education  
  - Increased awareness on the forestry sector | Illegal logging not specifically addressed                                                                                               |
| Moldova             | 1996 Forest Code:  
  - Protection of water security, sanitary and hygienic, climate regulative, and other functions of forests in the interest of public health care and environmental protection  
  - Maintenance of forest conditions necessary for ecological, social, and economic functions  
  - Continuity of functional efficiency of forests and rational use of forest resources  
A number of other parliament and government decisions exist with focus on  
- Conservation and protection  
- Afforestation and expansion of forested area  
- Contribution of forestry sector to solving socioeconomic problems (increasing mature forests, integral processing of wood, rational use of non-wood products). | A number of specific government decisions exist on illegal logging focusing on preventing unauthorized logging and theft, illegal hunting, and illegal grazing; mainly in the context of forest protection. |
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| Russian Federation      | Forest policy presently consists of a combination of forest legislation, several target programs and strategy documents, and some aspects of international agreements. The objectives of the current reform process include (as expressed by Petrov [2003], the head of the Forest Research Institute)  
  - Establishment of reasonable, profitable, cost-effective, and competitive production  
  - Providing favorable conditions and extended opportunities for foreign and domestic investors in the forest sector  
  - Capital accumulation in the most prioritized areas  
  - Development of forest products export  
  - Changing the existing structure of forest products export and shifting toward further processing of timber  
  - Small business support  
  - Intensification of state control  
  - Advanced production development on the basis of wood processing located in the regions of major volume harvesting | Intensification of control and enforcement activities highlighted in policy documents                                                                                               |
| Serbia and Montenegro   | No clearly defined forest policy document exists. Some elements of forest policy are addressed in the forest law, others in the 1996 Spatial Plan of the Republic of Serbia, which defines the sectoral objectives as  
  - Improvement of the forest condition  
  - Increase of the forest cover percentage  
  There is an ongoing process to develop a new forest policy, legislation, and a national forest program. | No specific policy measures or programs exist regarding illegal logging.                                                                                                     |
  - Development of a national strategy on preservation of biodiversity  
  - Ensure sustainable use of natural resources  
  - Development of a legal base and monitoring system for environmental protection  
  - Pilot projects on reforestation within the framework of UNCCD  
  - Forest conservation and soil protection  
  - Ecotourism and hunting development to contribute to solving social problems in the forest areas  
  - Development of unconventional sources of energy to decrease use of fuelwood  
  - FAO approached to assist in the development of a national forest program | No specific policy measures or programs exist regarding illegal logging.                                                                                                     |
| Ukraine                 | Acting Forest Code (1994)  
  The State Program “Forest of Ukraine” (2002) declared requirements for sustainable forest management and set the following goals:  
  - Increase of the forest cover, productivity, and stability  
  - Biodiversity conservation  
  - Rational use of forest resources  
  - Improvement of normative legal basis  
  New draft Forest Code, pending in parliament, foresees reduction in centralization of state forest management and creation of economic and legal mechanisms that would be applicable to all forest owners and users.  
  Draft Concept of Forest Sector Reformation and Development (2005) is a new policy document that will, if adopted, support  
  - Community and private forest ownership  
  - Private sector involvement in forest management  
  - Optimized structure of forest management enterprises and multifunctional forest use | No specific policy measures or programs exist regarding illegal logging.                                                                                                     |
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<tr>
<td>Uzbekistan</td>
<td>1999 Law About Forests and consequent Cabinet of Ministers’ decisions define that the Forest Department has the normative responsibility for the sector, and productive functions are carried out by the forestry enterprises together with local authorities. Logging for industrial purposes is prohibited in all natural forests. A need to develop a coherent strategic framework in the form of a national forest program is recognized, and FAO has been approached for support.</td>
<td>No specific policy measures or programs exist regarding illegal logging.</td>
</tr>
</tbody>
</table>
## Annex A2. Most Important Externally Supported Projects in Selected ENA Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Projects</th>
</tr>
</thead>
</table>
| Albania          | • Legal and Judicial Reform Project (active) by World Bank (the Bank)  
• Public Administration Project (active) by the Bank  
• Natural Resources Development Project (proposed) by the Bank |
| Armenia          | • Natural Resources Management and Poverty Reduction Project (NRMPRP) by the Bank  
• National Forest Policy, New Forestry Code, and Illegal Logging Action Plan within forestry component of the Bank NRMPRP  
• Forest Institutional Support Project (FISP) of forestry component of the Bank NRMPRP granted by SIDA  
• Support to implementation of poverty reduction strategy in Armenia by the Bank  
• Poverty Reduction Support Credit (PRSC) within the Bank program  
• PRSP program by the government  
• Reforestation and Forest Development Fund activities established by Armenian government |
| Azerbaijan       | • National Program on Environmentally Sustainable Social and Economic Development  
• National Program on Forest Rehabilitation and Development  
• National Poverty Reduction and Economic Development Program for 2003–5 supported by the International Monetary Fund and the Bank  
• National Program of the Regions’ Social and Economic Development for 2004–8  
• Small Matched Grants Program for the Caspian Region: implemented by the Caspian Environmental Program since 2000 with funding support of EU Technical Assistance to CIS Countries (TACIS) and Global Environment Facility (GEF)  
• Grants Program of the Critical Ecosystem Partnership Fund, started in 2004 with funding support of the Bank, GEF, Conservation International, the MacArthur Foundation, and government of Japan  
• Rural Environment Program supported by GEF, the Bank, and government of Japan submitted to the government for approval |
| Bosnia and Herzegovina | • Forestry Development Project by the Bank  
• USAID’s Cluster Competitiveness Activity  
• Economic Management Structural Adjustment Credit of the Bank  
• Third Electric Power Reconstruction Project (Power III), the post-conflict reconstruction program in the power sector in Bosnia and Herzegovina, combined with support for restructuring and reforms by the Bank in collaboration with several funding partners  
• National Forest Project funded by the Bank |
| Bulgaria         | • Forest Development Project by the Bank  
• Bulgarian-Swiss Forestry Programme funded by the Swiss government  
• German-Bulgarian Forestry Project funded by the German government  
• Agroforestry Project in the Rhodopi Mountains funded by the German government  
• Projects financed by the EU through nationally managed Sapard and Phare programs  
• UNDP Rhodopi Project  
• Fuel Switch Project by the Bank  
• Forest Fire Management, supported by FAO |
• Biodiversity Country Study; first biodiversity project in Georgia prepared with UNEP in 1996; implementing agency Noah’s Ark Centre for the Recovery of Endangered Species  
• Biodiversity Strategy and Action plan; World Bank– Ministry of Environmental Protection and Natural Resources alliance  
• TACIS Black Sea Biodiversity Project; implementation agency Batumi Black Sea Biodiversity Regional Center; UK Consultancy Group Halcro provides project consultancy  
• Borjomi-Kharagauli National Park; project funded by German government according to Georgian-German intergovernmental agreement and is established on the State Forest Fund territories; implementing agency WWF Georgia  
• Integrated Coastal Zone Management Project; GEF–World Bank and Dutch government; managed by local Program Implementation Unit  
• Georgia Protected Area Development Project; GEF–World Bank  
• Capacity Building and strengthening of Ministry of Environment; UNDP  
• Georgia Forests Development project; World Bank (2002–8) |
<table>
<thead>
<tr>
<th>Country</th>
<th>Projects/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyrgyz Republic</td>
<td>- Kyrgyz-Swiss Program of Support of the Forestry; began July 1995</td>
</tr>
<tr>
<td></td>
<td>- Since 2000, Central Asian Trans-boundary Project GEF–World Bank on conservation of biodiversity of West Tien-Shan carried out</td>
</tr>
<tr>
<td></td>
<td>- Interstate project on preservation of biodiversity, West Tien-Shan (TACIS)</td>
</tr>
<tr>
<td></td>
<td>- GTZ project “Biosphere territory Issyk-Kul” since January 2001</td>
</tr>
<tr>
<td>Moldova</td>
<td>- Moldova-Second Energy, World Bank</td>
</tr>
<tr>
<td></td>
<td>- Soil conservation project, World Bank</td>
</tr>
<tr>
<td></td>
<td>- Public Sector Reform, World Bank</td>
</tr>
<tr>
<td></td>
<td>- Fight Corruption and Improve Governance, Transparency International with UNDP</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>- Sustainable Forestry Pilot Project 2000–5, World Bank</td>
</tr>
<tr>
<td></td>
<td>- The Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia, 1997–2007</td>
</tr>
<tr>
<td></td>
<td>- Komi Model Forest Project 1996–2007, Swiss Development Cooperation</td>
</tr>
<tr>
<td></td>
<td>- Forest Resource Management in Northwest Russia, 1997–9, EU</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>- Restructuring of Serbian State Forests Srbijasume, Austrian Development Agency</td>
</tr>
<tr>
<td></td>
<td>- International training and education in forest policy and economics, Finnish government</td>
</tr>
<tr>
<td></td>
<td>- Accountability Programme (2002–5) by Transparency International</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>- The World Bank project Community Agriculture and Watershed Management Program may soon introduce a forestry component geared toward increasing supply of fuelwood and reducing pressure on existing forests</td>
</tr>
<tr>
<td></td>
<td>- World Bank Pamir Private Power Project financed by US “Focus”</td>
</tr>
<tr>
<td></td>
<td>- UNDP project Conserving Globally Significant Biodiversity and Mitigation/Reducing Environmental Risk in Ukraine’s Carpathians</td>
</tr>
<tr>
<td></td>
<td>- Swiss-Ukrainian Forestry Development Project in Transcarpathia “FORZA,” founded by the Swiss Agency for Development and Cooperation and executed by Inteccooperation, since 2003</td>
</tr>
<tr>
<td></td>
<td>- Czech project on inventory development</td>
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<tr>
<td></td>
<td>- World Bank, fact-finding and inception mission in forestry</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>- “Assistance to the private agriculture sector of Uzbekistan and forest reclamation on the dried bottom of Aral Sea” by GTZ</td>
</tr>
<tr>
<td></td>
<td>- Protection of Environment Project, financed through Department of Agriculture of the United States within the Foodstuffs in the Name of Progress program</td>
</tr>
<tr>
<td></td>
<td>- Project on the Establishment of the Nuratau-Kyzylkum Biosphere Reserve as a Model for Biodiversity Conservation in Uzbekistan by UNDP, started in 2003</td>
</tr>
</tbody>
</table>
Annex A3. Selected International Definitions for Illegal Logging

There are many definitions and concepts to define the scope of illegal logging and other illegal forest activities, either in publications or used by international agencies and organizations. In the following list we present only a limited selection of these to demonstrate the variety of interpretations made on this issue. (See also definitions of some related terms in annex A8.)

- Logging is illegal if logs are harvested in contravention of laws and regulations designed to prevent the over-exploitation of forest resources and to promote sustainable forest management (Callister 1992).

- Illegal logging consists in (FAO 2001)
  - extracting more timber than authorized,
  - logging without authorization,
  - obtaining logging concessions through bribes,
  - duplicating felling licenses,
  - girdling or ring barking to kill trees so they can be logged legally,
  - contracting with local entrepreneurs to buy logs from protected areas,
  - logging protected species,
  - logging in protected areas,
  - logging outside concession boundaries,
  - logging in prohibited areas such as steep slopes, riverbanks, and water catchment areas,
  - removing under- or oversized trees from public forests,
  - reporting high volumes extracted in forest concessions to mask the fact that part of the volume declared is extracted from nonauthorized areas outside the concession boundaries.

- From the legal perspective, illegal logging is logging done with the infringement of criminal law (timber robbery) or administrative law (that is, legally binding forest management and harvesting regulations) (Bouriaud and Niskanen 2003).

- Illegal logging takes several forms, including cutting in protection forests, overcutting, or cutting by third parties in concessions, violation of government regulations regarding concession operations, and using clear felling permits that were issued for other locations (Bocucci et al. 2003).

- Illegal forest activities are defined to include all illegal acts related to forest ecosystems, forest-related industries, and timber and nontimber forest products. They range from acts related to the establishment of rights to the land, to corrupt activities, to the acquisition of forest concessions, and activities at all stages of forest management and the forest goods production chain, from the planning stages, to harvesting and transport of raw material and finished products, and to financial management (Tacconi, Boscolo, and Brack 2003).

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9. See annex 8 to this report on definitions
• Illegal logging takes place when timber is harvested in violation of national laws (CEPI 2004).

• Illegal logging activities include the harvest, transportation, purchase, or sale of timber in violation of national laws. The harvesting procedure itself may be illegal, including using corrupt means to gain access to forests; extraction without permission or from a protected area; the cutting of protected species; or the extraction of timber in excess of agreed limits. Illegalities may also occur during transport, such as illegal processing and export; fraudulent declaration to customs; and the avoidance of taxes and other charges (FERN, Greenpeace, and WWF 2004).

• Logging is legal where concessions have been legalized, cutting limits have been respected, and taxes have been paid (FERN, Greenpeace, and WWF 2004).

• According to the legislation of the Russian Federation, illegal logging is logging of the forest without the appropriate documentation or logging with documentation, but violating the rules of logging, as well as taking down the forest at the wrong location or crossing the boundaries of the location approved for logging. Furthermore, exceeding the allowable quantities, cutting species that are not intended for logging and contrary to the issued documentation, cutting outside the scheduled timeframe, cutting trees protected by law, and cutting after issuing of verdict (decision) about interruption are also considered illegal, as are limitation or termination of the users’ rights on the territory of the forest area (Bolshakov 2004).

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10. Agreeing on an adequate definition of legality means deciding which aspects of national legislation will apply when checking for compliance. While it is clear that harvesting timber in violation of national laws is illegal, there is a range of other illegal practices associated with logging and the timber trade. This suggests that the definition of legality needs to encompass more than just illegal harvesting. A clear definition of legality that is objectively verifiable and operationally workable is therefore needed. In some countries, inadequate, conflicting or inequitable existing laws might make a clear definition of legality more difficult to achieve.
Annex A4. Definition of Corruption

There are many interpretations of what constitutes corruption. Corruption is variously defined as “the sale by government officials of government property for personal gain” (Schleifer and Vishney 1993, or “behavior on the part of officials in the public sector, whether politicians or civil servants, in which they improperly and unlawfully enrich themselves, or those close to them, by the misuse of the public power entrusted to them” (Transparency International 1996). The World Bank defines corruption as “the abuse of public office for private gain” (World Bank 1997). (See also definitions of some related terms in annex 8.)

Corrupt deeds are illegal actions that

- engage public officials. A private individual stealing wood from public forests is performing a criminal act but, according to this definition, not a corrupt act. While corruption engages civil servants, most frequently a party from the private sector or the civil society is also implicated. But the participation of public officials in illegal actions makes corrupt acts particularly damaging.
- involve public property and power. Public property may be tangible (timber, for example) or intangible (such as selling knowledge about government negotiating positions on timber concessions).
- are perpetrated for private gain. Thus, a public official misusing public forests but not deriving private gain (financial or otherwise) from that action is a negligent and incompetent individual (and not free from prosecution), but not a corrupt one.
- are intentional acts. A public official that unknowingly uses public forest resources illegally is also a negligent and incompetent individual but not a corrupt one.
Annex A5. Definitions of Governance

(See also definitions of some related terms in annex 8.)

Governance

• A process whereby societies or organizations make their important decisions, determine whom they involve in the process, and how they render account (Graham, Amos, and Plumptre 2003).

• The exercise of economic, political, and administrative authority to manage countries’ affairs at all levels. It comprises the mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences (UNDP 1997).

• The traditions and institutions by which authority in a country is exercised. This includes (a) the process by which governments are selected, monitored, and replaced; (b) the capacity of the government to effectively formulate and implement sound policies; and (c) the respect of citizens and the state for the institutions that govern economic and social interactions among them (Kaufmann, Kraay, and Zoido-Lobaton 1999).

• The exercise of authority through formal and informal traditions and institutions for the common good …. Governance includes the process of electing, monitoring, and replacing governments, the capacity to formulate sound policies, and the respect of the public and the state for the institutions that govern economic, political, and social interactions among them (Contreras 2001; Thomas et al. 2000).

• A political concept, which refers to measures that involve setting the rules for the exercise of power, and settling of conflicts over these rules (IFAD 2001).

• Governance refers to collective attempts to manage and regulate social relations. Increasingly, regulating and managing effectively involves governments cooperating with, or devolving government functions to, NGOs and the private sector (Rosenau 1992).

• Governance refers to sets of regulatory mechanisms in a sphere of activity that functions effectively even though they are not endowed with formal authority (Newell 2000).

The key features of governance are

• the blurring of boundaries and responsibilities for tackling social and economic issues,
• autonomous self-governing networks of actors,
• the capacity to get things done,
• the exercise of authority within a given sphere,
• accountability and transparency.

Good governance generally refers to democratic structures at the national level (Newell 2000a).
**Governance of natural resources** consists of “the process of formulation, articulation, administration, and implementation of policies, legislation, regulations, guidelines, and norms relating to the ownership, access, control, rights, and responsibility as well as capacity for the management of natural resources at local and/or national levels.” (UNDP http://drylandsnetwork.undp.org/definitions.cfm)

Forest governance encompasses all aspects of the exercise of authority of formal and informal institutions in the management of a nation’s forest resources. Governance comprises activities by the government, the private sector, and civil society and the relationships between them. Good governance translates into effective government institutions and an enabling framework (through policies, incentives, appropriate laws, strong enforcement, and so forth) for these three sectors to operate in harmony to achieve national objectives, such as economic efficiency, economic and social equity, improved environmental quality, and more sustainable forest management (FAO 2001).
Annex A6. Approaches to Formulating National Definitions for Illegal Logging

Arriving at a satisfactory definition, and therefore an unequivocal procedure, for classifying activities as legal or illegal as a base for organizing corrective actions will not be a straightforward process in most cases. It is reasonable to assume that in most situations a practical mechanism to arrive at a working consensus will be needed, a mechanism that will recognize and face the definitional obstacles discussed here.

This mechanism should follow these basic concepts:

- **Focus on a restricted product domain.** As mentioned, the variety of illegal activities having an impact on the way forest resources are managed can be numerous. Most initiatives have restricted their focus to logging and trade of wood products. This does not mean that other products of forests are not subject to illegal acts, or that they are not important. They are, but the need to increase attention demands a sharp focus on a few products only. The choice of logging and trade activities may seem arbitrary and to some extent it is, but not totally so. In most countries, logging and trade of wood products appear to be the most important drivers for the occurrence of illegal activities, pulling many others in their wake. Illegal logging, for instance, often contributes to unlawful occupation of forest lands, to the unauthorized use of fire, and to poaching. Apart from their economic importance, illegal logging and trade are also somewhat more visible and relatively easier to identify than many other forest products. For instance, logging on a certain scale requires heavy machinery, roads, and the movement of large volumes of material. Illegal logging can be easier to spot by making use of land, aerial, or space-based monitoring technologies.

- **Restrict the legal domain.** In a complex system, every law and regulation can be found to have links to others. An all-inclusive definition is out of the question because it would be utterly impractical. This suggests reducing the legal reference framework to a few, highly relevant laws. The degree of relevancy increases with the proximity of the regulation to the physical act that may turn out to be illegal. Thus, for example, a forest harvesting regulation is highly relevant to logging but the impact of other more distant laws, such as those that set tariffs for imported equipment, appear less directly relevant. That is, it is easy to classify a mahogany log as illegal if the law says that such species should not be harvested. It is far less convincing to declare it illegal on the grounds that the equipment used in its harvesting has not paid the corresponding import tariffs. Thus, a limited number of laws closely related to the physical activity in question (logging or trade, for instance) can be used as the “core” of legality. Box A6.1 contains an example of possible legal text that could be a component for this core. Given that laws vary from country to country, the legal components chosen will differ depending on the context. Countries in search of a workable definition of legality have found it useful to organize participatory, multistakeholder processes in reaching an agreement on what legal texts should be included and which ones should be left out.

- **Discriminate by type of actors.** Although most laws do not make an attempt to differentiate between large and small operators or between rich and poor operators, it makes sense to concentrate attention on a small number of the key illegal actors. For
example, some make the distinction between those illegal actors that are motivated by “greed” and those that act illegally as a result of either “need” or sheer incapacity to follow the law. Thus, some of the poorest populations do not have the wherewithal to comply with regulations that demand a certain level of financial, technical, or managerial capacity. To many, it appears reasonable to focus definitional efforts, leaving out functions and products that are closely associated with these poor populations—for example, fuelwood for home consumption. Additionally, the vast numbers of the poor make effective enforcement a distinctly unrealistic possibility in many countries with weak governance institutions. The current emphasis on large scale logging and trade, normally associated with corporations carrying out activities motivated by financial profits (and not necessarily “need” in the sense understood here), and with relatively less attention given to other products and activities, such as non-timber forest products and firewood, goes some distance in this direction.

Box A6.1 Potential Components of Legality

While there is no universally accepted way to address all aspects of legality in the forest sector, the components below give an idea of the possible elements to be included and of the potential complexity of operational definitions of legality.

**Tenure and use rights**—property rights or use rights clearly established and approved by relevant authorities; clear property boundaries, land registries, and approved uses of land.

**Forest management**—the existence of forest management plans including silvicultural systems to be employed, harvesting plans, and permits.

**Protected areas**—conformity with protected area legislation both within the forest management unit and in surrounding areas.

**Protected species**—compliance with laws and regulations regarding protected species of flora and fauna and their habitat.

**Environmental and social impact assessments**—observance of laws and regulations regarding environmental and social impacts and mitigation procedures.

**Indigenous peoples and local community rights**—compliance with legislation related to the protection of indigenous and local community rights that may be affected by forest operations.

**Workers rights, health, and safety**—respect of work laws such as those related to minimum wage and job stability, as well those concerning health conditions and safety of operations.

**Taxes and fees**—compliance with tax laws and other payments to government related to the operations of forest corporations.

**International agreements**—satisfaction of prescriptions contained in international treaties such as CITES and the Biodiversity Convention.

**Chain of custody**—compliance with regulations that mandate specific ways to prove legal
origin through the whole chain of custody.

*Product marking*—observance of rules regarding marking and identification of products and consistency with associated documentation.

*Processing, sales, and shipping*—processing, sales, and shipping corporations comply with legal requirements for their activities such as operating licenses, registration with relevant authorities, and building permits for processing and storage facilities.

Annex A7. Potential Financial Gain from Improved Control over Illegal Logging

Often with illegal logging, the total harvesting volume goes beyond the maximum that could be harvested legally. The theoretical loss in the past can be calculated as the market value of illegal logging, but the potential gain in the future is limited to the value of “additional” legal logging (figure A7.1).

Figure A7.1 Potential Financial Gain from Improved Control over Illegal Logging
Annex A8. Terms Used in FLEGT Processes

Capacity building

Capacity building encompasses the development of an organization’s core skills and capabilities - such as leadership, management, finance and fundraising, program management and evaluation - to build the organization’s effectiveness and sustainability. It is the process of assisting an individual or group to identify and address issues and gain the insights, knowledge, and experience needed to solve problems and implement change (http://www.tcwf.org/reflections/2001/april/pages/definition_of_capacity_building.htm).

Civil society

All those organizations outside the state, the family, and the market: business associations, employers’ associations, trade unions, charities, community groups, professional associations, women’s organizations, advocacy groups, church and faith groups, trade associations, self-help groups, media, academia, and so on (http://www.commissionforafrica.org/).

Commitment

The expectation that a policy or agreement made with legal standing will be fulfilled (http://www.ifpri.org/).

Conflict timber

- Timber that has been traded at some point in the chain of custody by armed groups, be they rebel factions or regular soldiers, or by a civilian administration involved in armed conflict or its representatives, either to perpetuate conflict or take advantage of conflict situations for personal gain. The trade of conflict timber allows armed groups to purchase weapons and is a disincentive for peace. It undermines legitimate forest enterprises and economic development. Conflict timber shares many of the same characteristics as illegal logging, but is characterized by its links with violent conflict rather than its legality (Global Witness 2001).

- Timber produced in areas where the timber industry is one of the primary factors allowing actors to initiate violent conflict (Arthur Blandell, personal communication).

Convention on combating bribery of foreign public officials in international business transactions

Commonly referred to as the OECD Bribery Convention, this international treaty signed in 1997 and in force since 1999, commits developed countries to criminalize bribery by their companies operating overseas. All OECD countries have ratified the Convention, as have five others (Argentina, Brazil, Bulgaria, Chile, Slovenia) (http://www.commissionforafrica.org/).

Empowerment
Multidimensional social process that helps people gain control over their own lives; process that fosters power (that is, the capacity to implement) in people, for use in their own lives, their communities, and in their society, by acting on issues that they define as important (www.currencytax.org/glossary.php).

**Forest Law Enforcement, Governance and Trade (FLEGT)**

The EU’s way of addressing the growing problem of illegal logging and trade in assorted timber products. It also aims to strengthen international cooperation to address violations of forest law. Products covered are logs, sawn wood, veneer sheets, and plywood (Bendz 2005).

**Forest Law Enforcement, Governance and Trade (FLEGT) voluntary partnership scheme**

A plan of action through which the EU will tackle illegal logging. At its core it is a proposal to set up voluntary partnerships with timber-producing countries, under which the EU will provide development assistance to improve governance in producer countries’ forestry sectors (Bendz 2005).

**FLEGT Action Plan**

A plan adopted by the EU in 2003, setting up a range of measures to combat illegal logging (Bendz 2005).

**Forest policy**

The statement by the government of the objectives that are to be achieved through the management of the forest estate (Boccucci et al. 2003).

**Globalization**

Process (or set of processes) that embodies a transformation in the spatial organization of social relations and transactions, expressed in transcontinental or interregional flows and networks of activity, interaction, and power (Held and McGrew 1999).

**Illegally harvested wood**

Wood that has been harvested in violation of national laws including the acquisition of harvesting rights from the rightful owner, the harvesting methods used, and the payment of all relevant fees and royalties (FSC 2004).

**Illegal timber processing**

Operating without a processing license, or ignoring environmental, social, and labor laws and regulations (FAO 2001).

**Illegal timber supply of the market**

Supply with the following sources (Korotkov 2001):
– illegal logging conducted with authorizing documents inside the cutting areas (for example, excessive cutting);
– logging conducted without authorizing documents or using false authorizing documents outside the cutting areas (illegal cuttings).

**Illegal timber transport, trade, and timber smuggling**

Consists in (FAO 2001)
– transporting logs without authorization;
– transporting illegally harvested timber;
– smuggling timber;
– exporting and importing tree species banned from trade under international law, such as CITES;
– exporting and importing timber in contravention of national bans.

**Institutions**

The rules of the game in a society or, more formally, the constraints that shape human interaction. Institutions are not organizations, although they embrace them, but are best understood as a set of formal and informal rules that are administered by organizations (North 1990).

**International Tropical Timber Agreement**

A commodity agreement that was negotiated with a limited life span under the auspices of UNCTAD and came first into force in 1985. It established the International Tropical Timber Organization.

**Land tenure system**

System of laws and regulations governing land and resource ownership, access, and use rights (http://drylandsnetwork.undp.org/definitions.cfm).

**Legal timber**

– Timber is legal when the validity of its origin, logging permit, logging system and procedures, administration and transport documentation, processing, and trade or transfer are verified as meeting all applicable legal requirements (Indonesia-UK MOU Definition on Timber Legality).

– Timber that is harvested and exported in conformity with the exporting country’s national laws (Bendz 2005).

**Local governance**

Comprises a set of institutions, mechanisms, and processes through which citizens and their groups can articulate their interests and needs, mediate their differences, and exercise their rights and obligations at the local level.

**Money laundering**
The processing of proceeds of crime to disguise their illegal origins.

**Participation**

One or more processes in which an individual (or group) takes part in specific decision making and action, and over which she or he may exercise specific controls.

**Perverse incentives**

Policies often shaped by patronage and corruption that may achieve their primary objective but more important, result in unexpected and undesired outcomes that are both economically inefficient and environmentally destructive.

**Public policy**

The contents and choices made in specific fields or sectors as determined by dominant plans, goals, and actions that regulate important issues of public concern (Schmithüsen 2003).

**Smuggled timber**

Timber reaching the market without necessary documents or with false documents (Bolshakov 2004).

**Sustainability**

Anything that maintains the potential to fulfill, now and in the future, relevant ecological, economic, and social functions, at local, national, and global levels (Second Ministerial Conference on the Protection of Forests in Europe–Helsinki).

**Transfer pricing and other illegal accounting practices (abuse of)**

Consists in (FAO 2001)

- declaring lower values and volumes than those actually exported;
- declaring higher purchase prices than the prevailing market prices for inputs such as equipment or services from related companies;
- manipulating debt cash flows to transfer money to a subsidiary or parent company, for example, by inflating debt repayment to avoid taxes on profits;
- undergrading, undervaluing, undermeasuring, and misclassifying species exported or marketed locally.

**Voluntary partnership agreements**

Agreements that aim to reinforce the EU’s Partner Countries’ ability to control illegal timber production, and to offer a mechanism to exclude illegal timber from EU markets.
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