

CRS Report for Congress

Illegal Logging: Background and Issues

Updated June 9, 2008

Pervaze A. Sheikh
Specialist in Natural Resources Policy
Resources, Science, and Industry Division



Prepared for Members and
Committees of Congress

Illegal Logging: Background and Issues

Summary

Illegal logging is a pervasive problem throughout the world, affecting countries that produce, export, and import wood and wood products. Illegal logging is generally defined as the harvest, transport, purchase, or sale of timber in violation of national laws. In some timber-producing countries in the developing world, illegal logging represents over half of timber production and exports. The World Bank estimates that illegal logging costs governments approximately \$15 billion annually in lost royalties. Illegal logging may stimulate corruption, collusion, and other crimes within governments, and has been linked to the purchase of weapons in regional conflicts in Africa. Illegal logging, however, benefits perpetrators by reducing the cost of legal and regulatory compliance of timber harvesting, sometimes resulting in higher profits. Illegal logging in protected areas can lead to degraded forest ecosystems, loss of biodiversity, and indirectly to deforestation and the spread of agrarian activity in some developing countries.

Several relevant multilateral and international agreements address illegal logging and illegal timber trade. These range from voluntary agreements that, for example, allow consumer countries to exchange data with producing countries, to legally binding multilateral agreements that enable signatory governments to seize illegal products and exercise financial and criminal penalties on those who possess or transport illegally produced timber.

The United States is the world's largest wood products consumer and one of the top importers of tropical hardwoods. Some are concerned that U.S. demand for tropical timber from countries in Latin America and Southeast Asia may be a driver of illegal logging. Others assert that if there were no illegally logged wood in the global market, the value of U.S. exports of timber could increase substantially. The United States has no specific domestic laws that address all aspects of illegal logging. Logging within the United States is addressed by several laws and regulations — some federal, but many state — that depend on what species is logged, and where and how it is done.

In 2003, the United States developed an initiative to help developing countries stop illegal logging. This initiative aims to remove legal and institutional barriers to combating illegal logging; promote technology to improve monitoring the legal trade in logging; and create incentives to abolish illegal logging practices in rural communities. The United States also addressed illegal logging in a free trade agreement (FTA) with Peru. The agreement requires that the Peruvian government enforce its international treaty obligations and increase monitoring and enforcement of illegal logging in its country.

Illegal logging is addressed by Congress in the 2008 farm bill (P.L. 110-234). A provision in the law amends the Lacey Act to include plants traded in violation of foreign laws. This was primarily intended to deter imports of illegally obtained timber from foreign countries.

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Illegal Logging: Background and Issues

Illegal logging is a pervasive problem affecting countries that produce, export, and import wood and wood products. Some have estimated that between 2% and 4% of softwood lumber¹ and plywood traded globally, and as much as 23% to 30% of hardwood lumber and plywood traded globally, could be from illegal logging activities.² The World Bank estimates that illegal logging costs governments approximately \$15 billion annually in lost royalties.³ Illegal logging is a concern to many because of its economic implications as well as its environmental, social, and political impacts.⁴

Some are concerned that U.S. demand for tropical timber from countries in Latin America and Southeast Asia may be a driver of illegal logging. The United States is the world's largest wood products consumer and one of the top importers of tropical hardwoods. For example, the United States is the largest importer of Peruvian mahogany, which some estimate to be 80% illegally logged.⁵ Some others contend that illegal logging activities devalue U.S. exports of timber. According to one study, illegal logging of roundwood and its wood products depresses world wood prices on average by 7%-16% annually. If there were no illegally logged wood in the global market, it has been projected that the value of U.S. exports of roundwood, sawnwood, and panels could increase by an average of approximately \$460 million each year.⁶ (This estimate is provided by a U.S. industry trade association opposed to low-cost imports.)

¹ "Hardwoods" is a term commonly used for trees in the phylum Anthophyta (angiosperms, or flowering plants), because the dominant hardwood tree species of temperate climates (oaks and maples) are harder (more dense) than the major "softwood" species (pines, firs, and spruces), trees of the order Coniferales (conifers). However, some "hardwood" species (e.g., aspen and poplar) are much softer (less dense) than many "softwoods." In this report, "hardwood" is used to indicate angiosperms, while "softwood" (or conifer) is used for coniferous species.

² Seneca Creek Associates, LLC, and Wood Resources International, LLC, "*Illegal Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry*," prepared for American Forest & Paper Association (November 2004), 154 pp. Hereafter referred to as *Illegal Logging and Global Markets*.

³ World Bank, *A Revised Forest Strategy for the World Bank Group* (Washington, DC: October 31, 2002).

⁴ For example, logging illegally within designated park boundaries could lead to environmental impacts such as habitat alteration and loss of timber species; also the illegal acquisition of permits and evasion of royalties could promote corruption.

⁵ Natural Resources Defense Council, *Trade in Bigleaf Mahogany: The Need for Strict Implementation of CITES* (September 2006), available at [http://docs.nrdc.org/international/int_06090001A.pdf].

⁶ *Illegal Logging and Global Markets*.

Scope and Scale of Illegal Logging

No internationally accepted definition of illegal logging exists, and there is considerable debate over definitions that have been presented. For example, logging without a government-approved management plan may be legal in parts of the United States, but illegal in Brazil.⁷ Definitions of illegal logging can be specific or broad. Illegal logging can be broadly defined as “large scale, destructive forest harvesting that transgresses the laws of the nation where said harvesting occurs.”⁸ An example of a specific definition is provided by Conteras-Hermosilla,⁹ where 12 activities are defined as illegal logging, including the following:

- Logging protected species;
- Duplication of felling licenses;
- Girdling or ring-barking, to kill trees so that they can be legally logged;
- Contracting with local entrepreneurs to buy logs from protected areas;
- Logging in protected areas;
- Logging outside concession boundaries;
- Logging in prohibited areas such as steep slopes, riverbanks, and water catchments;
- Removing under/oversized trees from public forests;
- Extracting more timber than authorized;
- Reporting high volumes of timber extracted in forest concessions to mask the volume taken from areas outside concession boundaries;
- Logging without authorization; and
- Obtaining logging concessions through bribes.

Due to the often clandestine nature of illegal logging, the variability in defining illegal logging, and the difficulty of obtaining large-scale data on illegal logging practices in many countries, estimates on the extent of illegal logging are difficult to quantify. A variety of techniques are used to determine where illegal logging is most prevalent. Examples include government records, court cases, witness accounts, interviews, and satellite imagery. Using these data and other sources, some estimate that the three countries where illegal logging is greatest (in terms of volume in 2003) are Russia, Indonesia, and Brazil. Other estimates of illegal logging activities that are derived from a variety of measures are presented from a sample of countries in **Table 1**.

⁷ *Illegal Logging and Global Markets*.

⁸ M. R. Auer, D. Ingram, and C. Farley, *Towards an Improved Understanding of Illegal Logging and Associated Trade*, U.S. Forest Service, International Programs (Washington, DC, May 30, 2003).

⁹ A. Conteras-Hermosilla, *Forest Law Enforcement: An Overview*, World Bank Discussion Paper (Washington, DC: June 19, 2003).

Table 1. Estimates of Illegal Logging in Foreign Countries

Region/Country	Assessment	Source
Malaysia	One third or more of forest exports were illegal in the 1990s.	Dudley et al., 1995; <i>Illegal Logging and Global Markets</i> .
Cambodia	90% of the logging is estimated to be illegal.	Auer et al., 2003; <i>Illegal Logging and Global Markets</i> .
Laos, Cambodia, Thailand, and the Philippines	Almost all timber exports in the early 1990s were illegal. Others estimate that 40%-45% of logging is illegal.	Dudley et al., 1995; <i>Illegal Logging and Global Markets</i> .
Indonesia	95% of timber exports were obtained illegally in the early 1990s. In the mid-1990s, nearly 84% of timber concession holders failed to obey the law. Estimated 70%-80% of forest production and imports are illegal.	Dudley et. al., 1995; Environmental Investigation Agency, 2001; <i>Illegal Logging and Global Markets</i> .
Myanmar	Over half of the country's forest exports were undeclared (i.e., illegal).	World Resources Institute, 1998.
Papua New Guinea	Several reports of bribing and monetary losses due to illegal logging.	Glastra, 1999.
Philippines	16 million hectares of forest have been reduced to 70,000 today, mainly because of illegal logging.	Environmental Investigation Agency, 2001.
Bolivia	Illegal deforestation is at least 4 times as high and maybe up to 8 times as high as legal deforestation.	Contreras-Hermosilla, 1997.
Brazil	80% of the logging in the Brazilian Amazon is considered illegal. Others estimate that the percentage of illegal logging varies widely (i.e., 20%-90%), yet concur that illegal logging is most prevalent in the Brazilian Amazon.	Dudley et al., 1995; <i>Illegal Logging and Global Markets</i> .
Russia	About 20% of the logging in Russia violates the law. Russia has about 20%-50% illegal forest production and imports.	Greenpeace, 2000; <i>Illegal Logging and Global Markets</i> .
Tanzania	Approximately 500,000 hectares are harvested annually to illegal logging.	Glastra, 1999.
Cameroon	About a third of the timber processed for local markets is obtained illegally. Approximately 50% of logging is illegal.	Glastra, 1999; <i>Illegal Logging and Global Markets</i> .

Region/Country	Assessment	Source
Liberia	Approximately 80% of logging is illegal.	<i>Illegal Logging and Global Markets.</i>
Ghana	As much as a third of the timber harvested in the 1990s may have been illegal. Estimated 34%-60% of logging is illegal.	Auer et al., 2003; <i>Illegal Logging and Global Markets.</i>

Sources: A. Contreras-Hermosilla, "The Cut and Run Course of Corruption in the Forestry Sector," *Journal of Forestry*, v. 95 (1997); Environmental Investigation Agency, *Timber Trafficking* (Washington DC, Sept. 1, 2001); M. Auer et al., *Towards an Improved Understanding of Illegal Logging and Associated Trade*, U.S. Forest Service International Programs (Washington, DC, May 30, 2003); Dudley et al., *Bad Harvest? The Timber Trade and the Degradation of the World's Forests* (London: Earthscan, 1995); R. Glastra (ed.), *Cut and Run: Illegal Logging and Timber Trade in the Tropics* (Ottawa, Canada: International Development Research Center: 1999); Greenpeace, *Illegal Forest Felling Activities in Russia* (Amsterdam, 2000); World Resources Institute, *Logging Burma's Frontier Forests*, Global Forest Watch (Washington, DC, 1998); and *Illegal Logging and Global Markets.*

Note: Estimates of illegal logging and illegal imports are not based on a common definition of illegal logging and could vary considerably from the year data was reported.

Illegal logging exists in the United States but is primarily done by individuals or small operations. Some report that up to 10% of forest production in the U.S. is illegal.¹⁰ The U.S. Forest Service estimates that approximately one out of every 10 trees harvested in national forests is taken illegally. Private lumber companies estimate that nearly 3% of their cut trees are stolen, amounting to losses of approximately \$350 million annually.¹¹ Statistics for illegal logging on private lands are unavailable, yet are anecdotally quoted as a serious problem.¹²

Some countries allegedly contribute to illegal logging by importing illegally obtained wood products. For example, China is a major importer of timber from Gabon, Cameroon, Equatorial Guinea, and Mozambique, all of which export illegally harvested timber. Others contend that some of the illegal timber imported by China is manufactured into products that are re-exported to the United States.¹³ The European Union (EU) has also been accused of importing illegally logged wood; the World Wildlife Fund estimates that the EU is spending £3 billion a year on illegal wood, much of it coming from the Amazon Basin, the Baltic States, the Congo Basin, east Africa, Indonesia, and Russia.¹⁴

¹⁰ *Illegal Logging and Global Markets.*

¹¹ M. Mendoza, "Thieves Steal Hundreds of Millions of Dollars in Trees Yearly From American Forests," *San Francisco Chronicle*, May 17, 2003.

¹² *Ibid.*

¹³ Testimony of Mr. Allan Thorton, President of Environmental Information Agency, hearing on *China's Influence in Africa*, House International Affairs Subcommittee on Africa, Global Human Rights, and International Operations, 109th Cong., 1st sess. (July 28, 2005), H.Rept. 109-74.

¹⁴ World Wildlife Fund, *Failing the Forests: Europe's Illegal Timber Trade* (November (continued...))

Ecological Impacts of Illegal Logging

Several ecological impacts can be associated with illegal logging practices. These impacts depend on how illegal logging practices are defined and where they occur. If illegal logging is characterized as large-scale destructive logging, it can potentially lead to the conversion of forests to grassland, depletion of plant species (e.g., tree species such as mahogany), and in some cases depletion of animal populations that depend on the habitats being logged. If logging illegally occurs in protected areas, important biological resources (e.g., rare plant and animal species) may become threatened. If logging is not done according to mandated management plans, it can potentially lead to collateral damage, whereby other tree species and younger trees are damaged, risk of fire is increased, and potential for sustainable harvesting of timber is lowered.

In some instances in the tropics, logging has been characterized as the initial stimulus for road-building, which leads to greater access to primary forests. If illegal logging occurs in protected areas, improved access to these areas through logging roads may lead to further activities such as clear-cutting, ranching, and agricultural development in the area.

Socioeconomic Impacts of Illegal Logging

Illegal logging can have economic impacts in the countries where it occurs. In several countries where illegal logging takes place, the volume of timber extracted illegally is greater than the official harvested total. Further, illegal logging and trade are connected to other illegal activities such as corruption, tax evasion, and money laundering, among other things.¹⁵ If illegal logging is prevalent in a country, there may be a low propensity to invest. For example, illegal logging may signal that law enforcement is lax and that corruption is prevalent. These factors may deter long-term investment in these countries and may increase costs for investors already involved in the country. One definition of illegal logging is extracting timber without reporting it to government officials. Without reporting, governments cannot assess taxes on the wood being extracted, which results in a loss of revenue for the country. For example, Indonesia estimated that its losses from illegal logging are \$3 billion annually, which is equivalent to more than 45% of the total value of its legitimate exports of wood and wood products, valued at \$6.5 billion annually.¹⁶

Illegal logging can arguably have a positive economic impact. Illegal logging can create jobs in impoverished areas, provide short-term low-cost timber, and satisfy excessive timber demands from within the country and importing countries. If local

¹⁴ (...continued)
2005), 97 pp.

¹⁵ Food and Agriculture Organization, International Tropical Timber Organization, *Best Practices for Improving Law Compliance in the Forestry Sector* (Forestry Paper 145, Rome, Italy: 2005), 113 pp.

¹⁶ “Down in the Woods,” *The Economist* (May 23, 2006).

governments and citizens perceive that illegal logging is beneficial to the community, some will not seek the enforcement of laws or will attempt to legalize illegal timber to preserve revenues.¹⁷

Illegal logging can affect local communities in the countries where it is occurring. Local communities may depend on forests for non-timber forest products (e.g., fruits and medicines) as well as for habitat and cover for wild game and fish. Illegal logging in these areas may convert forest ecosystems to less useful ecosystems such as grasslands or savannahs. In some parts of the world, illegal logging has been termed “conflict logging,” similar in meaning to conflict diamonds. For example, money earned from the illegal trade in wood has been traced to the purchase of weapons used in conflicts such as the one between Liberia and Sierra Leone.¹⁸

International Initiatives and Institutions

Several relevant multilateral and international agreements relate to illegal logging and illegal timber trade. These range from voluntary agreements that, for example, allow consumer countries to exchange data with producing countries, to legally binding multilateral agreements that enable signatory governments to seize illegal products and exercise financial penalties on illegally produced timber. This section reviews some of the agreements that have been implemented and some international institutions involved in addressing illegal logging.¹⁹

Wood Certification Programs

Two primary wood certification programs affect wood consumed in the United States.²⁰ The Forest Stewardship Council (FSC) is an independent, international nongovernmental organization that certifies that wood comes from well-managed forests that meet an established set of criteria. One key criterion is that the “chain of custody” information is provided. This information strives to contain the names and locations of each handler of the wood from the forest it came from to the shop where the product is being sold. Approximately 220 million acres are certified under the FSC program worldwide. (Approximately 110 million acres are in North America.) A second certification program is offered by the Sustainable Forest Initiative (SFI), which was created by the American Forest and Paper Association (AF&PA) and is

¹⁷ L. Tacconi et al., *Learning Lessons to Promote Forest Certification and Control Illegal Logging in Indonesia* (Center for International Forestry Research, Jakarta, Indonesia: 2004), 82 pp.

¹⁸ H. LaFranchi, “With Mahogany, Bush Goes a Shade Greener,” *The Christian Science Monitor*, November 21, 2002, p. 2.

¹⁹ For more information, see out-of-print CRS Report RL30544, *Selected International Forest Agreements and Programs*, by Carol Hardy-Vincent and Susan R. Fletcher, available from the author.

²⁰ Forest certification is the process by which the performance of on-the-ground forestry operations is assessed against a predetermined set of standards.

now independent.²¹ SFI also contains a set of guidelines and principles that must be followed to earn its certification. SFI certification is done for North American forests and does not have a “chain of custody” requirement. Approximately 107.8 million acres are certified under this program in North America. Other certification programs exist in Canada, the EU, and elsewhere. For reference, there are nearly 10 billion acres of forested land on the Earth.²²

Some contend that certification programs, if managed and monitored consistently, could reduce illegal logging. Most certified forests are in Europe and North America; only 8% of the total certified area is in developing countries (2% in Asia and the Pacific, 3% in Latin America, and 3% in Africa).²³ Others, however, argue that obtaining certification in developing countries is prohibitively expensive for most logging operations. Costs for managing forests to maintain certification, disorganized bureaucracy, and lax rules make certification in developing countries difficult.²⁴ Some argue that certification is not worth it, because the demand for certified tropical wood is not consistent from year to year and the cost to obtain certification makes wood less competitive on the market. To increase the demand for certified wood and to stimulate interest in certification, some have suggested that importing countries require certified wood for government projects. Five countries in the European Union, including Great Britain, have implemented or are trying to implement policies that would require state-financed construction projects to use certified wood.

United Nations

The United Nations Forum on Forests is an intergovernmental forum that promotes the sustainable development, management, and conservation of forests. It aims to provide a multi-year program of work to develop policies regarding forests with the goal of developing a legal framework on all types of forests.

International Tropical Timber Organization (ITTO)

The ITTO promotes sustainable forest management, including forest enforcement, among its member countries, which include the United States. The ITTO was established under the International Tropical Timber Agreement, which expired in December 2006. A successor agreement is currently being negotiated. The ITTO provides a framework for collecting data on the trade of illegal timber and investigates import and export data that represent illegal trade.

²¹ AF&PA represents wood and paper product producers in the United States.

²² Food and Agriculture Organization of the United Nations, *Global Forest Resources Assessment, 2005*, available at [<http://www.fao.org/forestry/foris/data/fra2005/kf/common/GlobalForestA4-ENsmall.pdf>]

²³ C. Fischer et al., *Forest Certification Standards: Toward a Common Standard* (Resources for the Future Discussion Paper, Washington, DC: April 2005), 28 pp.

²⁴ Ibid.

World Bank

The World Bank is the largest of several regional and international development banks that lend money to developing countries for projects identified by the host country. The World Bank has taken steps to assess projects for their environmental consequences, including the potential for illegal logging. In a revised Forest Strategy, the World Bank has proposed to address illegal logging through sustainable forest management and certification. In collaboration with the World Wildlife Fund, the World Bank is establishing a program for certifying sustainably managed forests. Under this program, logging operations must show *progress toward* sustainability to achieve their certification, as opposed to having already met all of the certification requirements.

G8 Illegal Logging Dialog

This initiative is convening legislators from the G8 (Canada, France, Germany, Italy, Japan, Russia, United Kingdom, and United States), China, India, and other timber-producing nations with industry representatives and other stakeholders to develop a plan for addressing illegal logging. The dialog began in 2006 will run until the end of the G8 meeting in 2008.

U.S. Laws That Address Illegal Logging

The United States has no specific laws that address all aspects of illegal logging. Logging within the United States is addressed by several laws and regulations — some federal, but many state — that depend on what species is logged, and where and how it is done. Logging can be restricted or banned if it affects species listed under the Endangered Species Act (ESA; 16 U.S.C. §§1531-1543). ESA also regulates the import of foreign species if they are listed as threatened or endangered under the act.

ESA authorizes the participation of the United States in the Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES). CITES was established to protect plants and animals from unregulated international trade.²⁵ Under the treaty, countries make a commitment that any trade in protected plant and animal species will be sustainable, and that there is a process to ensure that wildlife trade is consistent with the treaty. U.S. imports of wood and wood products from tree species listed on CITES are regulated according to their status under the treaty. Currently, 15 tree species are listed as trade-restricted under CITES. Regulating timber species listed under CITES has been controversial. For example, big leaf mahogany and ramin are listed in Appendix II of CITES, which regulates trade through export permits. Several allegations contend that mahogany and ramin have been imported in the United States without proper CITES permits and authorizations.

²⁵ For more information on CITES, see CRS Report RL32751, *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Background and Issues*, by Pervaze A. Sheikh and M. Lynne Corn.

The Tropical Forest Conservation Act (P.L. 105-24; 22 U.S.C. §§2431 et seq.) indirectly addresses illegal logging by authorizing debt-for-nature transactions with developing countries that provide funds for conserving tropical forests.²⁶ Eligible activities under this act include establishing, maintaining, and restoring parks, protected reserves, and natural areas, and training programs to increase the capacity of personnel to manage parks, among other things. Several countries have used funds generated from transactions authorized under this act to monitor logging activities and train enforcement personnel to address illegal logging activities in protected areas. Expenditures to address illegal logging are also provided in programs authorized by the Foreign Assistance Act (P.L. 87-195; 22 U.S.C. §§2151p-1). A portion of funds given to countries is used for activities to prevent illegal logging and enforce illegal logging laws. Some activities funded under this act are a part of the Administration’s initiative against illegal logging. (See “Foreign Policy on Illegal Logging” section, below.)

Some argue that the United States should enact legislation prohibiting the import of illegally logged wood and wood products, and amend the Lacey Act (16 U.S.C. §§3371-3378) to include foreign plant species. The Lacey Act includes enforcement mechanisms for the illegal trade of wildlife within the United States. Specifically, the Lacey Act makes it illegal to engage in the trade of fish, wildlife, or plants taken in violation of any U.S. or Indian tribal law, treaty, or regulation, as well as the trade of any of wildlife acquired through violations of foreign law or treaties (including CITES).²⁷ The Lacey Act does not address plants that are traded in violation of any foreign law or treaties. A plant is not covered under the Lacey Act unless it is indigenous to a state.

Amending the Lacey Act to include plants traded in violation of foreign laws would establish legal structures to prosecute parties who import and trade wood found in violation of other countries’ forest laws. The 2008 farm bill (P.L. 110-234) amends the Lacey Act to include plants harvested or taken illegally in areas outside the United States.²⁸ This law applies to illegally harvested timber species imported into the United States.

Foreign Policy on Illegal Logging

In 2003, the United States developed an initiative to help developing countries stop illegal logging. This initiative adopted several approaches to address illegal logging: addressing legal and institutional barriers that prevent on-the-ground law enforcement of illegal logging;²⁹ using technology to monitor logging; encouraging

²⁶ See CRS Report RL31286, *Debt-for-Nature Initiatives and the Tropical Forest Conservation Act: Status and Implementation*, by Pervaze Sheikh.

²⁷ Section 4(b) of the ESA.

²⁸ See §8204 of the 2008 Farm Bill (H.R. 2419). For more information on the 2008 Farm Bill, see CRS Report RS22131, *What is the “Farm Bill?”*, by Renee Johnson.

²⁹ On-the-ground enforcement is enforcing laws that pertain to illegal logging in timber-
(continued...)

good business practices, legal trade, and transparency in logging; and creating incentives to promote local communities to abolish illegal logging practices.³⁰ The initiative focuses on five regions: the Congo Basin, the Amazon Basin, Central America, South Asia, and Southeast Asia. The initiative states that it will provide \$15 million to address illegal logging. In the Congo Basin, the U.S. government has developed the Congo Basin Forest Partnership. This partnership is aimed at improving forest management and governance to reduce forest degradation and reduce illegal logging in the region.³¹

Earlier sanctions of illegal logging activities by the United States were directed to single countries (e.g., Cambodia, Burma, and Indonesia). Report language of some congressional appropriation acts have included provisions that indicate the intent of Congress to provide funds to stop illegal logging.³²

Free Trade Agreements

Bilateral free trade agreements between the United States and other nations have sometimes been criticized for deficient environmental rules that may have implications for illegal logging. For example, some argued that a free trade agreement (FTA) with Singapore increased U.S. imports of illegally obtained timber from Singapore. Singapore acquires wood from countries such as Indonesia and Malaysia, which allegedly harvest large portions of their timber illegally, and re-exports it to the United States. The United States addressed illegal logging during negotiations with Indonesia on a pending FTA. In 2006, the United States and Indonesia signed a memorandum of understanding (MOU) to enhance bilateral efforts to combat illegal logging and associated trade. The United States committed \$1 million with this agreement to fund projects that would reduce illegal logging in Indonesia, such as using remote sensing to identify illegally logged tracts of land. The MOU also sets up a working group to assist in implementing the initiative under a pending U.S.-Indonesia Trade and Investment Framework Agreement.³³

Similarly, some contend that an FTA with Peru could lead to an increase in exports of illegal logged timber to the United States from Peru. The primary species

²⁹ (...continued)
producing areas.

³⁰ M. Auer et al., *Towards an Improved Understanding of Illegal Logging and Associated Trade*, U.S. Forest Service, International Programs (Washington, DC: May 30, 2003).

³¹ The Congo Basin Forest Partnership was authorized under P.L. 108-200 and has received an average of \$15.7 million annually from FY2004 to FY2006.

³² For example, conference managers of the FY2003 omnibus appropriations bill (P.L. 108-7) expected a portion of funds appropriated to the U.S. Agency for International Development (USAID) for protecting biodiversity to be used to support projects that deter illegal logging in Indonesia, Central Africa, and elsewhere (§554 of H.Rept. 108-10).

³³ *Memorandum of Understanding Between the Government of the United States and the Republic of Indonesia on Combating Illegal Logging and Associated Trade*, November 16, 2006, at [http://ustr.gov/assets/World_Regions/Southeast_Asia_Pacific/asset_upload_file_619_9974.pdf].

of concern is Peruvian big leaf mahogany (*Swietenia macrophylla*). The United States is the predominant importer of Peruvian mahogany. Big leaf mahogany is currently listed under CITES as an Appendix II species. To meet CITES requirements for this species, the United States (and CITES) requires an export permit from Peru validating that mahogany entering the United States was harvested in a sustainable manner that is not detrimental to the species.

Some contend that Peruvian mahogany is being harvested illegally and at rates detrimental to the species and to the Amazon rainforest in Peru. Further, they contend that export permits provided by Peru, as required by CITES, have been granted without sufficient monitoring and assessment of harvesting practices.³⁴ The U.S.-Peru TPA is expected to increase protections for foreign investors engaging in business in Peru, which may lead to a larger timber industry in Peru and greater mahogany harvesting. The TPA would not alter the requirement for export and permits under CITES.

These concerns may be tempered by potential positive consequences of the TPA on the illegal logging of mahogany. The TPA between Peru and the United States is expected to increase awareness of illegal logging in Peru and adds additional mechanisms that may be used to address illegal logging in Peru. The TPA requires each country to effectively enforce its own environmental laws in a manner affecting trade between the parties and establish a policy mechanism to address public complaints that a party is not effectively enforcing its environmental laws whether or not the failure is trade-related.³⁵ Complaints could be filed by individuals and firms of each party to the agreement and would be addressed according to a set of procedures outlined in the TPA.³⁶ A separate dispute settlement mechanism is also available for trade-related complaints by one TPA party against another. Further, the TPA stipulates that nothing in its investment chapter would prevent a party from adopting, maintaining, or enforcing any measures that would ensure that investment activity is conducted in a manner sensitive to the environment.³⁷

Ongoing negotiations for TPA with Columbia do not include specific provisions related to illegal logging. However, provisions establishing an environmental committee to address complaints and requirements for enforcing multilateral environmental treaties (e.g., CITES) and domestic laws are included.

Many contend that illegal logging may indirectly contribute towards climate change because it is a driver of deforestation in the tropics. Deforestation is responsible for the largest share of CO₂ released to the atmosphere from land use changes and results in approximately 20% of anthropogenic greenhouse gas

³⁴ Natural Resources Defense Council, *The Trade in Bigleaf Mahogany: The Need for the Strict Implementation for CITES*, at [http://docs.nrdc.org/international/int_06090001A.pdf].

³⁵ United States-Peru Trade Promotion Agreement, Chapter 18, Environment, at [http://www.ustr.gov/Trade_Agreements/Bilateral/Peru_TPA/Final_Texts/Section_Index.html].

³⁶ *Ibid.*

³⁷ United States-Peru Trade Promotion Agreement, Chapter 10, Investment, at [http://www.ustr.gov/Trade_Agreements/Bilateral/Peru_TPA/Final_Texts/Section_Index.html].

emissions.³⁸ Much of the deforestation responsible for CO₂ releases occurs in tropical regions, which are substantially located in developing countries such as Brazil, Indonesia, and the Democratic Republic of the Congo. Climate change mitigation programs that address deforestation might consider targeting illegal logging activities to effectively implement forest conservation plans in tropical areas.

³⁸ Intergovernmental Panel on Climate Change, “Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,” *Climate Change 2007: the Physical Science Basis* (2007), at [<http://ipcc-wg1.ucar.edu/wg1/wg1-report.html>]. (Hereafter referred to as 2007 IPCC WG-I Report.)