

# DECENTRALIZATIONS EFFECT TO INDONESIA FOREST Illegal Logging Practice

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## Abstrak

Desentralisasi yang dilaksanakan di Indonesia sejak tahun 1998 menyebabkan kenaikan angka illegal logging pada hutan Indonesia. Illegal logging tidak hanya menyebabkan kerugian pada lingkungan tapi juga pada kegiatan ekonomi. Indonesia sebagai negara dengan hutan terbesar ketiga di dunia, sebagian besar pendapatan penduduknya bertopang pada hasil hutan kayu dan non-kayu. Kegiatan illegal logging akan memberikan kerugian ekonomi pada pemerintah dan juga masyarakat sekitarnya. Illegal logging di era desentralisasi salah satu penyebabnya adalah peraturan yang tumpang tindih. Peraturan menyebabkan meningkatnya biaya produksi terutama biaya tetap.

*Kata kunci: illegal logging, desentralisasi, peraturan pemerintah*

## INTRODUCTION

Decentralisation is a transferring considerable degree of administrative and regulatory authority from the national government to the country's province and district government. This process has been occurred in Indonesia since 1998. Decentralisation has been driven by the demands of provincial and district government who has rich jurisdiction. They are complained that the vast majority of the benefits go to the national government and to private sector. The legislation of the transferring are the law 22 on regional governance, law 25 on fiscal balancing, and the specific decentralisation, law 41 of 1999 about Indonesia's basic forestry law.

The manner in which decentralization affects forest management, community livelihoods, and economic development is a particular significance in Indonesia due to the scale and importance of the country's forest resources. Indonesia has the world's third largest tract of tropical forest, after Brazil and Congo. In 1997, the country's total forest cover was officially estimated by 100 millions hectares (the state of forest Indonesia). About 20 million Indonesian people, their live depends to the forest and the non-timber forest product. Timber gives very big revenue for the state. People used the timber for the paper industry. As the data provide by the

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State of Indonesian Forest tells that about in 1997 about 3,9 % of the GDP is from the timber, or almost a half from the value of oil and gas export, and equal to 10 % export earning.

Over the century ago Indonesia forest cover by 170 million hectares, today 98 million ha. It means that almost a half of Indonesian forest being degraded. Indonesia lost its 17 % forest by 1985 - 1997 with average 1 million ha per year. Over that time is a Soeharto`s regime. Much of the policies at that time give permission to exploit the large size of the forest. Most of the timber company belongs to the Soeharto families and his cronies. FAO study found there has been a marked increase in the extent and rate of Indonesia forest cover. At 1990, FAO study found that Indonesia forest cover has been reduced from 74% until 56% in the space years 30–40 years. It is conclude that the lost of Indonesia forest cover is because of the growth of timber industry. Another source provides the data that shown the linkages between the lost of Indonesia forest cover with the growth of population density.

Before the country`s entered the decentralization process, in late 1998, Indonesia`s forestry sector had entered a period of crisis. From the mid 1980, deforestation estimated by 1.6 million hectares per year. As we mentioned above that deforestation driving by the overcapacity in the nation`s wood processing industries. At the mid 1990s, Indonesia sawn wood, plywood, and pulp industries are estimated to have consumed 60-80 million cubic meters of wood per year. With few effective legal structures in Indonesia`s forestry sector, domestic demand for timber has resulted in large volumes of wood domestic demand for timber has resulted in large volumes of wood being harvested from illegal sources.

Illegal logging can be defined as the harvesting of logs in contravention of laws and regulations. These laws and regulations were designed to prevent the over exploitation of forest resources and to promote sustainable forest management. In accordance to this definition, illegal may include logging activities in protected area, the logging of protected species, logging outside concession boundaries, extraction of more than allowable harvest, removal of oversized or undersized trees, and harvesting in areas where extraction is prohibited such as catchments areas, step slopes and river banks. In the current era of economic and political change in Indonesia, illegal logging may also refer to an array of extractive activities that have some degrees of legal recognition, primarily as small-scale concession allowable under the current decentralization laws, or as logging practice legitimize through district regulations. In accordance to the last

definition, some logging activities may be considered to be “illegal” by the central government, but “legal” according to some district governments. The distinction between “illegal” and “legal” is therefore blurred making it extremely difficult to define either activity.

**Table 1. Forest Area and Deforestation, 1985-1997 (GFW Estimates)**

Island	1985			1997			Forest as % Land Area	Forest Change 1985-1997 (Ha)	Forest Change (%)
	Land (Ha)	Area	Forest cover	Forest as % Land area	Land Area (Ha)	Forest Cover (Ha)			
Sumatera	47,581,650		22,938,825	48	47,574,550	16,430,300	35	-6,508,525	-28
Java	13,319,975		1,274,600	10	13,315,550	1,869,645	14	595,075	47
Bali	563,750		96,450	17	563,150	76,700	14	-19,750	-20
Nusa Tenggara	6,645,625		686,775	10	6,639,925	450,450	7	-236,325	-34
East Timor	1,498,500		374,400	25	1,497,525	9,850	1	-364,550	-97
Kalimantan	53,721,675		39,644,025	74	53,721,225	29,637,475	55	-10,006,550	-25
Sulawesi	18,757,575		11,192,725	60	18,753,025	7,950,900	42	-3,242,050	-29
Maluku	7,848,175		5,790,800	74	7,846,600	5,820,975	74	30,175	1
Irian jaya	41,405,500		35,192,725	85	41,403,850	33,382,475	81	-1,810,250	-5
<b>Total</b>	<b>191,342,425</b>		<b>117,191,325</b>	<b>61</b>	<b>191,315,400</b>	<b>95,628,770</b>	<b>50</b>	<b>-21,562,750</b>	<b>-18</b>

*Source: The State of the Forest; Indonesia, 2002*

The state of the Forests: Indonesia, noted that illegal logging as an emotive term that requires some definition. It uses the terms of forestry practices or activities connected with wood harvesting, processing, and trade that do not conform to Indonesian law. There are essentially two kinds of illegal logging. The first is carried out by legitimate operators who violate the terms of their licenses. The second involves outright timber theft, whereby trees are felled by people who have no legal right to cut trees at all.

Data collection and analysis by the Natural Resource Management (NRM) Program of USAID focused on the wood intake and production of Indonesia’s sawmills and plywood plants. One conclusion was that any discussion of industry overcapacity and the link to illegal logging must recognize that “illegal logging” can take many forms beyond the illegal removal of trees from the forest. Examples can be found in the forest concession (HPH) system and the industrial plantation (HTI) system.

## **THE CONSEQUENCES OF ILLEGAL LOGGING TO THE ECONOMIC**

Decentralization and regional autonomy allowed district government to take benefit from natural resources, especially forest. For that need, the district government has to make their own rules to regulate the system of forest exploitation. But the problems in doing this is the capability of the institution still low. The officer has low education level that needs some roles from central government to increase their capacity building.

There is some approach which district government attempt to increase their revenue is by generating a new investment. In Kalimantan, district government generating new investment by giving some concession to the log firm. This concession we called with IPPK (Timber extraction and Utilization Permits), which the logging company has to pay some taxes to the district government. But the problem rose by doing this project is many logging company do their activities not in line with the area agreed at the concession. This practice caused the overexploitation to the forest. The data shows, at the era where the concession gives by the district government to the logging company, the area of forest cover increase. The failure on this program emerges due to the weaknesses of district institution to manage the forest. They supposed to take some monitoring activity to control the program performance.

According to the article wrote by William D. Sunderlin and Ida Aju Pradnja Resosudarmo, some concessionaries fail to manage their site appropriately, and have no view to long term investment, due to:

1. The method of the concession allocation gives too much land to concessionaries. Certain concessionaries thus have low incentives to prevent encroachment by small-holders, or are unable to stop such encroachments. The timber royalty fees in Indonesia are based largely on the volume of extraction rather than on the area of concessions, thus abetting the tendency to have overly large concession areas.
2. Certain policies encourage rent-seeking behaviour and thus undermine incentives for long-term management. The rate of royalty payment to the government is low, meaning that concessionaries are able to capture a large share of the potential rent of concession. William noted that based to Thiele, "high potential excess profits encourage 'rent seeking' activities in acquiring concession and open the way for corruption so that the enforcement of concession agreement is endangered.

3. There is insufficient support for provincial level protection of forests. Provincial-level governments receive a low share of royalty fees collected by the national government which, as explained above, are already quite low. The World Bank explains that “governments in provinces with extensive forest cover may be encouraged to replace forest with other forms of land use more able to generate revenue at the provincial, or at least provide more income opportunities to communities living near the forests whose income might otherwise become a burden on provincial resources”.

Illegal logging gives a very big impact to the economics, for example in Kota Waringin Timur and district of Bureau in Kalimantan. New initiatives arising since the fall of Suharto and an attempt to decentralize power to the district governments, have allowed district government to take benefit from the informal timber sector. This is most obvious in this district where the local government generated a considerable amount of revenue by taxing “illegal” carriers of timber. In the three months of April, May, June 2000, the regent was able to generate approximately US\$2,5 million by taxing illegal carriers of timber coming out of Kotawaringin Timur. In Berau, the district government has been able to generate a comparatively small amount of US\$444,000 from IPPK concession holders due to the fact that the imposed tax rate was far lower than the rate imposed in Kotawaringin Timur. But while less income was generated, the US\$444,000 accounted for 50% of Bureau’s gross domestic product (PAD), generated within the district in the year 2000. Small concessions holders have also been able to generate a great deal of informal income through the initial IPPK application process (US\$125,000) and from issuing SKSHH letters to sawmill (US\$55,000).

But while both district governments are undoubtedly benefiting from the legalization of “illegal” logging, the current rate of exploitation is far from sustainable. This means that these local governments will only be able to pay benefit financially from timber exploitation, both “illegal” and “legal”, for the next five to ten years. They will then have to find other ways to generate district income. In both of the districts discussed in this paper, local government is hoping to convert forest land to oil palm once it has been logged to ensure that there is an established revenue generating industry once production forest have been depleted. They are therefore making efforts to attract investors to the area in the hope that oil palm will provide a

key revenue source after the region's national capital has been depleted. While the political and economic situation in Indonesia remains unstable, however, investors have been reluctant to establish oil palm plantations in remote areas such as Kotawaringin Timur and Berau. World oil palm prices also significantly declined in recent years making the oil palm sectors less attractive to investors. It is therefore unlikely that a viable oil palm industry will be established in these two districts before timber resources become depleted.

Moreover, at the national level, "illegal" logging is thought to be costing the national government US\$2,0 billion per annum, without considering losses in terms of ecological costs. Some estimates place the total annual loss to the country from "illegal" logging over 1980-1985. While some of this revenue is now going to local people and district governments, it seems likely that the great majority is continuing to fall into the hands of privileged and well-connected elite. This situation undermines national government efforts to implement effective law enforcement and to promote sustainable forest management. It also undermines national government efforts to maintain control over district government decisions to generate tax from "illegal" logging activities.

## **THE GAP BETWEEN SUPPLY AND DEMAND**

Illegal logging happened in Indonesia has become a general secret that it supported by the civilian and military officials. Illegal timber brokers flourish throughout the country, supplying wood processors who cannot obtain adequate supplies legally. Official involvement in illegal logging has become so blatant and widespread that provincial legislators in Sumatera's, Jambi province felt obliged to make a public appeal to military, police, and justice officials to stop supporting illegal loggers operations. The Indonesia Plywood Association (Apkindo) complained in June 2000 that illegal loggers in Sumatera and Kalimantan were exporting at least 1 million m<sup>3</sup> of timber to China and undercutting the legal export markets.

The situation happened because of Indonesia has pursued a policy of aggressive expansion in the forest products sector with insufficient regard for the long term sustainability of supply. Indonesia's annual log production rose from about 11 million m<sup>3</sup> in the 1970s to a peak of about 36 million m<sup>3</sup> in the early 1990s. More rapid expansion occurred in the processed wood products sector as the government encouraged a shift away from the production of lower value

unprocessed logs toward value added products. The first boom was in plywood production, which took off during the 1980s and 1990s as part of the country's drive to increase exports. Production has declined at the economic crisis of 1997, although startling data discrepancies exist among different sources.

The pulp and paper industries have grown even more dramatically. Since the late 1980s, production capacity has increased nearly 700 percent. Indonesia has become the world's ninth largest pulp producer and eleventh largest paper producer. This prodigious investment in plywood, pulp and paper processing capacity has far outpaced efforts to develop adequate feedstock for plantations and the industry expansion has come largely at the expense of the country's natural forests.

**Table 2. Estimated "Legal" and "Illegal" Log Production in East Kalimantan, 2000**

Industry	Official, log legal production		illegal log production		Estimated real production	
	Total unit (HPH)	official production (m3/year)	Total unit (camps)	illegal production (m3/year)	unit	Production (m3/year)
Berau	8	798,000	180	160,000	194	958,000
Malinau	10	422,540	31	17,000	41	439,540
Pasir	3	74,578	114	94,000	117	168,578
<b>Total</b>	<b>21</b>	<b>1,295,118</b>	<b>331</b>	<b>271,000</b>	<b>352</b>	<b>1,566,118</b>

Source: Bappeda and BPS (2000) in *From New order to Regional Autonomy Shifting Dynamics of "Illegal" Logging in Kalimantan, Indonesia*

From the table above we see that in the year 2000 the total illegal logging camps 331 units found in Berau (180 unit), Malinau (31 unit), Pasir (114 unit). These illegal logging camps estimated to have production around 271,000 m3/year in 2000 or close to quarter of official production around 1,3 million m3/year. Because of the district government loose their revenue because of the illegal logging, than the government trying to document and acknowledge its existence. Until recently, provincial and district office only kept production and export statistics on legal logging activities.

In March 2000, the provincial forest department reported that there was six legally recognized mills producing plywood, 315 sawmills producing sawn timber and 22 mills producing moulding in central Kalimantan. These mills consumed a total of around 1.5 million

m3 of timber between January 2000 (forestry department on; *From New order to Regional Autonomy Shifting Dynamics of “Illegal” Logging in Kalimantan, Indonesia*). Most of the sawmills could be found in Kotawaringin Timur, Kotawaringin Barat, and Kapuas. These mills were thought to have consumed at least 155,750 m3 of timber between January 1999 and January 2000. This is approximately 11% of the total timber volume consumed by official sawmills operating in Central Kalimantan between January 1999 and January 2000, look at table 3 (*From New order to Regional Autonomy Shifting Dynamics of “Illegal” Logging in Kalimantan, Indonesia*).

**Table 3. Estimated “legal” and “illegal” timber production in Central Kalimantan, 2000**

industry	production	official, legal production		Illegal production		Estimated real production	
	capacity (M3/year)	Total unit	official production (m3/year)	Total unit	illegal production (m3/year)	Total unit	Production (m3/year)
Sawmill	1,660,706	315	757,569	190	155,750	505	913,319
Plywood	495,000	6	628,325	n.a	n.a	6	628,325
Moulding	276,070	22	92,851	n.a	n.a	22	92,851
<b>Total</b>	<b>2,431,776</b>	<b>343</b>	<b>1,478,745</b>	<b>n.a</b>	<b>155,750</b>	<b>533</b>	<b>1,634,495</b>

Source: Bappeda and BPS (2000) in *From New order to Regional Autonomy Shifting Dynamics of “Illegal” Logging in Kalimantan, Indonesia*

### THE SIMILAR STUDY

Research done by Christopher Barr and his partners in Malinau Districts, East Kalimantan also found that after decentralization the forest area decrease. This research doing by made some interview with the government official, logging companies, and also the community. The research found that one of the causes the reducing of the forest area is the concessions given by the district government. They write the rule pretty good, but very bad in implementation. The policies they made is overlapping between the policies from the central government, and between district government. Many logging company feel confused which rule that they have to follow. The result is many logging company exploit more that it has to be.

They also found that the in Malinau district illegal logging also supported by government official, police and military. They take the log to outside the country, such as Malaysia and



Singapore. Illegal logging not only caused the degradation of the forest but also the decrease to the revenue. Policies and regulation made by the district government still weak that cannot prevent the forest from illegal logging.

## **THE FINDING OF ECONOMIC ANALYSIS**

As we already mentioned above, that decentralization as the government policy tried to transferring considerable degree of administrative and regulatory authority from the national government to the country's province and district government. The issue of decentralization driven by the district government who never felt got some benefit from their resources. Decentralization give rights to the local and district government to manage their resources and take benefit from it.

Decentralization in Indonesia started since late 1998. Decentralization on the administrative followed by decentralization of forest administration. Kalimantan is a very good example for the decentralization implementation at the forest administration. Kalimantan as we know is the province in Indonesia which very rich of forest. Kalimantan produced a very large amount of log. Japan is the biggest importer log from Kalimantan. The exploitation of the forest increased in line with the increasing of the timber industry.

The implementation of decentralization in Indonesia has to face the limited capability of the institutional, from the district government, especially the capability to monitor the implementation of the regulatory that conducted in the forest. Without monitoring systems will cause the forest become over exploitation. Monitoring system need the institutional responsibility, without it what will happened is corruption practice. Monitoring systems need a very high cost to implement it. That's the problem in Indonesia, the government has not enough money to implement monitoring system. The result is corruption, collusion, and nepotism.

From the economic point of view, to implement some regulatory means a high cost. Environmental regulations may not only increase the cost per unit but perhaps more important they increase fixed costs (those costs that do not vary with how much you produce). When fixed costs increase substantially, it requires that a firm have a larger output level to maintain profitability. Thus large costs can lead to market structures with fewer, larger firms (increased market concentration). Firms gain larger market shares because each is compelled to expand

production capacity in order to cover these additional fixed costs. Unless demand for the goods these firms produce somehow changes, firms will merge reducing the number of competitors and reducing the degree of rivalry

## **CONCLUSION**

Decentralization process in Indonesia which started since late 1998 has to meet the complexity problems. Illegal logging that already occurred in Indonesia since many years ago, with the decentralization era, the amount of the illegal logging increasing. This is happened because of the decentralization has been done with the limited capability of the institution of district government.

Illegal logging happened because of the regulatory that is implemented to the forest has no clear enough to mentioned the rules to exploit the forest. Not only that, but the regulatory is overlapping between regulatory made by the central government and the district government. The complicated bureaucracy made many logging company take the short way that will give much profit to them. But in the reality not only logging company which doing some illegal practice, but the local people also doing that. The reasons of the local people do the illegal way, because of the economic reason, that they want to have a better live. The regulatory have the weakness side that it is not considered about the equity.

Illegal logging gives a very bad impact not only to the environment, but also to the economic side. We know that Indonesia as the third largest forest in the world, most of the people live depend on the forest and forest product. Illegal logging practice will reduce the revenue of the district government and local people.

Regulatory to the environment take a high cost. It means that with the implementation of the regulatory will increase the production costs. But the most important is regulatory will increase the fixed cost. This needs to be considered in implementing some regulatory. Because without considering about the costs, the impact is the illegal practice will be done, and also the corruption, collusion, and nepotism.

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