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Illegal Logging: A Market-Based Analysis of Trafficking in Illegal Timber

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Executive Summary

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Executive Summary

Over the past several decades, illegally sourced timber has contributed to a growing roster of problems that affect both producing and consuming countries alike. Within the United States, the effect of timber trafficking on the national economy, and its potential effect on American foreign policy, has raised serious concern – so much so that in 2002, President George W. Bush announced his Initiative Against Illegal Logging in an attempt to discern and curtail the causes, methods, and parties involved in illegal activities.

In 2005, the National Institute of Justice and Department of State, under the auspices of the President’s Council on Environmental Quality, commissioned a literature review by Abt Associates to answer two principal questions:

- Who commits the crimes of illegal timbering?
- How do they commit these crimes?

Project staff reviewed published and unpublished literature that identified original source material and the citations in those sources. Because sources often disagreed about the causes, consequences, and solutions to the problem, Abt Associates staff were selective in reporting from source literature that included academic papers, news accounts, and some material that was clearly advocacy. An early draft of this paper was reviewed by five external foreign experts (selected by the National Institute of Justice and the Department of State, in concert with Abt Associates), and by two anonymous reviewers (selected by NIJ). This final draft benefits from their thoughtful comments.

The literature review revealed that the causes, methods, and perpetrators of illegal timbering differ depending on the economies, societies, ecologies, and legal institutions where logging occurs. To provide a way to simplify and organize this diversity, this report develops a market-based description of present-day trade in illegal timber, focusing on the economic and political structures that create the environment and provide the incentives that make illegal logging possible and profitable. Four dominant patterns of economic and political structures (see Table 1 in the report) characterize illegal logging across nations and over time:

- Enforcement / Rule of Law
- Enforcement / No Rule of Law
- Some Enforcement / No Rule of Law
- No Enforcement / No Rule of Law

This market-based description does not explain everything about the crime, but it nevertheless provides a useful device for organizing the literature and presenting a coherent story about the logging, milling and trafficking of illegal timber.

Developing original estimates of the extent of illegal logging was beyond the scope of this study, but the Abt Associates team reviewed extant estimates, concluding that Seneca Creek Associates (2004) has provided credible estimates for gauging the scope of the problem. Seneca Creek Associates estimated that the total wood products trade in 2002 was \$186 billion – \$69 billion in wood products and \$117

billion in pulp, paper and paperboard trade.¹ Of that trade, Seneca Creek estimated that about 6 percent of the timber trade and 17 percent of the plywood trade was likely illegal. Most illegal timbering is concentrated in a few countries or regions.² However, because legally and illegally harvested timber is mostly indistinguishable in international commerce, few laws attempt to prohibit the importation of timber (except for certain specialty woods) that was illegally harvested.³ With some exceptions, then, timber and wood products are “legal” once they enter into international commerce, regardless of their legality at the source. This paper therefore says little about the international transshipment of timber, nor about the importation of timber into consuming nations.

Illegal logging is minimal in nations where the rule of law operates in concert with a strong and transparent national enforcement mechanism. The United States and Canada provide two illustrations of the *Enforcement / Rule of Law* model. Although illegal timbering happens in North America, it occurs at levels that contrast sharply with crime in other areas of the world. Of course, this does not mean that the U.S. and Canada (as well as the European Union) prevent the importation of timber harvested illegally.

In contrast, illegal timbering is significant in nations where the rule of law is inoperable, but there exists a strong national enforcement mechanism, which has the power and will to facilitate corruption on a grand scale. We call this the *Enforcement / No Rule of Law* model. Indonesia under the Suharto regime and both Cambodia and the Solomon Islands provide illustrations. The criminals in these nations are powerful politicians who have turned the state machinery to their direct advantage or to the advantage of their families and political associates. Although large companies may be complicit, the corrupt regime principally requires efficient businessmen who can log, mill and (as necessary) export efficiently to maximize profits diverted to corrupt leaders of state.

Illegal timbering is also significant in nations where the rule of law is inoperable (with respect to forestry) and there exists appreciable local enforcement but limited national enforcement – the *Some Enforcement / No Rule of Law* model. Brazil, Mozambique, Indonesia (post-Suharto), and the Eastern European nations of the former Soviet Union provide illustrations. Absent strong national enforcement, the enforcement of forestry laws has devolved on local units of government, where petty corruption has replaced grand corruption. The criminals are lower-level government officials who facilitate corruption, and typically local loggers, millers, and transporters who are willing to pay bribes as a cost of doing business. As implied by the estimates from Seneca Creek, illegal practices are widespread in the countries providing illustrations.

A variation on this theme results from a particular failure of the rule of law system, namely, failure to clearly define property rights. In both Brazil and Mozambique, loggers legitimately invested in logging equipment to later face unanticipated restrictions on their logging activities. Previously legitimate local businessmen, faced with financial ruin because of apparently capricious (from the perspective of loggers) changes in property rights, turned to bribery and other methods of avoiding regulations. This essay also places both Malaysia and Singapore into this third model, although for these two nations the issue is

¹ Seneca Creek Associates (2004), p. 6.

² Ibid, p. 2.

³ Tacconi, Obidzinski, & Agung (2004). European League Tables of Imports of Illegal Tropical Timber: Briefing. Friends of the Earth (2001).

trafficking rather than logging. Local Malaysian businessmen have found ways (apparently with the cooperation of the Malaysian government) to facilitate trafficking in logs that are illegally harvested in Indonesia. Singapore businessmen play a similar role, serving as a conduit between timber illegally harvested in Indonesia and importing nations. The Environmental Investigation Agency, for example, reports that the small island of Singapore has 181 timber importers and exporters.⁴ Laundering activities similar to those performed by Malaysia and Singapore are unnecessary for many source nations because public corruption or ineffective export enforcement negate any need to mask the illegal origin of exported timber.

The *No Enforcement/No Rule of Law* model differs from the three previous models described. Illegal timbering is appreciable in nations where the rule of law is inoperable and there exists neither local nor national enforcement. This scenario creates an environment that simulates an unfettered marketplace, although production may be limited by the absence of effective infrastructure for harvesting forests. The Democratic Republic of the Congo, Cameroon, Benin and other West African nations provide illustrations. Bandits account for some of the illegal timbering, but probably not much because timbering is a low profit operation compared with poaching and mineral exploitation. Furthermore, lumbering is capital intensive, so harvesting requires that a timber-rich area either have invested in an infrastructure, or that the harvesters bring sufficient capital to cut and transport timber. This probably explains observations by the Forest Monitor (2001) that European companies are active loggers in West African nations, and perhaps explains why China-based and Malay-based companies have reportedly entered into these markets.⁵ Comparatively small-scale (but not immaterial) bribes to national and local officials are a cost of doing business.

The purpose of this essay is to identify who participates in the lumbering, milling, and trafficking of illegal timber and how they commit their crimes. It does not name individuals, of course, but rather it reports on the type of offenders who have either facilitated or conducted illegal activities. In so doing, it reports systematic variations in the structure of illegal activity across producer nations. Depending on the setting, it identifies government complicity ranging from grand corruption to petty corruption to apparent indifference or an inability to regulate the nation's timber trade. It sometimes identifies conspiracies that resemble white collar and organized crime, but it also notes that in many settings loggers, millers, and transporters may be otherwise honest businessmen who are obliged to operate outside the law to deal with ill-defined property rights and ambiguous or contradictory laws and enforcement. It would be a stretch to conclude that illegal timbering occurs solely because incorrigible thieves are stealing the world's forestry inheritance.

Indeed, while not absolving loggers, millers, and transporters of fault – or excusing any practices that harm the economies and ecologies of producer nations – some see the centrality of consumer nations as “massive drivers of the problem.” And, if that is true, then the solution to reducing illegal logging may ultimately rest on future means of distinguishing between legally and illegally harvested timber. An appendix to this paper reports a separate review, also commissioned by NIJ and the Department of State, of technologies for combating illegal logging. The review examines what technologies are available (or

⁴ Timber Trafficking: Illegal Logging in Indonesia, South East Asia and International Consumption of Illegally Sourced Timber. Environmental Investigation Agency and Telapak Indonesia (2001).

⁵ Sold Down the River. The need to control transnational forestry corporations: a European case study (March 2001).

potentially available) for identifying illegal products, for monitoring illegal locations, and for discovering illegal practices (legal, false, and absent documentation).

This essay is a literature review. Its authors have been careful to validate information, sometimes by checking with multiple written sources, sometimes by conferring with on-the-ground experts. Not all sources and experts agree; multiple sources are not always available; and much of the literature is polemic. The authors hope that, when sifting through a large amount of information, they have been sufficiently selective to provide a credible explanation of logging, milling, and transporting while relying on a minimum of erroneous reports. The authors are mindful that many topics important to those who care about preserving the world's forests and the biodiversity they sustain fall outside the mandate for this literature review. They are mindful, also, that the advantages of using a market-based model to frame the literature review comes at a potential cost of marginalizing some topics that might otherwise be of interest. These limitations notwithstanding, this essay ties together a diffuse literature into a structure providing useful insights into the logging, milling, and transportation of timber in contravention of national and sometime international laws.