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Timber legality verification and small-scale forestry enterprises in Indonesia

Lessons learned and policy options

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Key points

- The Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, launched in 2003, is the European Union's (EU) response to the global fight against illegal logging. In particular, FLEGT aims at reducing trade in illegal timber between the EU and timber producer partner countries.
- FLEGT operates through two major instruments: bilateral trade agreements known as voluntary partnership agreements (VPAs) — that are signed with willing producer countries, and the European Union Timber Regulation (EUTR), which came into force in March 2013. The EUTR mandates EU importers to exert due diligence in their sourcing of timber from abroad to exclude illegal supplies.
- To date, six countries have signed VPAs. Among them, five have committed to apply VPA provisions regarding legality verification not only to timber imported to Europe, but also to timber traded on the domestic market in signatory producer countries. This means that timber harvested and traded on the domestic market will be regulated by national VPA licensing schemes (the so-called Timber Legality Assurance System, [TLAS]).
- The Indonesian Timber Legality Verification System (Sistem Verifikasi Legalitas Kayu, SVLK) is the cornerstone of the VPA between Indonesia and the EU, which offers opportunities for Indonesian timber producers to benefit from increased market access to a major eco-sensitive market.
- Significant progress has been made in the application of SVLK standards among large forestry enterprises and the prospects are good that full compliance can be achieved in the large-scale sector by the end of 2014.
- However, advancing SVLK among small and medium enterprises (SMEs) presents a major challenge. The main reason for this is the sheer size of the small-scale sector — Indonesia may have over 700,000 such enterprises, employing up to 1.5 million people.
- The other fundamental challenge for SMEs adopting SVLK is that many of these enterprises do not meet basic business legality requirements.
- The slow progress with legality verification is due to high certification costs, a mismatch between SVLK requirements and the livelihood strategies of small-scale timber growers, limited understanding in the small-scale timber sector of the need for and benefits of SVLK, and the limited capacity of certification bodies to carry out verification.
- Policy options to address these problems include: (1) developing district or province level legal assistance programs for SMEs to secure basic business documentation; (2) simplifying SVLK application procedures and facilitating cheap loans for community timber farmers and timber processing units; (3) reviewing policies on small-scale timber utilization permits to allow less cumbersome legal means for small-scale logging and timber processing; (4) intensifying the dissemination of information about SVLK and easy - to - follow compliance procedures; and (5) increasing the number and capacity of timber legality verifying bodies.

Introduction

In order to curb illegal logging and secure timber trade opportunities, particularly in Europe, the Government of Indonesia has negotiated a VPA with the EU, which was signed in September 2013 (European Union and Republic of Indonesia 2011; *Jakarta Post* 2013). In principle, the VPA is a system for ensuring legality, which plays a part in identifying, monitoring and verifying that timber exported to the EU originates from legal sources.

The decision to enter into the VPA with the EU and implement the SVLK is aimed at establishing a solid foundation for the legality of Indonesian timber exports to Europe and elsewhere in the world. Indonesia stands to benefit from opportunities to increase its share in eco-sensitive markets and possibly from price premiums. Significant progress has been made in implementing the SVLK — which is the cornerstone of the VPA — among large forestry enterprises. However, far less has been achieved in the small-scale forestry sector. Yet, Indonesia has over 700,000 small-scale enterprises producing timber, paper and furniture products, employing almost 1.5 million people (BPS 2011). What are the reasons for the slow pace of SVLK implementation in the forestry sector, particularly in its small-scale segment, and how could these problems be overcome?

To address the above questions, in 2011–2013, the Center for International Forestry Research (CIFOR) and partner institutions such as Bogor Agricultural Institute (IPB), the Forestry Research and Development Agency (FORDA) and a number of regional forestry offices carried out field research in East Kalimantan, Papua and Central Java. Drawing on findings from these three regions, this infobrief presents lessons learned and key recommendations for policy measures to advance the implementation of the SVLK in Indonesia.

Indonesian timber legality verification

Under the VPA signed with the EU in September 2013, SVLK certified timber is automatically considered legal under the EUTR (Buckrell and Hoare 2011; European Union and Republic of Indonesia 2011; *Jakarta Post* 2013). The SVLK system is mandatory for all forest management units and industries, and is enforced in conjunction with another compulsory certification scheme, Sustainable Production Forest Management (*Pengelolaan Hutan Produksi Lestari*, PHPL).

The Ministry of Forestry (MOF) has set up the regulatory framework and relevant institutional arrangements. These include: regulations on the types of forestry operations that need SVLK certificates, requirements for meeting legality standards, guidelines for evaluating forestry operations, validity duration for certificates, and a deadline (initially set for 31 December 2013) for small-scale timber industries to obtain SVLK certification. At the end of 2013, the Minister of Trade revised the deadline for SMEs to be SVLK compliant to 1 January 2015. Large-scale companies were expected to be SVLK compliant by December 2012.

The large-scale sector has shown significant progress in adopting SVLK, which has been driven by Ministry of Trade regulations stating that only processed timber deriving from SVLK certified producers and exporters can be exported. While some progress has been made toward small-scale enterprises getting SVLK certification, it would still require a major effort to ensure all small-scale enterprises are certified, even in groups.

By December 2013, about 837 large-scale timber-processing companies had gone through the SVLK certification process, of which 629 have been certified (Ministry of Forestry, in Sugiharto 2014) (see Table 1). At the same time, 819 exporters

Table 1. Progress of SVLK (as of December 2013)

Certificationa	Passed		Not passed		In process		Total (passed and in process)	
	No	Size (ha)	No	Size (ha)	No	Size (ha)	No	Size (ha)
PHPL-HT	32	3,745,939	21	755,183			32	3,745,939
PHPL-HA	92	10,475,872	20	910,763	15	1,147,370	107	11,623,242
PHPL-KPH	6	157,890					6	157,890
VLK-HT	42	1,460,675					42	1,460,675
VLK-HA	23	1,658,060					23	1,658,060
VLK-Private forests	72	40,523	4	1,500			72	40,523
VLK-Industry ^b	629		27		181		810	

^a PHPL-HT, PHPL-HA and PHPL-KPH are certification schemes for sustainable management of timber plantation concessions, natural forest concessions and forest management units, respectively. VLK-HT, VLK-HA, VLK-Private forests and VLK-Industry are legality verification certificate schemes for timber plantation concessions, natural forest concessions, private forests and timber processing industries, respectively.

^bThis certificate is not based on hectares, but on number of processing units. Thus size is not listed. Source: Ministry of Forestry, in Sugiharto (2014).



Transport can occur in harsh conditions, Indonesia Photo by Ahmad Dermawan, CIFOR

have also been registered in the timber legality information system website (SILK 2014a). In addition, timber exports are on track to meet or exceed the volumes exported in 2012, thus dispelling concerns that the application of SVLK will reduce timber exports (Ditjen Bina Usaha Kehutanan 2013). However, much remains to be done to ensure that all actors meet legality requirements and deadlines.

Lessons learned and policy options

High level of illegality in the small-scale sector

The high level of illegality in logging and small-scale timber processing is due to a number of factors. Some of them have to do with lack of knowledge about the official procedures for business registration. Overall, however, illegal small-scale enterprises thrive because of the high demand and limited legal supply of timber for local development and export. The number of small-scale timber processing industries we recorded in two sample districts in East Kalimantan Province was almost twice that of formally registered enterprises. In one district in Papua Province, small-scale logging and timber processing operations subsisted on timber from illegal sources. In some districts in Java, the number of unlicensed small timber processing industries was almost three times the number of those with licenses (Putri 2013; Astana et al. In press).

The high level of illegality does not necessarily mean a malicious disregard or premeditated breach of the law by

small-scale timber producers and processors. In many cases, this is simply due to limited understanding of the official requirements to register business enterprises and lack of familiarity with the procedures that have to be followed. In some cases, illegality may be intentional and due to the desire on the part of business owners to avoid tax and other administrative responsibilities.

Poor control of timber transport and processing in small-scale industries

With SVLK coming into effect, timber enterprises have to ensure that they use wood from legal sources only. However, the level of control of timber shipments from forest to industry remains low. This is partly due to weak enforcement of sanctions for detected violations of timber shipping procedures by district and provincial forestry authorities. There are opportunities for misuse of documents and disparities between the actual amount of timber transported or processed and what is reported in the documents.

Recommendations

- Timber legality and traceability checks by district officials should be published online, organized by district and provincial government.
- Logging report validation officers and log-income inspection officers play an important role in ensuring the legality of wood along the timber forest product chain. Their reports should be publically accessible.
- The MOF should institute more frequent performance checks of logging report validation officers and log-

income inspection officers. An incentive-based scheme should be introduced for detection of illegality cases that are confirmed in a court of law.

Most small-scale timber enterprises do not have complete legal paper work

Small-scale timber enterprises often operate in contradiction of the licenses or other legal paper work they hold. Most of these operations are technically illegal as they possess only a few of the permits required for processing and transporting timber. SVLK verification requires a range of documentation including a land ownership certificate, proof of timber utilization rights, proof of legitimate ownership of timber, tax registration number and other permits such as environmental assessment and business permits. Our research in Papua and East Kalimantan shows that many town-based timber depots operate on partial documentation only.

Recommendations

- District government authorities should make efforts to facilitate small-scale timber enterprises with incomplete permits in obtaining full legalization. This could be undertaken in the form of a capacity building program under the auspices of the District Forestry Office and financed from the district budget.
- The MOF and the Ministry of Trade should issue an explicit communique specifying the small amount of legal paper work needed for a small-scale timber business to be considered legal. This would enable quick progress toward legality and prevent holdups on details.
- To simplify the issuance and control of sawmill permits for small-scale industries, the provincial government should consistently delegate the authority to districts to issue permits for enterprises with a capacity below 2000 m³ per year. This is not happening in Papua, for instance, despite regulations to the contrary.

Limited supply of legal timber

A limited timber supply creates opportunities for illegalities, which in turn hampers SVLK implementation. This limited supply is partly a result of decreased production from natural and plantation forest concessions and the failure of people's plantations (*Hutan Tanaman Rakyat*, HTR) to achieve the expected timber production. While forest utilization concessions granted to customary communities in Papua have been approved by the local government, owners of the concessions have not been able to harvest timber. This is due to a different view by the MOF on, and risks associated with, small-scale timber harvesting in natural forest. The reduced supply has also been caused by the fact that timber harvested from forest conversion concessions (*Izin Pemanfaatan Kayu*, IPK) and community forests has not been utilized. These issues are common in East Kalimantan and Papua.

Recommendations

- Regional government should ensure that timber produced from land clearance (e.g. for mining in Berau District, East Kalimantan) can be utilized by small- and medium-scale timber enterprises.
- The MOF, Papua Provincial Government and district governments should coordinate to ensure that

customary-based forest utilization concessions can operate and produce timber, while taking into account rural welfare and resource sustainability.

High cost of SVLK certification

The cost of the SVLK assessment process is estimated to be IDR 30–114 million (USD 3,000–11,000) per verification, depending on the type and size of the business and its location. This is a considerable sum for small-scale businesses. It is highly unlikely that they will be able to shoulder this kind of burden. Small-scale businesses have not responded well to the collective certification initiative, aimed at reducing the cost burden (Dharmawan et al. 2013; Astana et al. In press).

Recommendations

- Verification bodies should be obliged to establish regional offices to keep travel and personnel costs down.
- Group certification should be encouraged (e.g. Multistakeholder Forestry Program Phase II) as a means to keep the costs to a minimum. The MOF should use the resources of the Forestry Financial Unit (*Badan Layanan Umum*, BLU) for group certification projects, and donors such as the European Commission, International Finance Corporation, World Bank, etc. should make financing available for projects supporting group certification.
- The MOF and donors should also financially support initiatives among farmer groups where members of a cooperative plant extra trees to generate additional resources to finance the cost of certification.

Mismatch between legality verification and livelihood strategies of small-scale timber growers

One of the key features of community forest management in Java is the system called *tebang butuh* where trees are felled only when families are in immediate need of cash. This practice means that trees are not harvested regularly and there is no predictable monthly or annual volume of production. Timber farmers usually own small parcels of land per family (i.e. less than 1 ha) meaning that only small volumes of timer are harvested. The land is privately owned, decision making is autonomous in nature and timber is not always the most important source of family income (Dharmawan et al. 2013). Timber farmers sell timber as standing trees and do not get involved in timber transport. Timber felling and transport is the domain of middlemen (Putri 2013).

In this context, imposing SVLK certification is a challenge. This is because the income from timber is variable and unpredictable but the cost of SVLK is significant and has to be paid. As a result, by December 2013, only 13 farmer groups in Java had obtained SVLK or PHPL certification (javacertifiedwood.com 2014). So far, SVLK has achieved little resonance among forest farmers, timber traders and small sawmills in Java. This is because local timber prices are not determined by the presence or absence of certificates, but by timber quality and volume. If interventions like SVLK result in high transaction costs and less financial benefits to working community forests, this could be counterproductive to community forest development.

Recommendations

• The MOF needs to support extension programs for community forest management (possibly in collaboration with universities and/or nongovernmental organizations) that target community forest management units and demonstrate additional benefits to be had by villagers from pursuing a greater range of activities – from planting, maintenance and harvesting to distribution and marketing (see Box 1).

Box 1. Group certification among furniture industries: Lessons from Jepara

About 90% of the furniture industry in Indonesia is composed of small and medium enterprises. In Jepara District, Central Java, the furniture industry generates about 27% of the district's economy. About 15,000 furniture companies operate in the district, employing up to 200,000 people. In 2009, these enterprises exported products valued at USD 120 million. The problem they face is the power imbalance throughout the value chain, which results in low margins for small-scale producers, poor product quality and an uncertain future for business operations.

To improve the situation of small-scale furniture producers, CIFOR carried out action research with local academics, district government and the local furniture industry association. The project focused on developing scenarios to improve the profitability of small-scale industries through collective action. Through this project, CIFOR strengthened the Jepara Small-scale Furniture Producers Association (APKJ). Facilitated by the project, the APKJ participated in several furniture exhibitions to gain new buyers and develop marketing skills. The APKJ was also assisted in exploring new sources of raw material by engaging with smallholder teak producers.

The project provided training opportunities in furniture exhibition events and entrepreneurship for women, and helped build a marketing portal for those seeking to buy furniture online at www.javamebel.com. Since April 2012, APKJ has become a cooperative and it is currently undergoing SVLK verification.

- Through the BLU unit, the MOF should provide community forest farmers with credit to postpone harvesting (*kredit tunda tebang*), which would allow farmers not to cut when in need but to wait until the trees are bigger and thus carry a greater commercial value. The effectiveness of the existing credit program needs to be evaluated.
- Timber farmers outside Java face similar problems under the HTR scheme. The BLU should provide cheap, longterm credit to communities to enable longer timber rotations. Larger timber will make it possible for HTR farmers, currently selling their logs to pulp and chip mills, to access markets with higher timber prices.

Limited awareness of SVLK

The level of awareness about SVLK in the small-scale timber sector and among province and district forestry officials is still relatively low, even in important timber producing regions such as East Kalimantan and Papua. In contrast, in Central Java Province, the knowledge about SVLK is improving. It is important to intensify awareness-raising campaigns throughout key provinces, through workshops, road shows and other socialization events, at all levels of government, in the private sector and among rural populations.

Recommendations

- Donors and the MOF should make resources available to disseminate information about SVLK via FM radio, TV, print and social media.
- Explanatory campaigns and events about SVLK which
 until now have only taken place in provincial capitals —
 should be extended to districts where many small-scale
 industries are located. The cost of these campaigns could
 be borne by the MOF and donors.
- Large-scale timber industries should assist small-scale producers and enterprises with information about SVLK
 — as per MOF Regulation No. 45/012. The MOF should follow up and ensure its implementation. Province and district forestry offices should produce a monthly target of large companies that should be required to organize SVLK information workshops for small businesses and communities in their areas.

Limited capacity of verification bodies

One of the main challenges involved in advancing timber legality verification in the small-scale sector is the fact that as of January 2014, Indonesia had only 14 timber legality verifying bodies (SILK 2014b). BPS (2011) estimates that the number of small companies in the forestry-related sector is 700,000, or about 27.5% of total micro and small enterprises in the country. Out of this total, in Java, 191 processing companies had secured SVLK certificates as of January 2014 (Javacertifiedwood.com 2014). So far no SVLK certificates have been issued for small-scale industries in East Kalimantan and Papua. At this pace of adoption, there is no hope for full SVLK compliance in the foreseeable future.

Recommendations

- The number of verifying bodies should be increased.
- This should be accomplished by providing incentives to those interested in establishing verifying bodies, or by employing a regionalization system that will encourage the bodies to be distributed across the regions.
- The MOF should also simplify procedures for small-scale enterprises to apply to the BLU for financial assistance with SVLK certification and surveillance costs.

Conclusion

The Indonesian Government aims to achieve complete SVLK compliance in the forestry sector, however, significant challenges will have to be resolved before this policy objective is possible. While progress with SVLK compliance in the large-and medium-scale sector has been significant, timber legality verification in the small-scale sector lags behind and is far more difficult to implement.



Timber processing, Indonesia Photo by Ahmad Dermawan, CIFOR.

Among the key hurdles preventing progress in the smallscale forestry sector are the large number of business units that have to be assessed, their mostly illegal status, the high cost of SVLK certification for small-scale forestry enterprises, the mismatch between SVLK certification and the household economics of small-scale timber growers, and limited knowledge about SVLK policy and its implications.

The solutions and policy options to overcome these obstacles include: (1) developing district or province-level legal assistance programs for SMEs to secure basic business documentation; (2) simplifying SVLK application procedures and facilitating cheap loans for community timber farmers and timber processing units; (3) reviewing policies on smallscale timber utilization permits to allow less cumbersome, legal means for small-scale logging and timber processing; (4) intensifying the dissemination of information about SVLK and easy to follow compliance procedures; and (5) increasing the number and capacity of timber legality verifying bodies.

Making progress with timber legality assurance in the small-scale sector will not be easy and it will take time, but there is little doubt that given the will and resources it can be accomplished. The measures proposed to address the problems above will reduce the reputational risk for SVLK timber in Indonesia, enhance legality assurance in the forestry sector and increase the supplies of legally verified timber in Indonesia.

Key legal frameworks governing Indonésia's timber legality verification system

Director General of Forestry Enterprise Development Regulation P.8/VI-BPPHH/2011 on Standards and guidelines for evaluating the sustainability performance of production forest management (PHPL) and timber legality verification (VLK).

Director General of Forestry Enterprises Development Regulation P.5/VI-BPPHH/2013 on Guidelines for the approval of the right of access or a memorandum of understanding on the provision and services of the Timber Legality Verification Information through the Portal of Timber Legality Verification Information System (SILK).

Ministry of Forestry Regulation P.38/Menhut-II/2009 on Performance appraisal standards and guidelines of sustainable production forest management and timber legality verification.

Ministry of Forestry Regulation P.68/Menhut-II/2011 Second change over Ministry of Forestry Regulation P.38/Menhut-II/2009 on Performance appraisal standards and guidelines of sustainable production forest management and timber legality verification.

Ministry of Forestry Regulation P.45/Menhut-II/2012 Second change over Ministry of Forestry Regulation number P.38/ Menhut-II/2009 on Performance appraisal standards and guidelines of sustainable production forest management and timber legality verification.

Ministry of Forestry Regulation P.18/Menhut-II/2013 on Timber legality verification information through the portal of timber legality verification information system (SILK) and the publication of V-Legal documents.

- Ministry of Forestry Regulation P.42/Menhut-II/2013 Third change over Ministry of Forestry Regulation number P.38/Menhut-II/2009 on Performance appraisal standards and guidelines of sustainable production forest management and timber legality verification.
- Ministry of Forestry Regulation P.13/Menhut-II/2013 on Performance appraisal standard cost of sustainable production forest management and timber legality verification.
- Ministry of Trade Regulation P.64/M-DAG/PER/10/2012 on Provisions of forest-products exports.
- Ministry of Trade Regulation P.81/M-DAG/PER/12/2013 Change over Ministry of Trade Regulation P.64/M-DAG/PER/10/2013 on Provisions of forest-products exports.

References

- Astana S, Obidzinski K, Riva WF, Hardiyanto G, Komarudin H and Sukanda. In press. *Implikasi biaya dan manfaat sistem verifikasi legalitas kayu terhadap sektor perkayuan skala kecil. Policy Analysis Journal.*
- BPS. 2011. *Profil Industri Mikro dan Kecil 2010*. Jakarta, Indonesia: *Badan Pusat Statistik*.
- Buckrell J and Hoare A. 2011. *Controlling illegal logging: Implementation of the EU Timber Regulation*. London: Royal Institute of International Affairs.
- Dharmawan AH, Mardyaningsih DI and Wiyanti NI. 2013. Struktur dan strategi nafkah rumahtangga petani hutan rakyat: Kaitan antara sertifikasi dan status sosial-ekonomi (Studi kasus di tiga kabupaten). Bogor, Indonesia: Center for Agriculture and Rural Development Studies, Bogor Agricultural University.
- Ditjen Bina Usaha Kehutanan. 2013. *Kebijakan PHPL–VLK menuju Manajemen Hutan Tanaman Kelas Dunia*. Presentation, Evaluasi Kinerja IUPHHK-HTI, 27 March 2013, Jakarta, Indonesia.
- European Union and Republic of Indonesia. 2011. FLEGT Voluntary Partnership Agreement between Indonesia and the European Union: Briefing Note. Accessed 14 August 2013. http://www.efi.int/files/attachments/euflegt/briefing_note_indonesia_en_.pdf
- *Jakarta Post.* 30 September 2013. Rl, EU sign agreement on legal timber trade. Accessed 4 June 2014. http://www.

- thejakartapost.com/news/2013/09/30/ri-eu-sign-agreement-legal-timber-trade.html
- Javacertifiedwood.com. 2014. Produk kayu bersertifikat/ Certified wood products. Accessed 31 January 2014. http://javacertifiedwood.com.
- Ministry of Forestry in Sugiharto. 2014. *Jangan persulit hutan rakyat*. *AgroIndonesia* 9(479):4.
- Putri ElK. 2013. Value chain perdagangan kayu rakyat: Mampukah sertifikasi memperbaiki keadilan bagi pelaku pasar? (Studi kasus di Provinsi Jawa Tengah). Bogor, Indonesia: Center for Agriculture and Rural Development Studies, Bogor Agricultural University.
- [SILK] Sistem Informasi Legalitas Kayu. 2014a. Daftar eksportir. Accessed 11 April 2014. http://silk.dephut.go.id/index.php/info/exporters
- [SILK] Sistem Informasi Legalitas Kayu. 2014b. Daftar LVLK. Accessed 25 February 2014. http://silk.dephut.go.id/index.php/info/lvlk

Additional reading

- Kishor N and Lescuyer G. 2012. Controlling illegal logging in domestic and international markets by harnessing multi-level governance opportunities. *International Journal of the Commons* 6(2):255–70.
- Obidzinski K, Dermawan A, Andrianto A, Komarudin H, Hernawan D and Fripp E. 2014. *Timber legality verification system and the Voluntary Partnership Agreement in Indonesia: The challenges of the small-scale forestry sector.* Working Paper. Bogor, Indonesia: Center for International Forestry Research.
- Putzel L, Kelly A, Cerutti PO and Artati Y. 2014. Formalization of natural resource access and trade: Insights from land tenure, mining, fisheries, and non-timber forest products. Bogor, Indonesia: Center for International Forestry Research.
- Wit M, van Dam J, Cerutti PO, Lescuyer G, Kerrett R and Parker Mckeon J. 2011. Chainsaw milling: Supplier to local markets A synthesis. *In* Wit M and van Dam J, eds. *Chainsaw milling: Supplier to local markets*. Wageningen, the Netherlands: Tropenbos International. VII-XXII.

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