



Timber legality verification system and the Voluntary Partnership Agreement in Indonesia

The challenges of the small-scale forestry sector

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Piles of teak logs, Jepara, Central Java, Indonesia.

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Abbreviations

APL	Area Peruntukan Lain (Nondesignated Forest Land / Other Land Use)
BLU	Forest Development Funding Centre
BPS	National Statistics Bureau
BRIK	Badan Revitalisasi Industri Kehutanan (Forestry Industry Revitalization Agency)
BUMD	Local Government-Owned Companies
BUMN	National State-Owned Companies
CAB	Independent Verification Body
ETPIK	Registered Forest Industry Product Exporter (license)
EUTR	European Union's Timber Regulation
FAKO	Faktur Angkutan Kayu Olahan
FLEGT	Forest Law Enforcement, Governance and Trade
FORDA	Ministry of Forestry Research and Development Agency
FSC	Forest Stewardship Council
GoI	Government of Indonesia
HK	Hutan Kemasyarakatan (Community forestry where activities are located within state forests)
HK	Hutan Konversi (Conversion Forests)
HL	Hutan Lindung (Protection Forests)
HP	Hutan Produksi (Production Forests)
HPH	Hak Pengusahaan Hutan (Natural Forest Concession Rights)
HPT	Hutan Produksi Terbatas (Limited Production Forests)
HR	Hutan Rakyat (Peoples' Forests / Privately Owned Forests)
HTI	Hutan Tanaman Industri (Industrial Forest Plantation)
HTR	Hutan Tanaman Rakyat (Community Timber Plantations)
IIUPHH	Iuran Izin Usaha Pemanfaatan Hasil Hutan (Forest Product Utilization Business Permit Fees)
IPHHK	Industri Primer Hasil Hutan Kayu (Wood Processing Industries)
IPK	Izin Pemanfaatan Kayu (Land Conversion Permit)
IUIPHHK	Izin Usaha Industri Primer Hasil Hutan Kayu (Holders of Primary Industrial Wood Forestry Product Business Licenses)
IUPHHK	Izin Usaha Pemanfaatan Hasil Hutan Kayu (Logging Concession Permit)
IUPHHK-MHA	Customary Community Timber Utilization Business Permits
IUPHHK-HA	Natural Forest Logging Concession
IUPHHK-HT	Plantation Forest Concession

IUPHHK-RE	Ecosystem Restoration Permit
KH	Kawasan Hutan (Forest Estate)
KIK	Kawasan Konservasi (Conservation Forests)
KPH	Kasatuan Pemangkuan Hutan (Forest Steward Unit)
KR	Kayu Rakyat (Community Timber)
LEI	Indonesian Ecolabelling Institute
PEFC	Programme for the Endorsement of Forest Certification schemes
PHBML	Pengelolaan Hutan Berbasis Masyarakat Lestari (Sustainable Community-based Forest Management)
PHPL	Pengelolaan Hutan Produksi Lestari (Sustainable Production Forest Management)
PHPL-HA	Sustainability Certificate for Natural Forest Concession
PHPL HT	Sustainability Certificate for Industrial Timber Plantation
RKT	Annual Cutting License
RWE	Roundwood Equivalent
SITU	Surat Izin Tempat Usaha (Location Permit)
SIUP	Surat Izin Usaha Perdagangan (Trade Business License)
SME	Small and Medium Enterprises
SVLK	Sistem Verifikasi Legalitas Kayu (Timber Legality Assurance System)
SVLK HA	Timber Legality Verification in Natural Forest Concession
SVLK HT	Timber Legality Certification in Industrial Timber Plantation
SVLK-Private Forest	Timber Legality Verification in Private Forest
SVLK Industry	Timber Legality Verification in Industry
TLAS	Timber Legality Assurance System
TUK	Tata Usaha Kayu (Timber Administration System)
VB	Verifying Body
VPA	Voluntary Partnership Agreement

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Executive summary

Illegal logging has been on Indonesia's political agenda as a major economic and environmental concern. Indonesia is at the forefront of tropical timber-producing countries seeking to increase confidence among timber buyers about the legality of its wood products. Indonesia officially signed a Voluntary Partnership Agreement (VPA) in September 2013, although work on the VPA has been ongoing for the past 10 years.

VPAs are a core part of the EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, initiated in 2003 and are bilateral trade agreements between the EU and countries exporting their timber into the EU. The aim of these agreements is to guarantee the legality of all timber and timber products exported from the producer country to the EU. Under the Indonesian VPA, a timber legality assurance system known as SVLK (*Sistem Verifikasi Legalitas Kayu*) has already been developed and as of 1 January 2013, the SVLK came into effect for woodworking, wood panels, and pulp and paper. When the VPA is fully implemented, the SVLK and its associated export license will become FLEGT legality licenses and will meet European Union Timber Regulation (EUTR) requirements for legal timber.

The overall objective of this paper is to analyze the potential implications of the mandatory implementation of SVLK on the small-scale forestry sector of Indonesia. In doing so, the paper also assesses whether a mandatory approach to legality verification will achieve a greater impact in terms of assuring legality, than voluntary approaches, such as certification. Analysis was undertaken through desk-based analysis of government statistics and field surveys in three provinces of Indonesia — Central Java, East Kalimantan and Papua. These are among provinces which produce the majority of timber traded locally in Indonesia. They also account for more than a fifth of Indonesia's population. Central Java is typified by smallholder-planted forest; East Kalimantan by long-established small-scale logging; and Papua by a recent history of small-scale logging. The findings specifically relating to the implementation of SVLK have been used to form recommendations that can be used for

'actionable' policy options. This country paper has been developed under the PRO-FORMAL: Policy and Regulatory Options to Recognize and Better Integrate the Domestic Timber Sector in Tropical Countries project.

The forestry sector

Indonesia is one of the major sources of tropical timber products for the global market (ITTO 2011). While the production of plywood, sawn timber and veneer declined sharply during 1994–2010, pulp and paper production, woodchip and fiberboard increased significantly. Furniture production, while small in terms of volume, is increasingly important in terms of export value. The export value of forest products increased from US\$5.86 billion in 1994 to US\$7.11 billion in 2010, but its share of total export values declined from 14.6% in 1994 to 4.5% in 2010 (Simangunsong 2012). In 2010, the forestry sector was estimated to employ 3.76 million workers (ITC 2011).

The small-scale domestic timber sector is considered as one comprising wood processing industries of the annual production capacity of less than 6,000 m³/year and associated timber supply chains. If the full range of downstream processing (i.e. family-based, small-scale furniture and handicraft production) is taken into account, the picture becomes even more complicated. The National Statistics Agency (BPS) has analyzed data on small-scale wood and handicraft enterprises and believe there could be up to 753,000 small-scale businesses, employing up to 1.5 million people (BPS 2011b). According to the Ministry of Forestry (MoF) and the Forestry Industry Revitalization Agency (BRIK), about 4000 small-scale timber businesses are registered as timber exporters. However, it is common knowledge unregistered companies export their products by passing them on to registered exporters for a fee. From the case studies, the number of small-scale timber processing industries recorded in two sample districts in East Kalimantan Province was almost twice that of formally registered enterprises, and in Yogyakarta, in 2011 the number of registered timber

processing industries with the capacity of 2000 m³ per annum or less was almost three times the number of those registered.

With community forestry also increasing significantly on the islands of Java and Madura, the complexity of the situation is likely to increase. The sector is complex in its structure, fragmented and in many ways undefined. Ensuring that this sector complies with the SVLK requirements is therefore going to be highly challenging.

Putting SVLK into context

Indonesia is ahead in engaging in VPAs and has now completed the system development phase and is continuing with implementation. On 1 January 2013, it became mandatory for wood panel, woodworking and pulp and paper industries to be compliant with SVLK. Some other industries, such as sawmill, furniture and handicraft businesses have until 1 January 2015 to meet the legality requirements under SVLK. While there is some evidence that the large- and medium-size companies are making advances toward compliance with SVLK, progress is much slower in the small-scale sector.

The SVLK system is based on an annual audit of each operator in the supply chain from forest to point of export. Although mandatory, it draws on the experience and process of voluntary certification schemes. However, voluntary certification schemes were developed in response to global concerns on illegal logging and trade, to meet the needs of companies wishing to address NGO concerns, reputational risks and increasingly to comply with growing market requirements. These schemes were not designed to resolve illegal logging issues globally, or to address forest sector governance at a country level.

The world's certified forest area is approaching 10%. Although, after nearly 20 years, almost 92% of the world's certified forests are in the northern hemisphere, contrasting with only 2% in tropical forests. The growth of FSC certification in Indonesia has more than doubled in the past two and a half years — from 833,000 ha in January 2011 to 1,679,117 ha in July 2013. This, however, remains a small share of the total forest area.

There are many issues that have limited the uptake of voluntary certification schemes, including the

enabling regulatory framework, lack of a sound business case, the right expertise or access to markets. Certification often requires concessionaires to reduce their output, invest in training and capacity building and pay for auditing costs. These costs, in many cases, can be offset by access to markets (occasionally with a price premium) and/or with donor support. Some of the challenges facing SVLK implementation mirror those of certification schemes. The scope to reach enterprises with a mandatory scheme such as SVLK is obviously larger than with a voluntary approach. Without knowing the exact number of small-scale enterprises, it is very difficult to know how effective the SVLK will be. The test will be how to make SVLK succeed, where voluntary certification has been less successful.

SVLK implementation and progress to date

National data and research findings show that progress with SVLK verification, while significant among large and medium enterprises, was still slow in the small-scale sector. Approximately 800 exporters had secured SVLK verification, most of which were large- and medium-size enterprises. At the national level, approximately 760 companies have obtained SVLK by December 2013 (Sugiharto 2014). According to the Information System of Timber Legality (*Sistem Informasi Legalitas Kayu*), approximately 175 timber companies have obtained SVLK certificates in Central Java. In East Kalimantan, only 14 timber companies have obtained SVLK, and a mere two companies are SVLK compliant in Papua.

Generic issues have come to light and are posing significant challenges to the implementation of SVLK. These include the costs of verification and the surveillance costs, the lack of awareness and understanding of SVLK and compliance requirements. In addition, with only 14 accredited timber legality verification bodies (VBs) in place, it would require massive efforts to meet the deadlines for SVLK compliance. Between 2009, when the SVLK entered into force, and mid-2013, auditors had assessed the legality of 2.2 million ha of state-owned forest, 133,000 ha of community forest, 7688 ha of private forest, and the operations of 651 timber processing units. Therefore, effort is needed to increase both the number as well as the capacity of VBs, with for example the establishment of regional offices to keep travelling costs down for audits.

Findings from the three case studies — Java, Borneo and Papua

The case studies identified challenges to be addressed if SVLK is to be effectively implemented.

Awareness raising and capacity building

Understanding of SVLK is limited throughout the supply chain, and thus the demand (i.e. the internal market) for SVLK from forest to end product is still lacking. This is coupled with a perception that SVLK is an additional burden — administratively and financially. Unreliable and a lack of available data make it difficult to ascertain the scale of the sector and to thus target assistance where needed. Training and capacity building through the supply chain and for verification bodies is required. To date low numbers of Small and Medium Enterprises (SMEs) have taken up the free clinics offered by the Java Learning Centre (Javlec) and the regional Departments of Trade and Industry, to support them in achieving SVLK certification; however, this number should increase in time. In East Kalimantan and Papua, where no support has been provided, awareness remains very low.

Funding and financial issues

SVLK is seen as an additional financial burden, on top of the existing formal and informal fees, rather than an opportunity. The costs of compliance and surveillance are so far not perceived as being offset by the market opportunities, for many producers. This could change for some exporters to Europe when FLEGT licenses are issued and compliance with the EUTR met. When donor and government assistance (awareness raising, training and financial support) has been provided, for example in Central Java, there is evidence of higher uptake of SVLK verification. However, the issue of how to cover the long-term costs of compliance and surveillance remain.

Compliance issues

SVLK certification requires certainty of area and utilization rights, proof of legitimate ownership of timber and concession area, permit documentation, etc. In reality, most small-scale forest businesses are informal and only some have the permits necessary to meet requirements for harvesting and transporting timber. This uncertainty and lack of information are prohibiting the uptake of and interest in SVLK. By simplifying and facilitating the permit process, making traceability checks publically accessible and ensuring that the process is more transparent, could see an increase in the number of registered SMEs and thus legal timber supply volumes.

Reducing the gap between legal supply and demand is essential to the uptake of SVLK verification. Demand for raw material exceeded supply in all three case studies, providing an increased opportunity for the informal sector (including timber kiosks and chainsaw milling) to meet demand. In Central Java, more supply is met from community production than ‘imports’ from other provinces in Indonesia. A significant percentage of raw material production from East Kalimantan goes to Java, limiting supplies to local markets and creating opportunities for the informal sector to fill the gap. In Papua, the supply chains are complex, with producers located in districts away from where there are sawmills and a large number of kiosks, creating distortions in the supply and demand of raw material.

The levels of informality/informal sector in Kalimantan and Papua in terms of supply are high, particularly for unregistered timber kiosks. Poor control of timber transport and processing in small-scale industries and lack of publically accessible official data pose challenges to legal compliance. This is coupled with forestry authorities’ weak enforcement of sanctions for violations by business practitioners; opportunities for misuse of documents; and disparities between the actual amount of timber transported or processed and what is written in the documents.

Practical policy options

Practical policy options drawing on lessons from the case studies have been developed. These aim to ensure timber legality and encourage small enterprises to be prepared for the implementation of SVLK.

Ensure a robust business case. This is paramount for the long-term success of SVLK. As shown with voluntary certification, without a robust business case, the uptake and long-term success of certification is questionable. This is also true for the implementation of SVLK. The costs of compliance, changing management practices, costs of verification, etc., will be limiting factors for many producers and processors and this is coupled with the existence of informal markets that accept non-SVLK products, providing an alternative market for many producers. Ensuring a business case, through market access, working to reduce costs and support technical capacity development are some ways

that the donor bodies and government can work together to ensure effective SVLK implementation. SVLK is mandatory and thus robust enforcement, including fines and penalties, will be required to ensure SVLK compliance.

Reduce costs of verification. The high costs, especially for small-scale producers, of SVLK, estimated to be IDR 30–114 million (US\$3000 to \$11,000) per verification need to be addressed, as they are seen to be burdensome. If unofficial payments are eradicated then it will help companies cover the SVLK costs and see a positive impact of SVLK. Where government and donor support has existed, for example in Central Java, there has been uptake and progress in SVLK verification; however, one community failed to renew its verification certificate due to lack of funds. Donor and government support needs to consider the long-term sustainability and not just fill short-term funding gaps. Group certification could be a way to not only reduce costs but also assist with providing access to markets (cf. Purnomo et al. 2014).

Raise awareness. Awareness and understanding of the requirements of SVLK are low across Indonesia, particularly in the case study areas of East Kalimantan and Papua. Java is a good example of how donor and government activities can achieve positive results in terms of raising awareness. With a lack of information on the scale of the small-scale forest sector, ensuring any outreach meets its target audience is a challenge and the overall scale of the task in hand is unknown. All media including radio, TV, print and social media should be utilized, with perhaps donor and government resources helping with this. Due to the scale of the challenge, alternative methods need to be explored and could include activities such as SVLK ‘surgeries’ at key trade events. Strengthening community group institutions and sharing learning processes to encourage community forest management in groups or villages could help with the promotion of SVLK and reduce the costs in general.

Capacity building of verification bodies (VBs). Increasing the slow uptake of SVLK certification could be helped by strengthening the number and capacity of VBs through the revision of relevant forestry regulations so that the existing regulatory framework for VBs does not continue to prioritize Indonesian organizations. Simplifying procedures for SMEs to apply for third-party financial

assistance for SVLK certification and surveillance costs, and ensuring low interest rates and long payback times would help support SMEs, as would increasing the donor funding and government support for VB start-ups.

Overcoming compliance issues. While an alternative informal market for unverified SVLK exists, the incentive for producers to implement SVLK remains limited. Practical options to address this issue include: better utilization of forest areas currently controlled by holders of inactive licenses; further development of industrial and community timber plantations and forests; better information collected (this is a positive outcome of the implementation of the SVLK); and zero production targets for operating companies disallowed. Improvements in technology efficiency in harvesting and processing are required, along with better monitoring by MoF to check that recorded recovery rates are accurate.

Ensuring small-scale timber enterprises meet legal requirements. This includes providing certainty to producers on area and utilization rights with clear boundaries; resolving the growing role of timber kiosks which add a layer of uncertainty and informality; and ensuring that basic documents such as business registration, health and safety, trading licenses, tax numbers, etc., exist and can be provided to the verification body. In addition, District governments should support small-scale timber enterprises with incomplete permits to obtain full formalization; and the sawmill permit processes, for example in Papua, simplified; improved timber legality and traceability checks with forestry officers issuing permits in the field and not from offices.

By formalizing the small-scale forest enterprises, particularly those supplying large-scale industries, the small-scale producers will be incentivized, supporting the growth in small-scale industries, creating economic benefits and increasing the volume of legally produced wood products in the market.

Concluding remarks

The report shows it is difficult to ascertain the scale of the sector, and to identify the number of actors due to the unreliability and lack of available

data. It is therefore problematic to not only target funding and capacity assistance where needed, but also to know what the general impact will be on the industry.

SVLK has been mandatory for large companies since the beginning of 2013, while small enterprises were expected to be compliant by the beginning of 2014. It is highly likely that a large portion of forestry operations, especially small-scale enterprises, will not meet the deadlines. Findings from Central Java, East Kalimantan and Papua show that progress with SVLK certification has been slow. Central Java has the largest number of certified timber companies but these represent only a small portion of the total number of timber enterprises in the province. Very few community forests have been certified. In East Kalimantan, most progress has been made with certifying logging concessions; however, these represent only 18% of active concession permits. Little has been done to advance certification in the processing sector. In Papua, most progress has been achieved with large-scale operators (four out of six), but virtually no developments have been made in other segments of forestry. However, it is likely that SVLK will become more 'mainstream' as more businesses become aware of the mandatory certification scheme, especially if the government moves forward with enforcement of the requirement.

The challenges facing voluntary certification are mirrored for SVLK, but on a much larger scale. These include: capacity and training of companies involved through the supply chain, government bodies, VBs and NGOs, etc.; the high costs of compliance and

surveillance; a reliance on donor or philanthropic funding to cover the above costs which tends to be short term and does not resolve sustainable financing needs; and finally, the need for a robust economic business case.

To conclude, achieving SVLK compliance in the Indonesian forestry sector as a whole will not be easy. However, it is possible to make significant progress by providing more time and information to stakeholders, expanding the capacity of verification bodies, making SVLK simpler and more financially attractive, supporting market access, and strengthening anti-corruption measures. Lessons can be learned from the practical challenges of certification in the tropics. The policy recommendations need to draw on these to ensure effective (cost and timely) implementation of SVLK that can be sustained, in particular for the small-scale forestry sector.

Overall, resolving the structural problems preventing the increase of legal timber in the supply chain for small-scale industries and local markets is critical and the solution involves stricter measures against inactive timber concessions and incentives to accelerate the development of industrial and community timber plantations. Capacity assistance and stricter law enforcement is needed to ensure greater integrity amongst forest officials and that basic legality requirements among SMEs are met. These measures will reduce the reputational risk for SVLK timber in Indonesia, enhance the legality assurance in the forestry sector, and increase the supplies of legally verified timber. Achieving progress in the small-scale sector, however, will not be easy and will take time.

1. Introduction

The commercial forestry sector has been operating in Indonesia for more than four decades. Since the forest utilization concession system was introduced in 1970, Indonesia has gone through several phases of forestry development. The 1970s was marked as the logging era, where Indonesia became a leader in tropical log exports. Since the Government of Indonesia (GoI) introduced a log export ban in 1985 to promote timber-based industries, Indonesia became the global leader in plywood production and export. This policy shift did succeed in making Indonesia a leading producer and exporter of tropical plywood, but it was not accompanied by measures that would have ensured the additional legal and sustainable supplies of raw timber needed (Barr 2001).

At the same time, timber plantations were introduced with the aim to provide a sustainable supply for the timber processing industry. Specifically for timber plantation development, during the 1990s the GoI provided incentives in the form of subsidies, loan and capital from the Reforestation Fund. One of the unintended consequences with regard to timber plantation development is the promotion of pulp and paper industries. Since the decade of 2000s, pulp and paper have become the leading commodity in the forestry sector in terms of export. One of the incentives to promote these industries in the 1990s was that they could use mixed tropical hardwood from the conversion of natural forests while they were preparing their timber plantations. This turned out to be a perverse incentive, because these industries keep expanding without having an adequate supply of legal and sustainable timber. This imbalance has been pressuring Indonesia's forests and also become one reason for the increasing supply of illegal timber (Barr 2001; Brown et al. 2005).

Illegal timber extraction and trade have been associated with a range of negative impacts on Indonesia's environment, economy and society (Hoisington 2010; Goncalves et al. 2012). Both are major contributors to deforestation and forest degradation (World Bank 2006; CIE 2010; Lawson and MacFaul 2010). In the early 2000s, it was estimated that up to 75% of Indonesia's timber supplies came from illegal sources, leading to the loss of up to 3 million ha of forest per year

(Kishor and Damania 2007). Over the last decade, declining timber stocks and rising costs have led to a downturn in Indonesia's production and export of tropical plywood and sawn timber (Obidzinski and Dermawan 2010; Jakarta Globe 2012). Illegal logging also resulted in significant tax revenue losses for the Government of Indonesia, estimated at US\$2 billion per year (Human Rights Watch 2009). Illegal logging is also related to deeply rooted corruption in all levels of government. The illicit wealth generated from illegal timber is also a source of social conflict and a signal of inherent poor governance (Obidzinski et al. 2006; Barr et al. 2009; Dermawan et al. 2011).

Indonesia is at the forefront of those tropical timber producing countries seeking to increase confidence among timber buyers about the legality of its wood products. The GoI engaged in a number of initiatives to reduce forest crimes. Indonesia became an integral part of the Forest Law Enforcement and Governance (FLEG) process supported by the World Bank (FAO 2005) and initiated in 2001, and has concluded several bilateral agreements for collaboration to reduce the illegal timber trade (Luttrell et al. 2011). The Indonesian government has also stepped up its own forest law enforcement efforts in the regions where illegal logging was rife (Luttrell et al. 2011; Nellemann 2012).

The EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, initiated in 2003, aims to reduce illegal logging through, in part, improvements in forest governance and regulation in both producer and consumer countries. Central to the FLEGT Action Plan is the negotiation and implementation of Voluntary Partnership Agreements (VPAs) — bilateral trade agreements between the EU and countries exporting their timber into the EU. The Indonesian government is implementing a VPA, having officially signed in September 2013, although work on the VPA-related legality system has been in progress for the last 10 years (EFI Briefing Note, May 2011). The aim of these agreements is to guarantee the legality of all timber and timber products exported from the producer country to the EU.

Central to every VPA is the Timber Legality Assurance System (TLAS) which tracks, monitors

and ultimately assures legality of timber. This culminates in the provision of a FLEGT license for legally produced timber at the point of export, ensuring that only legal timber is exported to the EU. In Indonesia, the TLAS, known as SVLK (*Sistem Verifikasi Legalitas Kayu*), has already been developed and as of 1 January 2013, the SVLK came into effect for woodworking, wood panels, and pulp and paper to meet the requirements for timber legality of the VPA. When the VPA has been fully implemented, and the SVLK externally evaluated and approved, FLEGT legality licenses will be issued at the point of export for all timber exports to the EU.

Because the policy debate in the forestry sector was mainly about reducing emissions from deforestation and forest degradation (REDD+), there have also been efforts to link all initiatives with REDD+. SVLK is also not an exception, as there are efforts to 'synergize' between SVLK and REDD+ (e.g. Dharmawan et al. 2012). The argument is that SVLK is expected to reduce illegal logging; therefore deforestation can be reduced and at the same time there will be an additional carbon stock from the development of timber plantations. However, there are larger cross-cutting issues where lessons from actions to curb illegal logging may have relevance to REDD+. SVLK and REDD+ are aiming at addressing fundamental governance issues, such as illegal logging and the improvement of the whole system of Indonesia's forest commercialization (Luttrell et al. 2011).

1.1 Objectives of this study

This country paper for Indonesia has been developed under the PRO-FORMAL: Policy and Regulatory Options to Recognize and Better Integrate the Domestic Timber Sector in Tropical Countries Project.

The overall objective of this paper is to analyze the implications of the mandatory implementation of SVLK on the small-scale forestry sector of Indonesia, which comprises the greatest number of enterprises, employs the largest number of people, and ranks third after the pulp and paper and plywood industries in terms of export revenue (BPS 2011a; Alaydrus and Herdiyan 2012; Ministry of Forestry 2012a). In doing so, the paper also assesses whether a mandatory approach to legality verification will achieve a greater impact in terms of assuring legality, than voluntary approaches, such as certification, taken to date.

The paper presents a brief overview of the Indonesian forestry sector, paying particular attention to the small-scale sector, with an outline of Indonesia's SVLK timber legality verification system and its objectives, implementation and progress to date. Challenges to SVLK are assessed, examining the structural obstacles at the national level, and illustrating these problems with examples from Central Java, East Kalimantan and Papua. In the final section, findings are summarized and recommendations provided on how to make the SVLK system work to ensure the integrity of VPA in Indonesia and to secure the continuity of rural livelihoods dependent on small-scale forestry.

1.2 Methodology and approach

The PRO-FORMAL project has worked to shed light on the domestic timber sector in a number of key producing countries of tropical timber. The overall objective of the project has been to foster legality, livelihood security and improved forest management in the domestic timber sector of selected tropical forest countries, in particular in countries negotiating or implementing a FLEGT-VPA. Specifically, the project has looked at producing policy-relevant options to better regulate and integrate the domestic timber sector (especially small-scale operations) into the formal economy, secure the livelihoods of people dependent on it and promote the adoption of improved forest management practices.

To analyze and understand the size, functioning, impacts, livelihood implications, and legal setting of the small-scale domestic timber sector vis-à-vis SVLK and regional timber regulations, the project team carried out both desk-based analysis of government statistics and field surveys in three provinces of Indonesia — Java, Borneo and Papua. These provinces were chosen because, when combined, they produce the majority of timber traded locally in Indonesia and are a major source of processed timber. They also account for more than a fifth of Indonesia's population. The sample sites selected present different stages of forest management and forest conditions: Java is typified by smallholder planted forest; East Kalimantan by long-established small-scale logging; and Papua by a recent history of small-scale logging.

Through surveys, information was elicited about the environmental impact of small-scale logging vis-à-vis large-scale extraction (e.g. IUPHHK, IPK), livelihood implications of small-scale logging and timber processing (sawmills), legal and institutional settings

of these small-scale operations, and in particular what obstacles they face in implementing SVLK. The analysis of government statistics comprised the supply–demand analysis which described the entire timber extraction and processing sector in the sample areas and enabled the identification of the size of the

domestic (local) timber consumption. This model was subsequently refined by a similar exercise at the district level. The findings, specifically relating to the implementation of SVLK, have been used to form recommendations that can be used for ‘actionable’ policy options.

2. Indonesian timber sector and small-scale enterprises

2.1 Introducing the Indonesian timber sector

Indonesia has a total forest estate of 132 million ha (Ministry of Forestry 2012). After several decades of scientific forest management in Indonesia, the rate of deforestation remains at approximately 1 million ha/year (Hansen et al. 2009, 2013; Miettinen et al. 2012; MoF 2012). Degradation of the country's forests and a decline of biodiversity have also occurred on a large scale due to unsustainable forest management, forest fires, illegal logging and forest conversion. Conversion to oil palm plantations (and illicit use of fire to clear debris) is one of the most significant drivers of deforestation/peatland degradation and sources of greenhouse gas (GHG) emissions in Indonesia (Miettinen et al. 2012).

As of 2011, these forest estate lands (*Kawasan Hutan*) can be divided into four categories:

- **Production forests** (*Hutan Produksi*, HP) and limited production forests (*Hutan Produksi Terbatas*, HPT) utilized for logging and industrial forest plantations (82.8 million ha)
- **Conservation forests** (*Kawasan Konservasi* including national parks and nature reserves) allocated for biodiversity, and wildlife conservation (19.7 million ha)
- **Protection forests** (*Hutan Lindung*, HL) set aside for protecting environmental services such as watersheds, carbon stocks, steep terrain, rivers and littoral habitats (29.9 million ha)
- **Convertible production forests** (*Hutan Konversi*, HK) used for other purposes including estate crops, agriculture and settlement (22.4 million ha).

Outside state forests, another 8.3 million ha of land is forested (nondesignated forest land, *Area Peruntukan Lain*, APL), and can be converted for agricultural use under the jurisdiction of district and provincial governments. Current licensing procedures and the extent to which oil palm plantation developers comply with social and environmental safeguards have been repeatedly called into question (Greenpeace 2008; EIA 2009).

Community forest activities and other small-scale forestry can occur in both production and protection forests. The area of community land and volume produced is not known, with unclear and often contradictory figures produced by the Ministry of Forestry. However *Hutan Rakyat* or community forest, which is included in the study sites in Java, is legally located outside the forestland. By 2003, *Hutan Rakyat* accounted for 1.56 million ha and by 2010 this had increased to around 2.7 million ha (BPKH XI 2012).

2.2 Indonesian export market

Indonesia is one of the major sources of tropical timber products for the global market (ITTO 2011). While the production of plywood, sawn timber and veneer declined sharply during 1994–2010, pulp and paper production, woodchip and fiberboard increased significantly (Table 1). Although not indicated in the table, furniture production, while small in terms of volume, is increasingly important in terms of export value. The export value of forest products increased from US\$5.86 billion in 1994 to US\$7.11 billion in 2010, but its share of total export values declined from 14.6% in 1994 to 4.5% in 2010 (Simangunsong 2012). In 2010, the forestry sector was estimated to directly employ 3.76 million workers (ITC 2011). This figure is, however, different from estimates of labor absorption reported by other sources. Large-scale industries absorbed 231,000 workers, while small-scale industries absorbed 1.5 million people (BPS 2011; Simangunsong 2012).

According to the Trade Ministry, exports of timber and timber products — mostly furniture — increased by 114% to US\$416 million in the first quarter of 2013, compared with \$193.9 million in the same period last year (Chatham House Illegal logging website). Although it is too early to confirm whether this is due to the VPA and SVLK, if Indonesia becomes one of the first countries to place VPA timber on the EU market, it is likely to have access to a larger share of the market. As also shown in early reviews of the timber market in Europe, following the implementation of the EU Timber Regulation

Table 1. Timber industry production in Indonesia 1994–2010 (in million m³).

Year	Sawlogs/veneer logs consumption				Small diameter logs (including pulpwood) consumption					Total industrial roundwood consumption
	Sawnwood industry	Plywood industry	Veneer sheets industry	Total	Pulp industry	Woodchip industry	Particle- board industry	Fiber- board industry	Total	
1994	3.46	16.91	2.92	23.29	5.91	0.41	0.34	0.11	6.77	29.21
1995	4.03	18.55	2.86	25.43	9.10	0.21	0.36	0.12	9.80	34.53
1996	7.13	20.90	2.64	30.67	11.52	0.03	0.45	0.12	12.13	42.20
1997	5.23	13.76	2.26	21.25	13.76	0.19	0.55	0.12	14.63	35.01
1998	5.41	14.69	2.63	22.73	15.44	0.55	0.35	0.14	16.48	38.16
1999	4.12	9.47	2.07	15.66	16.63	0.22	0.24	0.73	17.81	32.28
2000	5.58	9.07	1.34	15.99	18.40	0.02	0.25	0.73	19.40	34.39
2001	1.35	4.42	0.19	5.96	21.00	0.42	0.37	0.73	22.52	26.96
2002	1.25	3.46	8.72	13.43	22.36	0.02	0.01	0.73	23.12	35.79
2003	1.53	12.47	0.58	14.57	23.37	0.14	0.12	0.73	24.36	37.95
2004	0.87	9.19	0.31	10.36	23.44	0.35	0.31	0.73	24.82	33.80
2005	2.94	9.30	2.02	14.26	24.60	0.39	0.16	0.73	25.87	38.87
2006	1.36	7.69	0.51	9.56	25.52	0.44	0.05	0.73	26.74	35.09
2007	1.17	6.93	0.60	8.71	26.23	0.21	0.00	0.73	27.17	34.94
2008	1.06	6.71	0.85	8.62	26.94	0.22	0.00	0.73	27.89	35.56
2009	1.42	6.02	1.38	8.81	27.64	1.11	0.00	0.73	29.48	36.46
2010	1.77	6.72	1.47	9.96	28.35	1.40	0.00	0.73	30.47	38.31
Total	49.68	176.25	33.35	259.28	340.22	6.35	3.55	9.33	359.46	599.50

Note: the timber consumption is presented here as roundwood equivalent (RWE).

Sources: Ministry of Forestry; Ministry of Industry; Indonesian Pulp and Paper Association statistics, various years.

(EUTR) on 3 March 2013, there has been an identifiable shift toward timber products with clear legality credentials (ITTO 2013).

2.3 Unclear size of the small-scale forestry sector

In Indonesia the small-scale domestic timber sector is considered as one comprising wood processing industries of the capacity of 6000 m³/year or less and associated timber supply chains. In practice however, the real size of the Indonesian forestry sector is uncertain, as is the actual timber demand, due to incomplete data about the number of small-scale forestry enterprises. According to the Ministry of Forestry (MoF) and Forestry Industry Revitalization Agency (BRIK), about 4000 small-scale timber businesses are registered as timber exporters in

Indonesia. However, it is common knowledge that thousands more are unregistered and export their products by passing them on to registered exporters for a fee (personal communication from Zulfikar Adil, BRIK, 2013).

A 2012 survey by the Ministry of Forestry Research and Development Agency (FORDA) showed that just in the Special Province of Yogyakarta alone, 71 out of 96 small-scale sawmills had not been registered with the Ministry of Industry and were therefore considered illegal (Astana et al. 2012). Adams and Asycarya (2012) estimate that there may be 10,000 small-scale sawmills and furniture businesses in Indonesia and these may be consuming up to 10 million m³ of timber a year (Klassen 2010).

2.3.1 Community forestry

Community forest enterprises (*Hutan Rakyat*) are one type of small-scale enterprises that are

increasingly important in the Indonesian forestry sector, as recognized in the five policy priorities for the Indonesian government mentioned above. They are considered part of the private forest and located on land that is classified as private ownership (*Yang Dibebeani Hak Milik*), as defined in the law UU 41/1999.

Community forestry is increasing significantly, particularly on the islands of Java and Madura. According to Nugroho (2010), there has been a growth of community forest areas of ±200,000 ha per year between 2003 and 2010, with a growth of standing stock of ±8.35 million m³ per year. While the exact figures of smallholders involved in tree planting, particularly in Java, are not available, some reports suggest that the size of private forests in Java is approximately 1.7 to 2.6 million ha (BPKH XI 2012). With the assumption that on average each household owns or manages 0.25 ha, this translates to 6.8 to 10.4 million households planting trees in Java. These numbers show that community forests will not only produce a large amount of wood in the future but also generate social, economic, and environmental benefits (Cossalter and Pye-Smith 2003; Maryudi et al. 2012; Porter-Bolland et al. 2012).

2.4 Complex small-scale processing sector

If the full range of downstream processing (i.e. family-based, small-scale furniture and handicraft production) is taken into account, the picture of the small-scale processing sector becomes even more complex. A study by CIFOR shows that in Jepara District alone (Central Java Province) there are about 15,000 small-scale timber businesses, which employ over 175,000 workers (Roda et al. 2007; Irawati et al. 2009; Melati et al. 2010). In addition, Ministry of Forestry (MoF) and BRIK data indicate that in Java alone there are 121,438 handicraft and small-scale furniture businesses that use timber (Sudharto 2012). At least another 30,000 such businesses are found in Bali. It is

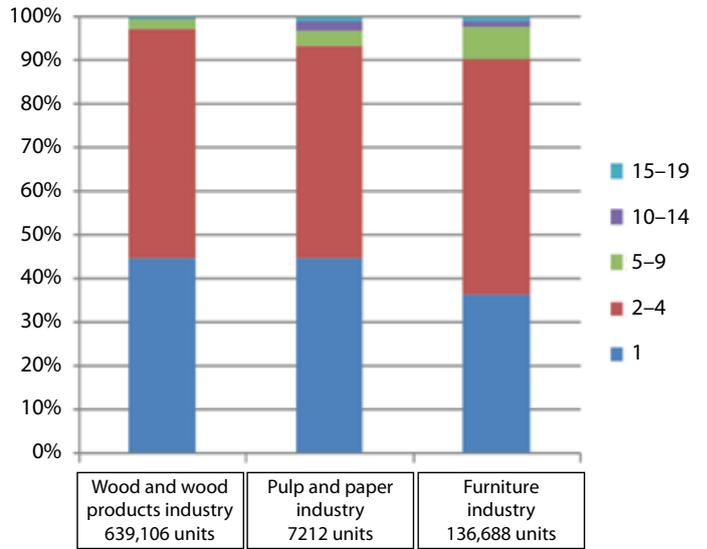


Figure 1. Number-of small scale timber enterprises in Indonesia.

Source: BPS 2011.

estimated that these small-scale businesses employ in the region of 750,000 people.

The numbers are significantly higher if the National Statistics Bureau (BPS) data on small-scale wood and handicraft enterprises are considered. According to the BPS, there could be up to 686,000 businesses of this kind, employing up to 1.5 million people (BPS 2011b).

While there is some evidence (as shown in the following sections) that the large- and medium-size companies are making advances toward legality verification and sustainable certification, including the compliance with SVLK, progress is much slower in the small-scale sector. Regardless of which figure above is right, it is clear that the number of small-scale businesses which will have to meet timber legality and VPA requirements is very large. The sector is complex in its structure, fragmented and in many ways undefined. Thus ensuring that this sector complies with the SVLK requirements is going to be highly challenging as discussed in the following sections.

3. The context of timber verification

3.1 Evolution of Indonesian efforts to fight illegal logging and related trade

The attention toward curbing illegal logging as one of Indonesia's key forest governance challenges has increased following the political changes of 1998 and the transition to democracy. The Government of Indonesia (GoI) developed regulatory frameworks, including the enactment of Law 41 of 1999 on Forestry that revokes the 1967 Basic Forestry Law, and established an inter-agency team to combat illegal logging and illegal forest product trade (Scotland et al. 2000). A number of joint operations among the Ministry of Forestry, National Police and Army have been carried out in many provinces in Indonesia (Luttrell et al. 2011). The Indonesian government currently has five forest policy priorities for the sustainable management of its forest resources; these are 1) curbing illegal logging; 2) conservation and rehabilitation of forest land; 3) restructuring of the forest sector; 4) community engagement and empowerment; and 5) clarifying land tenure.

The Indonesian government engaged in a number of initiatives to reduce forest crimes including introducing efforts to fight rampant illegal logging and trade, which was running virtually unchecked nationwide in the early 2000s. Indonesia became an integral part of the Forest Law Enforcement and Governance (FLEG) process supported by the World Bank (for example the FLEG Bali meeting in 2001), has engaged in the FLEGT VPA process and concluded several bilateral agreements for collaboration to reduce the illegal timber trade (Luttrell et al. 2011). It has also stepped up its own forest law enforcement efforts in the regions where illegal logging was rife (Luttrell et al. 2011; Nellemann 2012).

3.2 FLEGT Action Plan, European Union Timber Regulations and the VPA process

The EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, initiated in 2003, aims to reduce illegal logging through, in part,

improvements in forest governance and regulation in both producer and consumer countries. The FLEGT Action Plan includes a range of initiatives and actions targeting both consumer countries (through for example supporting the development of private and public sector timber procurement policies, financial regulations and market regulations such as the EUTR) and in producer countries with the implementation of Voluntary Partnership Agreements (VPAs). The FLEGT Action Plan thus incorporates a mix of mandatory and voluntary approaches, working on whole supply chains with both consumer and producer countries, to tackle the issue of production and trade in illegal timber products.

Central to the FLEGT Action Plan is the negotiation and implementation of VPAs — bilateral trade agreements between the EU and countries exporting their timber into the EU. The aim of these agreements is to guarantee the legality of all timber and timber products exported from the producer country to the EU. Thus central to every VPA is the Timber Legality Assurance System (TLAS), which consists of five core elements — legality definition; wood tracking system; verification; issuance of licenses; and independent auditing. The TLAS essentially identifies, monitors, and provides FLEGT licenses for legally produced timber, ensuring that only legal timber is exported to the EU. For forest legality verification to be effective, the 'forest governance system' in which the policies, legal framework and institutional architecture lie, must work in a coherent manner.

As of October 2013, there are six countries that have completed formal negotiations with the EU and are in the process of developing the TLAS agreed under each VPA, including Indonesia. Nine countries have entered into negotiations with the EU, with a number of other producer countries expressing interest in VPAs. To date, no country that has signed a VPA has yet finalized the system development and implementation phase and thus to date no FLEGT licenses have been issued. However, Indonesia is ahead of most of the other countries engaged in VPAs, and has now completed the system development phase, and is continuing with implementation.

Five of the six current VPAs have national-led systems, with only Indonesia opting for the operator-led system. The Indonesian system is based on an annual audit of each timber exporter's due diligence system. Mechanisms for publishing reports, receiving and responding to complaints, etc., as with any voluntary auditing system, have to be developed and effectively implemented. The more common, national-based system involves a government-led licensing and verification process, where authorities check evidence of legal origin for each timber shipment, rather than each timber exporter as with the Indonesian system. The Indonesian approach, although mandatory, thus draws on the experience and process of voluntary certification schemes.

Another output of the FLEGT Action Plan is the European Union's Timber Regulation (EUTR), which came into force on 3 March 2013. This regulation was brought into effect to reduce illegal logging by prohibiting operators in Europe from placing illegally harvested timber and products on the EU market. FLEGT licenses issued under a VPA will comply with the EUTR requirements for legality, and for operators in the EU buying FLEGT licensed products, it will mean that no further due diligence on the legality of the timber product will be required.

Through a long process that involved consultations with various stakeholders which could span into a 10-year period, the VPA agreement was signed between Indonesia and the EU on 30 September 2013 (see Annex 2 on key events that led to the signing). By signing the VPA, the Indonesian SVLK and its associated export licensing are expected to become FLEGT legality licenses, and thus will meet EUTR requirements for legal timber once the VPA is fully implemented.

3.3 Putting SVLK into context

The SVLK is the very heart of the VPA process since it describes the control systems to ensure legality, including independent auditing and monitoring arrangements, complaints and information management.

The SVLK is linked to the trade with the EU through a separate export licensing system called V-Legal (which will become FLEGT Timber License when the VPA is fully implemented). As it

currently stands, SVLK as such is not sufficient for compliance with the EUTR, as only FLEGT timber is recognized as legal. However, as mentioned above, with the completion of the VPA, Indonesian timber with a FLEGT license, will be recognized by the EUTR as legal.

On 1 January 2013, it became mandatory for wood panel, woodworking and pulp and paper industries to be compliant with the SVLK Indonesian certification scheme, with sawmill, furniture and handicraft businesses having until 1 January 2014 to meet the legality requirements under SVLK.

3.4 Regulatory changes for SVLK

In order to facilitate the implementation of VPA, the Minister of Forestry has issued a number of accompanying regulations relating to the obligations of upstream and downstream forestry operations. In June 2009, the Minister of Forestry issued Ministerial Regulation No. P.38/2009 on Standards and Guidelines for Evaluating the Sustainability Performance of Production Forest Management (PHPL) and Timber Legality Verification. This regulation obliged timber utilization permit holders and timber industries to implement sustainable forest management and timber legality standards. This was followed in December 2011, by the Ministry of Forestry Regulation No. P.68/2011 which required all timber industries with an investment value of less than US\$20,000 to fulfil SVLK verification. The subsequent Ministry of Forestry Regulation No. P.45/2012 specified 31 December 2013 as the deadline for SVLK verification among small-scale forestry and downstream processing enterprises. This is considered to be an ambitious plan given the large number of forest and timber industries to be assessed. With the Ministry of Trade extending the deadline for SVLK compliance for small-scale operators for another year, the Ministry of Forestry is revising the regulation about the deadline (Wibowo 2014).

Parallel with the extension for smallholders, and likely recognizing the continued challenge of reaching thousands of small-scale producers, the Ministry of Forestry issued the Forestry Regulation No. P.43/2014 which allows small-scale forestry enterprises, timber depots, and household-based industries to use a self-declaration document (*deklarasi kesesuaian pemasok* or supplier's compliance declaration) as a means of timber legality assurance.

3.5 Role of voluntary market measures such as certification

In the mid 1990s, in response to growing international concerns and high profile NGO campaigns, a number of private sector led, voluntary initiatives to tackle the trade in unsustainable and illegal timber products evolved. Private sector consumers, in particular some of the large European retailers and DIY stores, introduced initiatives to combat illegal and unsustainable timber products in their supply chains. At this time the 95+ Group, an industry and NGO initiative, was established and was instrumental in the establishment of the Forest Stewardship Council (FSC).

The two global voluntary certification schemes are the FSC and Programme for the Endorsement of Forest Certification (PEFC) which was established in 1999. Other certification and legality verification schemes have also evolved over the years, primarily to meet buyer requirements, address NGO concerns and later to meet regulatory requirements such as the US Lacey Act and the EUTR.

Such voluntary measures were developed in response to global concerns on illegal logging and trade to meet the needs of companies wishing to address NGO concerns, reputational risks and increasingly to

comply with growing market requirements. Although these schemes have overarching objectives to mitigate the trade in illegal and unsustainable timber, they were not designed or developed to resolve illegal logging issues globally. For example the schemes have to work within country frameworks to meet international requirements and unlike VPAs do not seek to address governance in the whole forest sector. The focus is on individual supply chains. Although there are examples of price premiums for some products that are certified, price premiums have not been widely accessible. This is especially so for legality verification which is seen as a norm in business rather than something which warrants a financial reward by the market.

3.5.1 Uptake of certification in the tropics

The world's certified forest area is approaching 10%. However after nearly 20 years, almost 92% of the world's certified forests are in the northern hemisphere, contrasting with only 2% of tropical forests that have been certified. During that same period, more than 290 million ha that have been certified (Table 2) have been destroyed and converted to non-forest uses (FAO 2010).

In recent years, the growth of FSC certification in Indonesia has been particularly encouraging. The total FSC certified forest area has more than doubled in

Table 2. Potential global and regional supply of roundwood from certified resources, 2010–2012.

Region	Total forest area (million ha)	Certified forest area (million ha)			Certified forest area (%)			Estimated industrial roundwood from certified forest (million m ³)			Estimated proportion of total roundwood production from certified forests (%)		
		2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
North America	614.2	199.8	201.0	198	32.6	32.7	32.2	194.6	227.5	224.0	10.9	12.8	12.7
Western Europe	168.1	85.0	85.3	95.4	51.2	50.8	56.7	261.7	201.0	224.7	14.6	11.3	12.7
CIS	836.9	29.9	44.3	47.5	3.6	5.3	5.7	5.8	8.5	9.1	0.3	0.5	0.5
Oceania	191.4	11.6	12.3	13.2	5.6	6.4	6.9	2.8	3.5	3.8	0.2	0.2	0.2
Africa	674.4	7.3	7.6	7.3	1.2	1.1	1.1	0.8	0.8	0.8	0	0	0
Latin America	955.6	14.4	16.1	14.7	1.6	1.7	1.5	2.7	3.2	2.9	0.1	0.2	0.2
Asia	592.5	8.6	8.1	9.5	1.5	1.4	1.6	3.4	2.8	3.2	0.2	0.2	0.2
World total	4033.1	356.7	374.9	385.5	9.0	9.3	9.6	471.8	447.3	468.6	26.4	25.3	26.5

Notes: 'World' is not a simple total of the regions. The double certification has been taken into account.

Source: Fernholz and Kraxner (2012).

the past two and a half years — from 833,000 ha in January 2011 to 1,679,117 ha in July 2013, and this is likely to be due to initiatives such as The Borneo Initiative (*Box 1*).

The uptake of certification in the tropical regions has been lower than expected. This is sometimes due to reasons outside the control of the private company, such as wider governance and social issues, and the cost of certification.

Barriers to tropical certification include:

- **Capacity and training.** Tropical certification requires specialized forestry experts to train operational staff on environmental and social issues (e.g. High Conservation Value Forests (HCVF), Reduced Impact Logging (RIL), participatory planning). However, the costs of hiring these experts are often not accounted for in any business model that might exist. The high turnover of operational staff in many concessions means that regular ongoing training programs are needed, and experts must be available to run them, incurring further cost to the company.

Box 1. The Borneo Initiative

The Borneo Initiative aims to boost the area of FSC-certified forest in Indonesia and surrounding countries by four million hectares in 2014 and a total of eight million hectares in 2016.

The Borneo Initiative was started in the Netherlands with the aim of boosting both supply and demand for legally and sustainably produced tropical hardwood. The Borneo Initiative offers timber companies in Indonesia and surrounding countries financial support as they undertake the process of gaining certification for their forestry management. In addition, it offers support in forging trade links with timber buyers in the Netherlands, Europe and the United States. The first agreements with logging companies were developed in 2010. Since then The Borneo Initiative has concluded agreements with 36 timber companies, together accounting for a forest acreage of 3.6 million hectares. Of these, 10 have since gained a FSC certificate.

The Borneo Initiative has resulted in a doubling of the acreage of FSC-certified forest in Indonesia.

www.theborneoinitiative.org.

- **Certification costs are high, including annual surveillance costs.** The 5-yearly certification audit costs are high. Larger and more remote concessions require higher fees. The annual surveillance certification costs are still relatively high and many concessionaires fail to take account of these costs in their annual business plan, if they have one. This makes both the resourcing costs of working towards certification and the certification audit costs very expensive.
- **Reliance of donor or philanthropic funding.** Tropical Forest concessionaires therefore tend to rely on a combination of philanthropic, donor (for example The Borneo Initiative) or private sector-funded forestry experts to train operational staff and potentially help with certification audit costs.
- **Robust economic business case required.** However, these schemes and programs to support certification are based upon the assumption that the concession will become economically able to sustain itself after certification. This is not always realistic, given ongoing resource costs and lack of revenue.

Thus, forest concessionaires sometimes struggle to make tropical forest certification economically viable, because they cannot maintain skills of operational staff without long-term philanthropic funding and may also not be able to secure significant profit from timber sales, to fund certification audit costs and skilled operational staff costs. Tropical timber producers are concerned about their difficulties in achieving certification status and the expected increase in production costs, while market benefits (for example price premiums) look uncertain.

3.6 Voluntary versus mandatory approaches

There are many issues limiting the uptake of voluntary certification schemes; some are beyond the sphere of influence of companies, for example the enabling regulatory framework and others are due to having a sound business case, the right expertise, and access to markets. Sustainable forest management certification, in many cases, requires concessionaires to reduce their output and this is often not a financially viable business model. However, as programs such as The Borneo Initiative show, progress can be made with certification with donor assistance. By its very nature, a voluntary scheme has a limited scale; it is focused on one forest concession, or one supply chain where the buyer is supporting the producer to become certified with the assurance of a buyer for the certified products.

As recognized by the FLEGT Action Plan, to resolve issues of illegal logging and trade a mixture of regulatory and voluntary measures, at both consumer and producers sides, is required. No single measure can be expected to work alone. For voluntary practices to work, often wider legislative and governance reforms are required, to provide an enabling framework within which voluntary private sector initiatives can operate at the producer side and a level playing field for legal timber products is provided in the market place.

In this way it is useful to see the VPA process as a way to support private sector voluntary approaches and not a replacement or something that operates in isolation from other initiatives. In fact, as discussed above, the SVLK approach is built on a voluntary certification model, with each node in the supply chain requiring verification of the SVLK requirements. The important difference is that, of course, SVLK compliance is mandatory.

The scope to reach actors with a mandatory scheme is obviously much larger than with the voluntary approach; however, without knowing the exact number of small-scale timber businesses and sawmills, it is very difficult to speculate how many can be reached and thus how effective the SVLK will be. The National Statistics Agency (BPS) has analyzed data on small-scale wood and handicraft enterprises, and believes there could be up to 686,000 small-scale businesses, employing up to 2.7 million people (BPS 2011b), with only a very small number of these actually registered. According to the Ministry of Forestry (MoF) and the Forestry Industry Revitalization Agency (BRIK), about 4000 small-scale timber businesses are registered as timber exporters.

Some of the challenges facing SVLK verification mirror those facing certification schemes but on a much bigger level. The test will be how to make SVLK succeed, where voluntary certification has been less successful.

4. SVLK — Implementation and progress

4.1 How does SVLK work?

The system was launched in 2009 through a multistakeholder process, where the involvement of government in certifying timber legality is moved to verification bodies (VBs). The VBs are monitored by the National Accreditation Committee (Komite Akreditasi Nasional, KAN). This system has adopted a mechanism similar to voluntary certification, but with legal mandate. Therefore it can be seen as a combination of market-based certification and government-sponsored legality framework (cf. Cashore and Stone 2012). SVLK is seen as an addition of the existing Timber Administration System (*Tata Usaha Kayu*, TUK) used in Indonesia since the 1980s. There are concerns that the existing paper-based legality assurance has limited resources for oversight (Syahadat 2006; Syahadat and Dwiprabowo 2008; Wells et al. 2008).

Since 1 January 2013, the Ministry of Forestry and Ministry of Trade of the Republic of Indonesia has enforced and imposed SVLK. It uses an operator-based licensing certification approach where, to achieve certification, conformity assessment bodies (CABs) must audit the legality of the operations of timber producers, timber traders, processors and exporters and ensure that companies audited operate in compliance with INDO-TLAS and have credible supply chain controls. Similar to voluntary certification systems such as FSC and PEFC, SVLK outsources the verification role to independent private verification bodies (CABs), which have been accredited by the National Accreditation Body, and which are appointed by the Ministry of Forestry to verify and assess the Legality Assurance System.

In October 2012, the Ministry of Trade issued Regulation No. 64/M-DAG/PER/10/2012 on Forestry Product Export Regulation, which classified forest products into two categories: Group A and Group B. Each category has a different mandatory date for achieving INDO-TLAS/SVLK verification:

- Group A: plywood, sawmill, chip wood, laminated veneer lumber (LVL) and veneer. This group category was mandated to have SVLK verification before 1 January 2013.
- Group B: furniture, woodworking, pulp and paper. This group category was mandated to have SVLK verification before 1 January 2014.

In December 2013, the regulation was revised by the issuance of the Ministry of Trade regulation 81/M-DAG/PER/12/2013, which extends the deadline for Group B for a year.

After then, every company or industry that exports its product will have to pass through the legality verification process in order to obtain “V-LEGAL” documents. If a company or industry has not been verified for its legality, then a CAB will carry out an inspection.

SVLK applies to all aspects of upstream and downstream forestry operations (Adams and Asycarya 2012). For upstream forestry operations (which include various forms of logging), the companies must have:

- concession or land ownership documents in legal order
- forest management plans (annual and 5-year concession work chart, logging block markers, timber stock chart, etc.) in legal order
- taxation, environmental impact assessment and other administrative documents in legal order.

If the upstream operations have procured or are in the process of obtaining the sustainable forest management certification from the Ministry of Forestry, they are automatically SVLK compliant.

Downstream operations, or wood processing companies, must have:

- a legal permit to operate, company tax registration, environmental impact assessment, timber supply plan and timber export license (ETPIK), etc.
- a system and documents in place to trace and document the supply of timber (Log Legality Certificate, Log Transport Invoice, Certificate of Origin for timber, etc.)
- a system and documents in place to trace and document the shipping of timber from the mills.

SVLK places particular emphasis on document legality adherence and the certification process is

envisaged to take no longer than 10 weeks (Adams and Asycarya 2012). The cost of the assessment process is estimated at IDR30–114 million (US\$3000–11,000) per certification, depending on the type and size of business and region (Ministry of Forestry 2010). Following the certification, annual surveillance is required. SVLK verification has to be renewed every 3 years. For small-scale enterprises under Group B, SVLK verification is expected to be valid for 6 years with bi-annual surveillance (personal communication from BRIK, 2013), however, this has not yet been agreed with the EU.

4.2 Implementation of SVLK

The SVLK legality standards apply to:

- state forests managed by national state-owned companies (BUMN), local government-owned companies (BUMD), and private, including IUPHHK holders of natural forests and plantation forests
- state forests managed by communities, including: community forestry (HKM), forest villages, indigenous forests, smallholder plantations (HTR)
- state forests which are not management unit based, including the holders of timber utilization permits
- forests rights / community forest / private forest and non-forest areas.

In order to facilitate the implementation of the SVLK, in October 2012 the Ministry of Trade issued Regulation No. 64, which divided Indonesian timber industries into two groups: A and B. As mentioned above, Group A comprises wood panel, woodworking and pulp and paper industries, which were to be SVLK compliant by 1 January 2013. In 2012, 670 Group A enterprises were estimated to export regularly, out of 2100 timber processing companies registered as timber exporters (personal communication from BRIK, 2013). The rest were thought to do so sporadically.

Group B comprises over 4000 registered sawmill, furniture and handicraft businesses. Group B enterprises have been granted an extension until 1 January 2014 to meet the legality requirements under SVLK. As a stop gap measure, between 3 March 2013 (when EUTR came into effect) and 1 January 2014, the Indonesia government aimed to rely on inspections as the legal basis for continued export to Europe.

4.3 Progress with SVLK and PHPL verification

Progress with SVLK verification in Indonesia varies across different forestry subsectors. *Table 3*, below, shows the number of units and number of hectares, that have been certified up to December 2013.

It can be seen that progress by the end of 2013 in industrial timber plantations (PHPL-HT and SVLK-HT in *Table 3*) was still a challenge. Out of 249 companies having timber plantation concessions in 2011, 95 companies have gone through PHPL and SVLK certification processes, of which 74 companies got certificates. In terms of areas, areas under PHPL and SVLK certification reached 5.2 million or approximately half of total timber plantation concession areas. In terms of commercial logging concessions (PHPL-HA and SVLK-HA), out of 292 companies that manage 23.2 million ha of concessions, companies that have received PHPL and SVLK-certification reached 115 companies covering approximately 12.1 million ha. The total number of SVLK certified companies (SVLK Industry) reached 629, while another 181 were undergoing assessment, making it likely that by end of 2013 up to 810 sawmills could be certified. A worrying issue is that only 40,500 ha of private forests have been certified. This figure is very low compared with the estimated size of private forests. In Java, private forest is estimated to reach at least 2.7 million ha (BPKH XI 2012).

National data and research findings from March 2013 show that progress with SVLK verification, while significant among large and medium enterprises, was still slow in the small-scale sector. Out of the 407 companies that had secured SVLK verification as of March 2013 from about 1000 officially active timber exporters, most of these were large- and medium-size mills.

In Central Java, for example, 69 entities, including four community forest farmer groups have secured certificates. In East Kalimantan, 21 out of 99 active forest concessionaires have secured SVLK verification or an equivalent (PHPL). Only two out of 31 active large-scale mills have been certified so far. According to the Information System for Timber Legality (*Sistem Informasi Legalitas Kayu* — SILK), a website dedicated to monitor the development of SVLK which is managed by the Ministry of Forestry, at least two small-scale industries have SVLK certificates in the province. In Papua, only six of 37 large-

Table 3. Progress with SVLK and PHPL certification as of December 2013.

Certification	Passed		Not passed		In process		Total	
	No.	Size (ha)	No.	Size (ha)	No.	Size (ha)	No.	Size (ha)
PHPL-HT	32	3,745,939	21	755,183			53	4,501,122
PHPL-HA	92	10,475,872	20	910,763	15	1,147,370	127	12,534,005
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			76	42,023
VLK-Industry	629		27		181		837	

Note: PHPL-HA is a sustainability certificate for natural forest concession; PHPL HT is a sustainability certificate for industrial timber plantation; SVLK HA is timber legality verification in natural forest concession; SVLK HT is timber legality verification in industrial timber plantation; while SVLK-Private Forest and SVLK Industry are timber legality verifications in Private Forest and Industry, respectively.

Source: Ministry of Forestry in Sugiharto (2014).

scale forest companies have SVLK certification or equivalent. SILK records two companies secured SVLK verification by 2014. There is no SVLK certification in the small-scale sector so far in Papua (Sudharto 2013). With only 14 accredited timber legality verification bodies in place, the deadlines for SVLK compliance are unlikely to be met even after it is extended for another year.

4.4 Issues with SVLK compliance

Even though there have been positive reactions from NGOs and the international community about the potential of SVLK in reducing illegal logging and deforestation in Indonesia, there are some generic issues with the implementation of SVLK affecting both large- and small-scale enterprises that need to be addressed to ensure and maintain the credibility of the system. The specific issues facing the small-scale forestry sector are discussed in the context of the case studies in the next section.

4.4.1 Lack of qualified and independent verifying bodies

Major concerns exist about the readiness of the Indonesian forestry sector to fully implement the VPA. Assuming that the 372 timber companies listed in Group A (SVLK Industry) were certified by the end of 2012, it will have taken 2 ½ years to assess and certify this comparatively small number of large-scale operators. There are another 298 of what is described as 'active timber exporters' and potentially 1430 more companies which export irregularly.

One of the reasons for the slow progress is that there are only 14 accredited SVLK verifying bodies carrying out timber legality assessments, while three more are in the process of accreditation (Adams and Asycarya 2012). Even though there are 14 accredited verification bodies for the timber industry, up to 80% of requests for certification are directed to the three largest companies (personal communication from BRIK, 2013). There are 13 accredited PHPL verifying bodies carrying out certification in logging and plantation concessions.

The sheer number of small-scale wood processing and handicraft businesses has led the government to seek alternative approaches. One such alternative is the Directorate General of Forest Production Development Regulation No. 577 issued in July 2012, which opens up the possibility for group certification for small-scale timber producers (Purnomo et al. 2014). It requires the small-scale operators to create cooperatives of at least 25 businesses. In February 2013, the Ministry of Forestry issued regulation P.13/ Menhut-II/2013, which stipulates the standard costs for PHPL and SVLK certification. The regulation divides the cost of group certification by the number of members. This means that certification for less than 25 members is also possible as long as they are able to cover the costs of SVLK certification.

4.4.2 Certification costs

All forest enterprises (producers and industry) are required to be certified. However, certification is costly (cf. Atyi et al. 2013). Initial costs of compliance and first audit are high, and relatively

more so for smaller companies, with additional surveillance cost every 2 years.¹ These costs are prohibitive for many producers and processors. Over the certification period (which is considered to be 6 years), carvers for example are expected to pay 70 to 90 million rupiah (US\$7000 to US\$9000) in certification and audit fees — costs that most middle-and small-scale producers will struggle to meet. This will reduce potential profit margins, either putting people out of business, or encouraging them to operate as an informal unregistered company.

In addition to the certification fees, under SVLK, all enterprises exporting to the EU market must pay documentation fees to prove legality for each of the stages from when a tree is felled in the forest, transformed into wooden furniture and shipped to Europe (CIFOR blog, 6 February 2013). Also, when taking into consideration the standard minimum wage (for instance, in Central Java it is about US\$76 a month), the cost of certification is almost prohibitive.

The Ministry of Forestry has committed to allocate budget to cover the first time certification cost for small-scale operators. However, this could become a huge challenge given the sheer number of small-scale operators. BPS (2011) estimates that there are approximately 750,000 small-scale timber processors in Indonesia. Assuming a group consists of 100 members, there would be 7500 groups to be certified. If each group, certification would cost US\$7000, the Ministry would require US\$ 52.5 million. The government has allocated IDR 3 billion (US\$300,000) from the state budget to help small-scale producers obtain SVLK certification, although this is just over 0.6% of the total costs. Although government and potentially donor support could be provided in the short term, the sustainability of certification will depend on the ability to cover the long-term costs and this needs careful consideration.

One way to reduce the costs of certification is for small-scale organizations to get group SVLK certification. However, there are a couple of issues that arise with group certification. There is inevitably a question of trust and integrity amongst members of the group, because if just one member does not comply with SVLK standards, the entire collective will be penalized. Additionally, farmers lose their flexibility to make decisions as to when to harvest, and so there could be a risk of reduction in community forestry as farmers may replace trees with agricultural crops such as snake fruit.

4.4.3 Lack of awareness of SVLK

Although the level of awareness and understanding of the VPA process and SVLK among large-scale operators was not high in 2012 (Adams and Asycarya 2012), among government officials in outlying districts and the small-scale timber sector particularly in East Kalimantan and Papua, the level of awareness and understanding of SVLK was very low (MFP 2011). Community forest farmers and small-scale industries in Central Java are improving their understanding of SVLK partly due to assistance provided by local NGOs under some donor projects. Nevertheless, smallholder timber growers are confused about the regulatory changes and obligations resulting from SVLK. Organizing small-scale timber enterprises into cooperatives for collective SVLK certification is also a challenge. As wood is a secondary income source, owners of community forests lack incentives to set aside the funds and time necessary for obtaining certification. The assistance from the Forest Stewardship Council (FSC) and Indonesian Eco-labelling Institute (LEI) that encourages voluntary certification is one reason why most small-scale forestry practitioners in Central Java have a comparatively better understanding of SVLK (Obidzinski et al. 2014).

¹ There could be a 2-year surveillance period for Group B SMEs, but this has not been agreed with the EU.

5. Challenges for small-scale forestry sector to comply with SVLK lessons from the three case studies

This section looks more specifically at the challenges facing small-scale enterprises to comply with SVLK and at a more basic level in operating legally, drawing on the case studies of Papua, Borneo and Java.

5.1 Case study: Papua

The area of forest in Papua province is 30.4 million ha or approximately 74% of the province (Minister of Forestry Decree No. 458/Menhut-II/2012). Papua, together with Aceh, is a province with special autonomy, where an important element of it is the recognition of the existence and importance of indigenous communities. There is a Papua People Assembly (Majelis Rakyat Papua – MRP) in addition to the ‘standard’ legislative body. MRP is a cultural representation of the people of Papua. Another important implication from being a region with special autonomy is related to the shared revenues, where Papua province gets higher shares of natural resource revenues, particularly from oil and gas. In terms of government administration, the governor is important in decision making that affects forests in the province.

Table 4. Area of production and plantation forest.

Total area of production forest	14.8 million ha
Production forest & limited production forest	10.7 million ha, 5.5 million ha of which are subject to concessions, mainly natural forest utilization concessions or IUPHHK-HAs ^a
Convertible production forest	4 million ha
Industrial plantation forest / community plantation forest	5.2 million ha

a The allocation of natural forest utilization concessions (IUPHHK-HAs) began in the 1980s.

Source: Ministry of Forestry, 2012.

In 2012, 29 HPH and two HTI companies were granted forest timber utilization permits on this production forest, including several companies operating around the Digoel River in the southern part of the province (see *Figure 2*). Of these 31 companies, only 17 are active on a total area of 3.6 million ha. Of the 14 inactive companies, seven with an area of 1.3 million ha are stagnant, and seven more with an area of almost 1.1 million ha have yet to begin operations.

5.1.1 Complicated roundwood supply channels

In relation to the location of the forest production areas (HPHs), the large sawmills are distributed across the region (see *Figure 2*), adding a level of complexity to the clarity over the origins of wood products when assessing its legality and sustainability. As an example, in Jayapura district 15 operational sawmills were recorded; however there are no HPHs, which are supposed to be the suppliers of roundwood, in the district. A similar situation is apparent in Nabire district where there is only one HPH concession, with nine recorded sawmills. The opposite is the case in Mimika and Waropen districts, which have several active HPH companies, but no large sawmills operating there. There is huge demand for wood in Merauke compared to other districts, probably related to the presence of a large-capacity woodchip plant, as its industrial plantation forests have yet to start producing timber.

Since 2008 the Papua provincial government has applied a ban of selling roundwood outside Papua province. This ban has forced roundwood producers to only market their products to industries in Papua province or to reduce their logging production. The effects of the ban are echoed in the figures — in 2011, Papua produced 531,000 m³ of logs, well below its annual target of 1,250,000 m³.

Based on forestry office data, 70 sawmills were recorded in Papua province in 2012. These consisted of six with annual capacities in excess of 6000 m³ and 64 with licensed annual capacities between 2000 and 6000 m³ (Papua Province Forestry Office

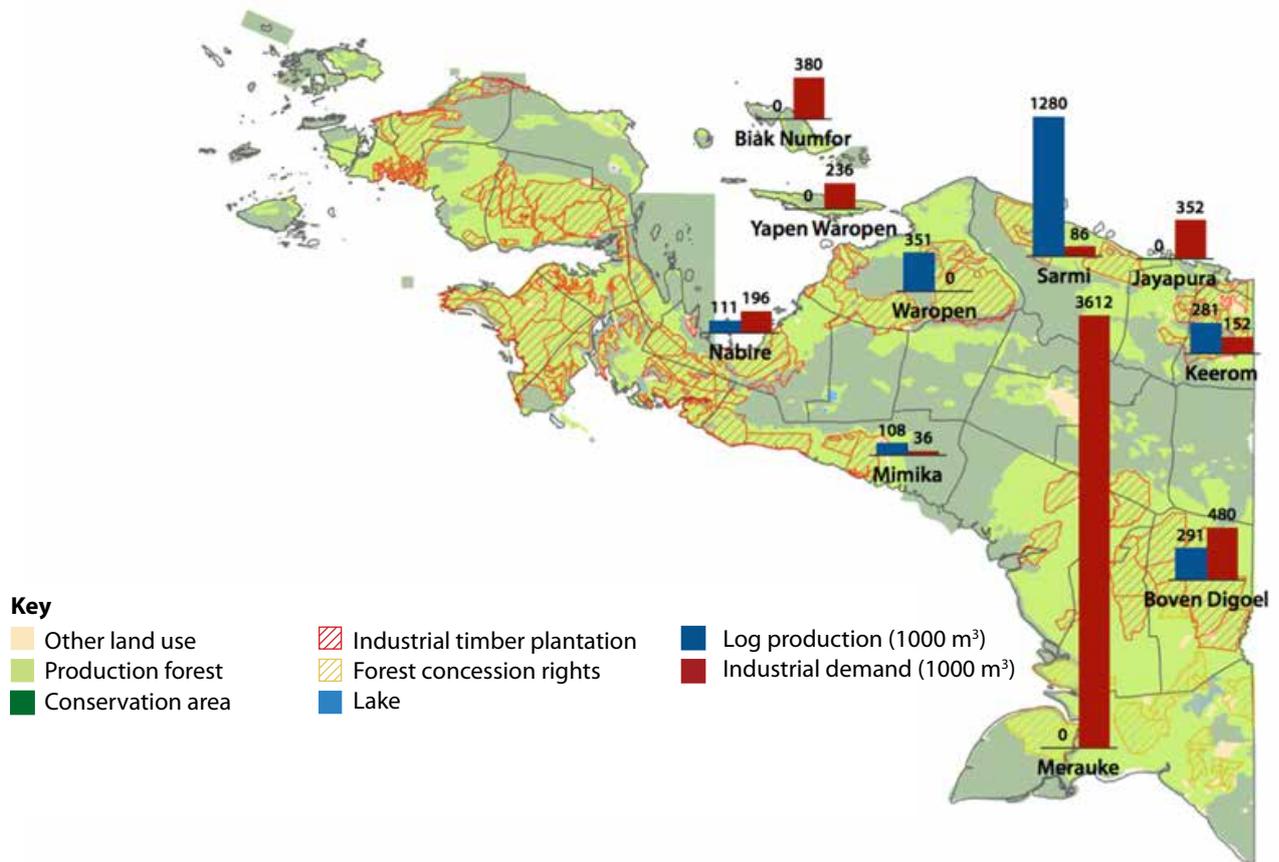


Figure 2. Distribution of forest timber utilization companies, log production and industry raw material requirements in Papua province in 2012.

Note: Log production figures are based on company RKT annual work plans set by the Ministry of Forestry.

2012). However, of these 64 sawmills only 31 were reportedly still active with a maximum total annual production capacity of 174,600 m³. Although no data were recorded on small sawmills with annual production capacities below 2000 m³, provincial and district government sources estimate that such mills may number up to 500 (personal communication from the Provincial Forestry Bureau and APHI Papua, 2012). The three districts for which data are available have a total of 139 sawmills (Merauke, 18; Mimika, 44; and Nabire, 77). Since the total number of districts in Papua is 29, the number of small sawmills operating throughout the province is likely to be significant (Andrianto et al. 2010).

The main products produced were sawn timber, moldings and plywood. Over the past 3 years, woodchip mills have been set up in Papua with an annual production capacity of 1.8 million m³.

5.1.2 Deviation of terms for IPHHK permits

Small-scale logging was formally recognized in Papua in 2002, when the governor issued regulation No.

522.2/3386/SET allowing customary communities to operate small-scale logging permits, called IPKMA, for up to 1000 ha for the duration of 1 year. By 2005, 247 permits had been issued covering a total area of 232,780 ha (Dinas Kehutanan Provinsi Papua 2008). However, due to allegations of widespread illegalities, in 2005, IPKMA permits were revoked by the central government (EIA and Telapak 2009).

In 2009, the governor of Papua issued a special regulation which revived small-scale logging permits but on a much reduced, more local scale. These permits, locally known as IPHHK, authorize the permit holders to harvest up to 20 m³ of timber per year. There is no unified register of how many small-scale logging permits have been issued since 2009, but the Provincial Forestry Bureau (*Dinas Kehutanan Provinsi Papua*) estimates that up to 1000 IPHHK permits may be issued annually (Dinas Kehutanan Provinsi Papua, personal communication). This is plausible, as the CIFOR survey shows that in 2011, 160 permits were issued in Mimika and 115 in Nabire alone.

Special IPHHK permit holders are allowed to 'trade' their timber legitimately within the province. However, there are a number of limitations with the IPHHK system that have led to their misuse. Each permit is limited to 20 m³ of timber production; however, in practice it is estimated that three times this volume has been produced through reuse of permits in particular. Higher volumes produced are one way to offset the high transaction costs (organizing permits, landowner permissions, etc.); costs of checks and measures by forestry officers; infrastructure costs (work huts and logging trails, recruitment of staff); forest levies and the required 10 seedlings to be planted and maintained. These costs are felt to be disproportionate to the profits made.

Additionally, IPHHK permits should only be allocated for producing wood to meet the needs of the local community, but in practice sawmills in the district rely on logs extracted by IPHHK permit holders. When then transported from the forest source to sawmill, timber from IPHHKs often do not have the relevant transportation documents.

5.1.3 SVLK developments and issues in Papua province

As of November 2012, of the 29 HPHs and two HTIs operating in Papua province, only five companies had secured PHPL certification and only one had obtained an SVLK certificate (Ministry of Forestry 2012). From interviews, 26 companies showed no interest in SVLK verification, seeing it as an additional burden, adding to already high operating overheads.

SVLK verification

From the field work, holders of IPKs and small-scale forest utilization permits such as IPHHKs expressed no need to obtain SVLK verification. Furthermore, several companies stated that issues concerning the location of their operations and unclear boundaries may prohibit their ability to gain SVLK verification. In practice, felling, transportation and circulation of logged timber, including marking trees and wood administration, apparently do not follow set procedures and systems, while legally, clarity of location and suitability of logging and transportation procedures are principles that must be fulfilled in timber legality verification.

Downstream only four of six large-scale sawmills had secured SVLK verification (Ministry of Forestry Timber Legality Information System, accessed 26 March 2013). These industries are required to have timber legality certificates because they export their products directly.

Increasing number of timber kiosks operating as sawmills

To accommodate wood produced by IPHHK permit holders, regional governments organized procurement of timber kiosks under Papua Governor Regulation No. 18 / 2010. Timber kiosk licenses are valid for 1 year, are extendable, and are issued for storing wood allocated for local needs. Quotas set for timber kiosks are 1500 m³ a year. In practice, however, as there are no wood management records or routine monitoring of the flow of timber through these kiosks, the forestry office does not know for certain how much wood each kiosk sells or what the total sales volume for the district is. In Nabire in 2012, 53 timber kiosks were registered with

Table 5. Timber legality certification developments in Papua, November 2012.

Business unit	No. of companies	No. of companies with SVLK certification
Large scale:		
HPH	29	5
HTI	2	1
IPK	0	None
Sawmills, capacity above 6000 m ³ /yr	6	4
Small scale:		
IPHHK	Up to 1000	None
HTR	4	None
Forest under rights	2	None
Sawmills, 2000–6000 m ³ /yr	30	None
Sawmills, less than 2000 m ³ /yr	Up to 500	None

Sources: Papua Province Forestry Office (2011) and 2012 CIFOR survey data.

the forestry office, but during surveys, 81 operational timber kiosks were recorded, with a theoretical 121,500 m³/yr capacity. This is compared with just one large sawmill (over 6000 m³) and seven medium sawmills (under 6000 m³).

Timber kiosks in practice function as unlicensed sawmills. Although permits for sawmills with annual capacities below 2000 m³ can be secured by individuals using *Surat Izin Tempat Usaha* (SITU) and *Surat Izin Usaha Perdagangan* (SIUP) documents, permits must be holders of Primary Industrial Wood Forestry Product Business Licenses (IUIPHHKs) and involve the provincial office and the Ministry of Forestry. However, because these IUIPHHK permits have yet to be granted by the provincial office, the district government tends to leave timber kiosks to operate as sawmills. Timber kiosks also act as sawmills to produce lengths, planks and moldings. Their raw materials are sourced from IPHHKs and unlicensed loggers. From observations, in 2011 and 2012 there was an increase in activity from timber kiosks.

Informal payments

In addition to formal payments that businesses are required to pay, such as IUPH (forest product utilization business permit fees when they obtain HPH or HTI permits), reforestation funds (DR) and forest resource rent provision (PSDH) on the forest products they harvest, there are a number of additional informal fees that companies are reportedly required to pay. These include: payments for organizing permits, field checks and documents varying from IDR 10 to 30 million for each inspection visit; and unofficial routine payments to security officers, village heads, customary chiefs, subdistrict heads and local newspapers every month. These payments have to be made to help the companies' timber businesses to run smoothly on the ground and to ensure that there is no disruption to operations in the field.

Conflicting data

Data from surveys conducted in 2011 and 2012 by the CIFOR project team on the number of companies differs from data from the Papua Province Forestry Office. Upstream, in addition to the one HPH and one active IPK recorded in the provincial forestry office, another IPK was found to be operating without formal registration. In addition, 122 IPHHK and three Forest User Rights permits for *Hutan Hak* or Private Forest granted by the district government were not recorded in statistics issued by the provincial forestry office.

Conflicting data also apply for downstream industries. The provincial forestry office reported only five active operational sawmills, but surveys conducted in 2011 and 2012 found one large sawmill and seven others with annual production capacities below 6000 m³ operating with substantially high levels of production. Of the eight active sawmills registered with the district forestry office, only three work with HPHs, while the rest rely on raw material supplies from holders of permits issued by the district government, such as IPKs, Forest User Rights and IPHHKs, and also from unlicensed loggers.

Communal land-owning communities

Communities, with communal land, in general are willing to accept the informal sector to work on their land. Firstly because they are usually more flexible, and secondly because the amount of compensation they receive is higher than they get from the HPHs or IPKs operating on their land. Communal land-owning communities receive IDR 150,000 per m³ (US\$12.50) as compensation for small-scale operations, while HPH or IPK permit holders only pay compensation based on a governor decree at IDR 50,000 (US\$4) per m³. Thirdly, communities that own communal land are more aware of the flow of wood from their land and feel satisfied with the sincerity of those cutting down trees.

5.2 Case study: East Kalimantan

Forest areas in East Kalimantan cover 14.7 million ha or approximately 70% of the total area of the province. Of these areas, production forest makes up 9.7 million ha, of which 7.5 million ha is managed under natural forest logging concessions (IUPHHK-HA²), plantation forest concessions (IUPHHK-HT) and ecosystem restoration permits (IUPHHK-RE) or set aside for community plantation forests, community forests and village forests. The area of production forest not subject to concessions is 2.2 million ha (Ministry of Forestry 2012). East Kalimantan is one of the provinces that no longer has convertible production forests (HPK), which are areas with significant potential as sources of timber production for industries. This deficit has led to roundwood supply being sourced from the informal sector.

2 *Izin Usaha Pemanfaatan Hasil Hutan Kayu dalam Hutan Alam.*

Registered forest timber product industries consist of sawmills and plywood, veneer and woodchip plants with annual production capacities of up to 2000 m³, from 2000 to 6000 m³ and above 6000 m³ (East Kalimantan Provincial Forestry Office 2012). Table 6 shows the number and capacities of sawmills and potential wood raw material requirements.

The total raw material realization for all sawmills was more than 3 million m³ in 2012. The largest volume was in 2011, at more than 3.6 million m³. This means roundwood supply capacity only reached 20% of the potential total raw material requirements of large sawmills registered with the East Kalimantan Province Forestry Office. This shortfall between total supply of roundwood and total industry installed capacity has led to a demand in roundwood supply that has to be sourced from the informal sector. However, this creates a policy issue, as the industry should be downsizing and not seeking to find new supplies of raw material.

The CIFOR survey work focused on Berau and East Kutai districts in East Kalimantan. With a total area of 2.2 million ha, Berau district has areas of forest comprising production forest, limited production forest, protection forest and other land use areas. An estimated 80% of the roundwood produced from the four operational IUPHHK-HA concession holders, the two operational IUPHHK-HT concession holders and the seven IPK holders is destined for East Java, while a minority is used to meet the needs of timber processing industries in Samarinda, Balikpapan and local markets. Local markets can only absorb small amounts as local industries cannot compete for wood pricewise. As shown in Table 7, only some HPH, HTI and large-scale sawmill

Table 6. Production capacity of sawmills with annual production capacity from 2000 m³ to 6000 m³ per annum and their raw material requirements.

Product type	No. of industries	Maximum production capacity	Potential raw material requirement (RWE)
Sawn wood	96	889,326	1,368,194
Plywood	18	1,836,757	2,825,780
Veneer	7	283,300	544,808
Woodchip	5	7,314,365	12,190,608
		10,323,748	16,929,390

Note: RWE = roundwood equivalent.

Source: East Kalimantan Provincial Forestry Office 2012.

companies have secured certification. Generally, only 17% of all concessions and large-scale sawmills have timber legality certificates. As yet, no small-scale sawmills with annual capacities below 2000 m³ or from 2000 to 6000 m³ have SVLKs.

With an area of around 3.57 million ha in total, approximately 66% of East Kutai district is still dominated by extensive areas of forest, comprising production forest (1.04 million ha), protection forest (0.32 million ha) and convertible production forest (0.73 million ha). Although they only have old machinery and vehicles, the majority of the six IPK permit holders carrying out activities in the seven registered and active HPHs reached their production targets in 2011 and 2012. Most of the HPH, IPK and HTI owners sell their roundwood to Java, and distribute the remnants to Samarinda and to local businesses. Community timber (*Kayu Rakyat, KR*) is sold locally and to surrounding areas. Planks and lengths of wood are sold to timber kiosks. Chainsaw milling businesses only serve local community needs and local molding and furniture businesses. It has been estimated through interviews with the forestry office that an estimated 70% of roundwood is shipped to Java.

5.2.1 SVLK developments in East Kalimantan

Thus, one major problem faced in encouraging sawmill developments in the forestry sector in East Kalimantan province is the lack of raw material supply from legitimate sources. The appearance of a government regulation obliging all sawmills and raw material suppliers to have timber legality certificates has provided its own challenge for business practitioners in the province.

Table 7. SVLK status developments in East Kalimantan, 2012.

Business type	Number	No. of companies with timber legality/PHPL certification
HPH	75	18*
HTI	24	3
Large-scale sawmills (above 6000 m ³ a year)	31	2
Small-scale sawmills (below 6000 m ³ a year)	73	0

Note: *There are 18 active PHPLs and 28 more companies are undergoing the evaluation process.

Source: Ministry of Forestry 2012.

5.2.3 Issues for consideration for SVLK implementation

Unofficial fees

In addition to the official fees applied to HPH, HTI and IPK concession holders such as IIUPHH (Forest Product Utilization Business Permit fees), there are a number of unofficial fees to be paid. These include organizing permits, field checks, documentation (varies from IDR 10 to 30 million per visit, US\$840–US\$2500); and payments to security personnel, village heads, customary heads and subdistrict heads (from IDR 500,000 to 1.5 million a month, US\$42–US\$125 for molding and furniture businesses, and up to IDR 5 million a month, US\$420 for large-scale sawmills). Assuming there is one visit every year, the unofficial fees could translate as approximately US\$1400–US\$7500. As in the Papua case study, these payments are made to help the companies' timber businesses run smoothly on the ground and to ensure that there is no disruption to operations in the field. In annual terms, SVLK certification cost might be smaller. However, being SVLK certified does not guarantee that the unofficial fees will disappear.

Sawmills and chainsaw milling

Community timber utilization (*Kayu Rakyat*) and chainsaw milling enterprise operational activities are characterized by small amounts of capital, no management planning and use of traditional methods. Chainsaw milling activities operate to meet the raw material needs of the surrounding area (i.e. village building material requirements), supply downstream industries such as molding and furniture businesses, and meet the needs of the timber kiosks in district capitals.

In some villages, chainsaw milling is the main income source as it is better paid than work in palm oil plantations, for example. However as informal workers, they have inadequate rights as workers, uncertain working hours and no clear standard wages. In East Kutai district for example, chainsaw milling generates substantial income for its workers compared with other enterprises, as most of the sawn timber they produce is a high quality *ulin* sold for IDR 3 million (US\$250) per m³.

Chainsaw milling is important in the Berau district for both employment and income, and also in terms of the volume of timber produced. In some areas of Berau district, for example Gunung Sari and Teluk Sulaiman villages, about 75% of families depend on chainsaw milling as the main job and an important

source of income for meeting daily needs. The number of villagers working as chainsaw millers is estimated at 1100 in Berau district. This estimate is based on surveys which recorded 275 chainsaw mills. Based on calculations that if every group produces 1 m³ of sawn wood a day and works for 20 days a month, the total volume of timber produced for 2012 would have been approximately 55,000 m³ (110,000 m³ RWE).

Berau local district market is supplied by informal industries such as molding, furniture and timber kiosk businesses, consuming more than 10% of total industry consumption in 2012. The three industries act as an alternative affordable source, compensating for the limited formal timber supply from which a proportion goes to Java. Raw materials for all molding and furniture businesses in Berau district come from chainsaw milling.

In East Kutai district, the number of large and small sawmills actively reporting raw material supply production to local forestry offices is 23 out of a total of 63. However, only seven were operational in July 2012, two down from those operational in 2011. Although their raw material requirements are also met by community timber utilization (KR), HPH, IPK, oil palm and coal mining companies, a number of companies were not operating as they had been caught using illegal raw materials and had been shut down.

The number of molding and furniture companies registered with the East Kutai District Trade and Industry office is 25 and 20 respectively. However, CIFOR survey results found 40 molding and 33 furniture companies — almost twice the number of those registered. They have adapted to community demand and now sell planks or lengths of wood using rough timber from chainsaw milling carried out by local villagers, as well as the roundwood waste from oil palm estates.

Supply of roundwood

Sawmills face difficulty in securing roundwood locally. Raw material utilization reports are always lower than the targets set by companies, indicating their difficulty in securing raw materials from roundwood producers in the region. Most raw material supplies for formal industries come from collaboration with local HPH, HTI and IPK concession holders, and a minority from private forest (*Hutan Hak*) or community timber (*Kayu Rakyat* (KR)). *Hutan Hak* and community timber contributed to around 6% of total roundwood

production. Community timber permit holders also manage timber by using contractors who have heavy machinery or transporter trucks. Community timber and land clearing SKAUs (*Surat Keterangan Asal Usul*, Use of Origin Certificate) can reportedly cause high levels of degradation to remaining forest stands.

The lack of supply is exacerbated by the low productivity (as a result of lack of employees and poor machinery) both in sawmills and chainsaw millers. Recovery rates for sawmills, both large and small scale, are between 35 and 45%.³ This is different to recovery rates reported to forestry offices. Through interviews, it has been discovered that sawmills regularly manipulate recovery rate figures, making them higher than those set by the Ministry of Forestry, and thus it is possible that the timber raw material supplies reported were lower than the volumes actually used.

In 2011, in East Kutai district, seven out of 15 registered HPHs were still operational. Up to July 2012, roundwood production reached 152,000 m³ and thus the estimated volume of roundwood production for East Kutai in 2012 is the same as for 2011, approximately 200,000 m³. Roundwood in East Kutai district is also sourced from IPKs, of which there were six operating in 2012, and from community timber (*Kayu Rakyat*, *KR*) permits in forest under rights (*Hutan Hak*).

Timber kiosks

There are 24 timber kiosks in Berau district, half of which operate without licenses even though they only require business and trading permits. Their raw material requirement is more than 23,000 m³ every year. To meet village building material requirements, villagers can buy or order wood from chainsaw milling businesses. Wood taken to timber kiosks is reportedly escorted by, or even owned by local security officials who get wood from chainsaw milling, either by buying it, confiscating it or having their own chainsaw milling crews.

Other SVLK developments in Berau district

Of all the HPHs in Berau district, four: *PT Rizki Kacida Reana*, *PT Inhutani I Segah Hulu Unit*, *PT Inhutani I Sambarata Unit* and *PT Utama Damai Indah Timber* have secured PHPL certificates (Ministry of Forestry, BP2HP, 2012). However, in the upstream sector, not one sawmill, either large or small scale has timber legality certification. Three large companies, *PT*

Kertas Nusantara, *Maluang Raya UD* and *CV Sungai Berlian Jaya*, which should have the financial capacity to cover the costs of organizing certification, have also yet to secure SVLK certificates.

Less than half of a total of 15 active HPHs in East Kutai have obtained timber legality certificates. In 2012, only one of the seven had an active SVLK, whilst in the other six the SVLK certificate had already expired. None of the sawmills or processing industries have SVLK certificates, and more than half of them do not even have the various documents required, including TDI/ SITU/ SIUP / TDP documents, to obtain SVLK verification. Again there is a low level of awareness of SVLK; nevertheless, a minority responded positively to SVLKs saying they had to be regulated to facilitate the continuation and smooth running of their businesses. A similar situation was true for government forestry and trade and industry offices; in the forestry office, only division heads understood SVLKs.

5.3 Case study: Central Java

Central Java is one of the most important provinces in Indonesia's woodworking sector. Community forests have developed rapidly in the province, alongside the development of state forests by *Perhutani*, the state-owned company responsible for managing state forests on Java. It covers an area of 3.25 million ha, around 636,000 ha of which is Perhutani-managed state forest. This area of state forest includes around 362,000 ha of production forest and 184,000 ha of limited production forest while the remainder is protection forest (Central Java Bureau of Statistics 2012). At the end of 2012, it was reported that the area of community forest in Central Java was at least 743,000 ha (Finesso 2012). Consequently, the area of community forest in Central Java is greater than that of production forest managed by Perhutani.

Central Java is also one of the central hubs in Indonesia for wood distribution. Data gathered from 18 Production Forest Use Monitoring Agency (BPPHP) offices show increases in the amount of wood entering Central Java over the past few years from 87,000 m³ of wood in 2009 to 319,000 m³ of wood in 2011. However, despite this large increase, proportionally it is still small compared with timber supplied through local production in Java, as community forest timber production reached almost 1,355,600 m³ in 2011 (Central Java Province Forestry Office 2012).

³ Based on interviews and measurements on the ground by the CIFOR project team, 2013.

5.3.1 Sawmills

In 2011, Central Java Forestry Office reports showed that 553 sawmill businesses operated in the province, 358 (65%) of whom were those with annual capacities below 2000 m³. Although this represents a large proportion of all sawmills, 42 sawmills with annual capacities greater than 6000 m³ account for 1.8 million m³/yr of production capacity, or 60% of the total production capacity of the industry.

The raw material requirement of sawmills in Central Java in 2011 was reported by the Central Java Forestry Office as being 4.68 million m³ with 90% of the sawmills in the district producing sawn wood, and the remaining 46 sawmills producing plywood, veneer or a combination of these products. However, there is a lack of good statistical data and this is apparent when looking at the production figures for woodworking. It was reported by BPPHP for the January–October 2012 period that woodworking production had increased to more than 60 times that for the previous year, and BPPHP's reported sawn wood production for 2011 is almost four times higher than the 935,000 m³ national production reported by the Ministry of Forestry for the same year. This difference could just be due to the fact that sawmills with annual production capacity below 6000 m³ are not reported in Ministry of Forestry statistics.

5.3.2 Timber supply and demand

In addition to its sawmills, Central Java, and particularly Jepara, is known as a center for Indonesia's furniture making industry. A census conducted by CIFOR in Jepara showed around 15,000 furniture producers in the district (Roda et al. 2007; Irawati et al. 2009; Melati et al. 2010). Furniture industries in Jepara are estimated to require around 900,000 m³ of raw materials annually (Purnomo et al. 2011).

By comparing timber supply volumes with raw material requirements of the timber industry in Central Java, it is apparent that even with the additional timber entering Java, timber supply is far lower than industry requirements.

5.3.3 Key findings from Central Java

Surveys were conducted in three districts: Blora, Wonogiri and Wonosobo. It was found that community forest farmers in Blora and Wonogiri districts generally plant teak, while most farmers in Wonosobo plant sengon. In general, there is clear ownership of planted land which minimizes illegal

logging and farmers generally replant trees after others are cut down, implement a selective cutting system and apply felling techniques, which is all beneficial for sustainability. It was confirmed that the role of wood was mainly as a 'rainy day' income source for farmer. Between 80% and 95% of farmers in the three districts only cut trees when there was an urgent need for funds — this practice is called *tebang butuh*. High levels of community forest timber trading in Wonosobo are made possible by the presence of sawmills, which consume a lot of wood produced by local community forests.

SVLK compliance

Central Java is one of the provinces which has benefited from extensive attention in Indonesia's preparation of SVLK by central and provincial governments. Also a number of NGOs have facilitated awareness raising and training to community forest farmers and industries to help prepare them for SVLK certification. Farmer groups in Central Java made up two of the first 11 recipients of SVLK certificates in Indonesia, which were issued in November 2011 (as discussed in more detail below).

Number of certificates issued

Up until May 2013, data from the Ministry of Forestry's Timber Legality Information System (SILK) listed 48 holders of Forest Timber Product Processing Industry Business Permits (IUIPHHK). However, another source reports that by March 2013 only 58 entities have secured an SVLK (Mongabay 2013). Four community forest farmer groups have obtained SVLK certificates, two of these — the *Jati Mustika* Forest Farmer Group Association (*Gapoktanhut*) in Blora and the *Joko Madu* Community Forest Owners Association (APHR) in Wonosobo — were two of the first community forest management entities to secure SVLK certification in November 2011. On the positive side, *Jati Mustika's* SVLK status was revoked because it has secured certification of a higher level than SVLK, i.e. Sustainable Community-based Forest Management (*Pengelolaan Hutan Berbasis Masyarakat Lestari* (PHBML)) (Arupa, 2012).

It is worth noting that these two community forest farmer groups were recipients of third-party funding to cover certification costs. The government (Ministry of Forestry) is currently providing funds to cover the costs of preparing certification and providing groups with their initial certification. It has been proposed that instead of an annual surveillance, with related costs, that SMEs from

furniture, woodworking, pulp and paper — Group B — carry out surveillance every 2 years. This has not yet been agreed by the EU though.

The Java Certified Wood website in November 2013 listed 17 woodworking companies, seven sawn wood companies, four furniture companies and four roundwood producers. The remaining 36 companies produce more than one product. Some, for example *PT Albasia Bhumiphala Persada* in Temanggung, are recognized as plywood and parquet companies. However, the number of primary industry companies (68) with SVLK certificates is far lower than the number of primary industries registered with the Central Java Forestry Office (553).

The implementation of SVLKs for primary industries began in January 2013. Most small-scale industries and private forest managers have trouble obtaining SVLK certificates. By December 2013, only 64 management units of private forest and 33 small-scale timber industries had been involved in the assessment process towards SVLK certification (Noviani, 2013). This is a very small number compared with the actual number of furniture producers and companies that will need certification by the end of December 2013. Jepara alone has more than 15,000 operators.

Community forest group surveys

For community forest farmers in Wonogiri who have already obtained sustainable community-based forest management voluntary certificates from the Indonesian Ecolabelling Institute (*Lembaga Ekolabel Indonesia* (LEI)), the obligation to secure SVLK verification is perceived as an additional burden. Their perception is based on some arguments. First, LEI community-based forest management is perceived as being equivalent with the PHPL certification standard. PHPL is deemed as having a higher degree than SVLK, because forestry operators who already have PHPL certificates do not have to carry out a SVLK certification audit. Second, farmers have complained that having a LEI certificate does not guarantee a higher price for their timber (Putri 2013).

SVLK implementation assumes that practitioners focus on their enterprises and act like business entities with commercial motives. In reality, it is extremely difficult to position community forest timber in the framework of a profit-oriented business. For farming households in the three districts, timber is a source of income for urgent subsistence needs, with farming and non-farming activities providing cash for daily needs. In some cases where alternative uses

of the land exist, communities are considering not replanting trees after harvesting, thus shifting away from forest production, for example in Wonosobo where communities are considering replacing sengon trees with snake fruit. This could have knock-on implications for industries such as plywood, where supply could be reduced.

One positive impact of SVLK implementation in the three research districts in Central Java, was signs of improvements in wood management at the farmer group level. There has been an increased effort to record data on the area of community forest and timber ownership, and species and volumes of wood owned by farmer group members, which will make it easier to trace wood when it is traded. Group members also learnt to make joint decisions regarding harvesting and sales negotiations. Although, improved wood management has yet to answer challenges associated with *tebang butuh*, i.e. how to deal with a circumstance when a community member needs money urgently, and thus some farmer groups are making efforts to secure funds that can be used to bridge the urgent needs of any of their members.

To strengthen market linkages, farmer groups that have already secured SVLK certificates are trying to identify partnerships with companies that have also obtained SVLK certificates. The problem, particularly in the short term, is the extremely small number of certificated companies who then, with a strong bargaining position, can push down the price of wood from certificated farmer groups. This is expected to change over time.

Mentoring and facilitation clinics

Free clinics to support SMEs in achieving SVLK certification have opened in Jepara, the city of Yogyakarta, Surakarta, and Pasuruan, supported by the Java Learning Centre (Javlec) and the regional Departments of Trade and Industry. The clinics offer facilitation and stock-taking analysis for businesses, in order to achieve certification. Between June and September 2013, Javlec mentored 10 SME groups on the TLVS standard, 33 SMEs in all. Four of the SME groups were non-association groups, industries that are not members of the Jepara furniture association. The other six SME groups that were mentored by Javlec are association members.

Expectations

Expectations of premium prices for SVLK licensed wood amongst community forest farmers,

particularly when the government began encouraging timber legality certification in 2009 have been largely unfounded. However, the set-up of community forest management business units has been supported and facilitated by regional governments and NGOs, in particular, ARUPA, *Aliansi Relawan untuk Penyelamatan Alam*. These community farmer groups have made efforts to improve management practices in community forests in their regions, to support the legality of their wood and to expand and maintain market access.

5.4 Lessons learnt from the three case studies

There are considerable challenges and opportunities that can be drawn from the sections above, with potential recommendations for policy presented in Section 6.

5.4.1 Awareness raising and capacity building

The level of understanding of SVLK in Kalimantan and Papua is low, whereas in Java, the level of awareness regarding SVLK certification is higher.

Lack of data makes targeting of awareness raising and support difficult. Unreliable and a lack of available data, including the number of businesses involved, permits issued and volumes produced make it difficult to ascertain the scale of the sector and to thus target assistance where needed. There are significant levels of informality in the small-scale sector. It is possible that the 4000 small-scale processors officially registered with MoF are only a small part of the total number that operate unregistered (Roda et al. 2007; Irawati et al. 2009; Melati et al. 2010; Adams and Asycarya 2012). This uncertainty of the scale of the sector will affect all actions of SVLK implementation.

Although it is a mandatory requirement, the perception of many timber enterprises is that SVLK is an additional burden. There is a significant lack of SVLK verification across the whole supply chain in all three provinces, and with a very limited understanding across sawmills, processors and producers of SVLK and its requirements, it is currently considered as an extra inconvenience and cost on top of both official and unofficial fees. In order for this uptake to be increased, this perception needs to be changed, through awareness raising campaigns, for example.

5.4.2 Funding and financial issues

Where donor and government assistance has been provided, for example in Central Java, there has been a higher uptake of SVLK certification than in other areas. In Central Java, where the small-scale forest sector is very important for woodworking and furniture, there have been a higher number of communities and companies achieving SVLK certification. This is due to the extensive government and donor support provided in this region, in terms of awareness raising, training and financial assistance.

High costs of existing formal and informal costs of doing business make extra costs associated with SVLK difficult to bear. SVLK is seen as a burden rather than an opportunity. The issue of covering long-term costs of bi-annual surveillance is yet to be resolved, as it is hard to develop a business model that can cover this additional cost. This cost has already resulted in one community in Java that had achieved SVLK certification with government support, fail to renew the certificate. Donor and government financial support solves short-term funding, but does not solve long-term financial cost requirements.

Certification of community groups or associations could reduce the costs of certification and support the community to access training and ultimately markets. The grouping together of small companies and the development of community groups or associations to work together and apply for a single SVLK permit could reduce some of the monetary pressure that small individual companies face. However, long-term financial costs may still prove problematic. Positive opportunities do exist for communities wishing to get group certification, but it will require training and support on technical aspects of forest management and changing how the community operates and makes decisions.

5.4.3 Making a robust business case

Ensuring a robust business case for companies to implement SVLK is paramount for the long-term success of SVLK. As shown with voluntary certification, without a robust business case, the uptake and long-term success of certification is questionable. This is also true for the implementation of SVLK. Even though the SVLK is mandatory, the costs of compliance, changing management practices, costs of certification, etc., will be limiting factors for many producers and processors. This is coupled with the existence of informal markets that accept non-SVLK products, providing an alternative

market for many producers. Ensuring a business case, through market access, working to reduce costs and support technical capacity development, for example, are some ways that the government and donor bodies can work together to ensure effective SVLK implementation. SVLK is mandatory and thus its robust enforcement, including fines and penalties, will be required to ensure SVLK compliance.

The number of timber legality verifying bodies (VBs) and the number of businesses that require certification is clearly disproportional and needs addressing urgently. As of March 2013, there were only 11 VBs in Indonesia qualified to undertake SVLK verification. Therefore, effort is needed to increase both the number as well as the capacity of VBs in Indonesia, with the establishment of regional offices to not only keep travelling costs down for audits and surveillances, but to also use local knowledge.

SVLK verification requires certainty of area and utilization rights, proof of legitimate ownership of timber and concession area, permit documentation, etc. In reality, most small-scale forest businesses are informal, and only some have the permits necessary to meet requirements for harvesting and transporting timber. This uncertainty and lack of information is prohibiting the uptake and interest in SVLK. By simplifying and facilitating the permit process, making traceability checks publically accessible and ensuring that the process is more transparent, an increase in the number of registered SMEs could augment the legal timber supply volumes.

Market access is a likely benefit for some and this will improve as the processing industries also gain SVLK and create a demand for SVLK raw material. However, currently in Java, some communities report that it is hard to sell SVLK product as industries are not demanding it. Coupled with this, there is an uneven market platform, with

the informal sector in all three areas providing an alternative market that does not require SVLK certification. Therefore it is vital to create demand for SVLK raw material. Government can be a key actor in this case, because for instance the proportion of public funds used in the development of infrastructure is still high. In December 2013, the Government of Indonesia drafted a regulation on green procurement (Jakarta Post 2013).

Reducing the gap between legal supply and demand is key to uptake of SVLK certification as demand for raw material exceeded supply in all three case studies, providing an increased opportunity for the informal sector (including timber kiosks and chainsaw milling) to meet demand. In Central Java, demand exceeds supply for raw material but more is met from community production than 'imports' from other provinces in Indonesia. A significant percentage of raw material production from East Kalimantan goes to Java, limiting supplies to local markets and creating opportunities for the informal sector to fill the gap. In Papua, the supply chains are complex, with producers located in districts away from where sawmills are located and the large numbers of kiosks, creating distortions in the supply and demand of raw material, giving a lack of supply in some areas and over-supply in others.

The levels of the informal sector in Kalimantan and Papua in terms of supply are high, particularly for unregistered timber kiosks. Poor control of timber transport and processing in small-scale industries and lack of publically accessible official data pose challenges to legal compliance. This is coupled with forestry authorities' weak enforcement of sanctions for violations by business practitioners; opportunities for misuse of documents and disparities between the actual amount of timber transported or processed and what is written in the documents; as well as collusion between officials and business people/ timber owners.

6. Lessons learnt and policy options for SVLK

Drawing on the generic issues outlined in Section 4 and the specific issues shown in the case studies in Section 5, for compliance with and implementation of SVLK verification, lessons learnt are presented in this section along with recommendations for practical policy options. These policy options could be considered by the Ministry of Forestry, forestry offices and related institutions to ensure timber legality and encourage small-scale forest enterprises to be prepared for the implementation of SVLK.

6.1 High costs of certification

The cost of the SVLK assessment process is estimated to be IDR30–114 million (US\$3000–\$11,000) per verification, depending on the type and size of the business and region. This is not an inconsiderable sum for small-scale actors (Ministry of Forestry 2010). It has been calculated that the 4000 registered small-scale timber processors in Indonesia would require about US\$10 million for every round of verification.

Solutions and policy options:

- Verification bodies should be obliged to establish regional offices to keep traveling costs down.
- Group certification could keep the price to a minimum.
- Financial assistance could be provided for certification (i.e. loans with long payback times).

6.2 Lack of awareness of SVLK

Understanding of SVLK among stakeholders in small-scale timber industries and even among some regional forestry officials is still relatively low, particularly in the research sites in East Kalimantan and Papua. Understanding and awareness of SVLK are improving among community forest farmers and small-scale industries in some research districts in Central Java province. Initiatives from institutions like FSC and LEI in several areas of Central Java to encourage voluntary certification are one reason for a better understanding of SVLK from most business practitioners.

The number of companies listed in the official data from the District Industry Office database in the Berau district was smaller compared with the number found on the ground (for example, in Java the official number was about 60% of the total number found). If there are many unregistered companies, they will not have taken part in any public consultation and their knowledge and awareness of the SVLK will be low.

It is essential that awareness raising and training for practical implementation of SVLK, including collective certification mechanisms, should be intensified particularly with respect to small-scale industry practitioners in the regions by the Indonesian government and donors. Although only low numbers of SMEs have taken up the free clinics offered by the Java Learning Centre (Javlec) and the regional Departments of Trade and Industry, to support them in achieving SVLK certification so far, it has been proven in Java that awareness raising campaigns and capacity building and support work, and this number should increase in time. The support and back-stop that the clinics appear to offer is invaluable for those SMEs that need to work out what they need to do to achieve certification. In East Kalimantan and Papua, where no support has been provided, awareness with small-scale businesses, governments and other relevant stakeholders remains very low.

A way to address this could be to increase the awareness raising campaigns throughout key provinces, expanding the audience of socialization events beyond key personnel from province and district forestry agencies, as these individuals frequently rotate posts and rarely have time to instil the information at the grassroots. There is a need to increase the number and geographical scope of VPA/SVLK road shows, organized by the Ministry of Forestry.

Solutions and policy options:

- The concept of SVLK, including collective certification mechanisms, should be intensified particularly with respect to small-scale industry practitioners in the regions.

- Donor and government resources should be made available to spread the information on SVLK via FM radio, TV, print, and social media.⁴
- Awareness-raising of SVLK — which until now has only taken place in provincial capitals — should be extended to districts where many small-scale industries are located by using existing trade and agricultural extension networks, as a way to scale up the outreach.
- Large-scale timber industries which have linkages with small-scale producers/enterprises should assist them with SVLK as per Ministry of Forestry Regulation No. 45/2012, perhaps in terms of capacity building, rather than financial.
- More intensive outreach in mass media and social networks is needed: train the trainer programs and roll out regionally through a wide group of stakeholders including national and local forestry authorities; agricultural extension networks; forest management advisors; civil society networks and links to SMEs; academic institutions; certification bodies; PUSDIKLAT (Ministry of Forestry Education and Training Centre) staff; KAN (National Accreditation Committee) staff; heads of villages (who issue transport documents for communities); police and customs.
- Other tools could include provision of SVLK ‘surgeries’ at roadshows and trade fairs where industry can have a one-to-one meeting with an adviser on their particular SVLK issue.

6.3 Compliance issues for small-scale enterprises

There are various issues of compliance for small-scale enterprises regarding SVLK, including a lack of supply of legal timber, low efficiency in timber harvesting and processing limiting supply, and, particularly in East Kalimantan and Papua, small-holder tree growers not producing enough timber, thus limiting the supply of legal timber available to the market.

⁴ As the potential for social media is perhaps greater in Indonesia than any other country in the world, social media promotions could be very powerful. Although in 2013, only about 22% of Indonesians have access to the internet, it has been predicted that every Indonesian will have at least one phone by 2015, with a prevalence of low-cost web-enabled phone plan options to push social media onwards.

6.3.1 Lack of supply of legal timber

The lack of supply of legal timber creates opportunities for illegal activities that in turn slow down implementation of SVLK. The existence of inactive companies leads to inaccurate Annual Allowable Cut (AAC) with annual work plans and production plans not always being met. This affects the continuity of legal timber supply and creates opportunities for the supply of illegal timber.

Solutions and policy options:

- Increase the supply of legal timber by evaluating and utilizing forest areas currently controlled by holders of inactive IUPHHK-HAs and IUPHHK-HTs. By the end of 2012, the Ministry of Forestry had revoked 18 inactive industrial timber plantation concessions covering 360,000 ha. While this is a promising step, further efforts are needed because only 1.2 million ha is fully planted out of 11 million ha of land allocated for timber plantations (DBUHT 2013).
- Step up the development of industrial timber plantations (HTI) in order to augment the legal supplies of timber. Timber plantation has been well below targets and has been operating at low productivity levels (Brown et al. 2005; Barr et al. 2009). The Ministry should try to enforce the Decree on the acceleration of timber plantation development issued in 2014. Asia Pulp and Paper, for instance, has committed to reach 100% of raw materials from plantation timber. The Ministry should use this momentum to also push other companies to follow the same path.
- Investigate why companies with active concession permits are not operating. Annual work plans (RKT) with zero production targets should not be allowed.
- Despite large targets for HTR development which was to reach 1.9 million ha by 2010, by the end of 2013 only 702,520 ha of land was identified as potentially available and only about 188,641 ha had been allocated through permits (Ministry of Forestry 2014). HTR development should be encouraged further by revising legislation relating to plantation forests. In particular, the government should offer marketing guarantees for timber from community plantation forests and an easier permitting process. Furthermore, longer tenure of HTR permits, their transferability and inheritability should be allowed to enable greater business certainty.
- Regional government forestry offices should collect data on the size of local industry timber needs based on industry’s planned raw material requirements.

6.3.2 Low efficiency in timber harvesting

The low supply of legal timber from natural forests is not only due to the declining number of companies operating, but also to high levels of inefficiency and waste during the felling, transportation and processing of timber products. Thus, to maximize formal timber supply, efforts are also needed to overcome inefficiency and utilize waste.

Logging and timber processing activities by large-scale companies outside Java are relatively efficient compared with those by small-scale operators, but the recovery rate for logs to sawn timber is very low (30–35%), which is lower than the standard recovery rate of 50% mandated by the Ministry of Forestry. On the other hand, in small-scale logging operations outside of Java (e.g. Papua), such as IPHHK where felling activities and cutting logs into square logs take place in the forest, a lot of wood waste is generated in the forest since the operators use only basic machinery. However, once square logs enter sawmills downstream, the recovery rate is very high (65%). If the efficiency of upstream and downstream operations could be improved, larger volumes of wood could be produced. The Ministry is aware of this issue, as this has become one key area of concern in the Ministry's long-term plan of 2006–2025 (Manurung et al. 2007).

Solutions and policy options:

- The Ministry of Forestry should closely monitor and make efforts to verify the recovery rate reported by companies. It is often the case that the reported recovery rate is intentionally underestimated to allow room for illegal timber.
- Industry associations should encourage member companies to pursue technological improvements (retooling) and timber processing plants should be encouraged to revitalize their machinery and use equipment that generates less waste.
- The Ministry of Forestry could insist that timber processing units bring up their recovery rate to 50% by enforcing the existing regulation.
- Small-scale timber industries should be encouraged to use portable sawmills, which generate relatively little waste compared with machine saws.
- Markets for wood waste from sawmills should be identified and the establishment of waste wood processing industries should be encouraged.

6.3.3 In Java, timber production from small-holders cannot be predicted

The timber system in community forests is characterized by '*tebang butuh*' where trees are felled

only when the need is urgent. This habit makes timber supply difficult to predict. In addition, independent farmers do not partner with anyone except in farmer groups. The amount of land controlled is generally less than 1 ha. As land is generally privately owned, decision making is autonomous in nature. Community forest products are not the sole livelihood source and contribute only around 17%–31% for all categories of farmers.

Community forest farmers in Java are encouraged to get SVLK certificates. But SVLK gets little attention from community forest farmers, timber traders and local sawmills. This is because local timber prices are not determined by the presence or absence of certificates, but by timber quality and volume. Should interventions like SVLK result in high transaction costs and fewer financial benefits to working community forests, this could be counter-productive to community forest development.

Solutions and policy options:

- Community timber forest institutions should be strengthened and shared learning processes encouraged on community forest management in group/village community units, from planting, maintenance and harvesting to distribution and marketing, and adapted to conditions in each district. On the other hand, the existing SVLK regulation should be able to adapt to the community characteristics. For example, instead of certification for groups that consist of farmers, SVLK could be applied as certification for groups that consist of farmer groups, making the costs even smaller.
- Community forest farmers need a type of formalization to resolve the '*tebang butuh*' (cut timber only when in financial need) issue. One possible mechanism is '*kredit tunda tebang*' by formal institutions such as cooperatives, farmer groups, etc. An example of this credit is a partnership between a company in Central Java and communities (Nugroho et al. 2013). The company provides the credit so that farmers can sell the timber 1–2 years later with a better market price. BLU has started implementing this scheme in some districts in Java (Kompas 2013).
- Forest development funding centers (BLU) should simplify application procedures and facilitate access to loans for community forest farmers so they can postpone tree felling until they can secure the best prices for timber.
- HTR development should be encouraged further by revising legislation relating to plantation

forests. In particular, the government should offer marketing guarantees for timber from community plantation forests and an easier permitting process. Furthermore, longer tenure of HTR permits, their transferability and inheritability should be allowed to enable greater business certainty.

- Simplify access to loans for HTR from BLU, currently centralized within the Ministry of Forestry in Jakarta. BLU should have representation at the regional cluster to allow farmers to have easier access for loan applications and technical assistance.

6.4 High levels of informality in the small-scale sector

The level of informality in logging and small-scale timber processing is high partly due to the disparity between high demand and limited legal supply of timber. This has been the problem with the large-scale industries since the 1990s, where part of the reason for illegal logging is that the development of timber industries has outpaced the development of their raw materials supply (Scotland et al. 2000; Barr 2001; Brown et al. 2005; Barr et al. 2009). The number of small-scale timber processing industries recorded in two sample districts in East Kalimantan province was almost twice that of formally registered enterprises. In Papua province, the research data collected on small-scale logging and timber processing operations in a sample district indicate that the majority of timber consumed comes from illegal sources. In Java (Yogyakarta region), in 2011, the number of unlicensed timber processing industries with a capacity of 2000 m³ per annum or less was almost three times the number of those licensed (Astana et al. 2013).

6.4.1 Solution to poor control of timber transport and processing in small-scale industries and lack of publically accessible officials

Forestry officials play an important role in maintaining a balance between formal timber supply and the consumption of raw materials originating from legal sources. With the implementation of SVLK, business people have to ensure they are prepared to produce and process wood only from legal sources.

One key area of concern is related to timber transport. There are opportunities for misuse of

documents so that the actual amount of timber transported or processed and what is written in the documents is different. It is difficult for the public to help control the situation since they do not have access to the data.

SVLK will transfer the verification process to the certification holder, with regular surveillance from verification bodies. However, on the other hand, the existing timber transport permit system is still in place.

Solutions and policy options:

- Timber legality/traceability checks by district-level officials should be publically accessible — i.e. online per district or per province.
- Logging report validation officers and log-income inspection officers play an important role in ensuring the legality of wood along the timber forest product activity chain. The officers should be given incentives for delivering their reports correctly and in a timely manner. The reports should be made publically available.

6.4.2 Solution to the fact that most small-scale timber industries do not fulfil legal permit requirements

In addition to ensuring legality in the timber production and trade, SVLK is also aimed at supporting timber product processing principles and fulfilment of labor rules, including occupational health and safety in sawmills. Therefore, proof such as company deeds of establishment, trading licenses or business registration (TDI), tax numbers (NPWP), industry business permits and timber transportation documents (SKSKB, SKAU, SKSKB Cap KR) are used as verifiers for obtaining and extending SVLK certification. While this is a good intention, most small-scale timber industries are informal, with some having only a few of the permits required for processing and transporting timber.

Several cases in research locations in Papua show that many timber depots — under the license issued by the District Head — supply export-oriented industries even though officially they are not allowed to do so. Some other depots function as sawmills and produce wood products. This is despite the rules stipulating that timber depots or log stores should store, channel or sell sawn wood to meet local requirements only. To be able to legally process and export timber, they should have sawmill licenses which are currently the authority of governors (if they have a capacity <2000 m³). In East Kalimantan, timber depots often do not have complete legal paperwork and operate on partial documentation.

Solutions and policy options

- District government authorities should facilitate small-scale timber enterprises with incomplete permits to obtain full formalization. Formalization of small-scale timber businesses could be done in stages.
- To simplify sawmill permit processes for small-scale practitioners in Papua for instance, provincial governments should consider giving district heads the authority for issuing permits to sawmills with capacities below 2000 m³. This needs to be accompanied by efforts by district forestry offices to monitor their operation in order to ensure that timber depots that are intended only to meet local timber requirements do so.
- Provincial and district governments should provide guidance to encourage the establishment of work groups across government offices that can play a part in facilitating small enterprises to obtain business permits. The government can also set up one roof licensing system and allocate funds in the regional government budget (APBD) to support their operation. Jombang District Government, for example, has facilitated permit finalization processes, and the number of industries with permits increased from nine units in 2010 to 36 units in 2012.

6.4.3 Solution to limited options for full formalization for small-scale upstream forest enterprises

In reality, most small-scale forest businesses are informal, and only some have the permits necessary to meet requirements for harvesting and transporting timber. It is therefore a challenge to apply SVLK to small-scale upstream forestry enterprises, as SVLK verification requires certainty of area and utilisation rights, proof of legitimate ownership of timber and concession area, permit documentation, etc.

Solutions and policy options:

- As in the above section, efforts should be made to raise the status of informal small-scale forestry enterprises to formal businesses, particularly those that have been supplying formal large-scale woodworking industries. The central government should empower small-scale timber utilization/extraction permit schemes for communities and recognize regional government permit schemes as long as they accord with prevailing central government legislation.
- Provincial and district governments play a role in facilitating small businesses to obtain timber utilization/extraction permits. They could, for instance, accelerate the formalization process by simplifying permit application procedures, for example by setting up a 'one roof licensing system' where all requirements are done in one office. The Ministry of Forestry has started the initiative by setting up a one-stop licensing unit on the ground floor of the Ministry of Forestry building. Similarly, some districts have set up one-stop licensing offices. Monitoring will be key for provincial and district governments, and therefore sufficient funds from the budget should be allocated for proper monitoring and reporting.
- If wood processing industries (IPHHKs) maintain their original objective for timber to meet community and public requirements and not be sold, then their implementation should be more strictly controlled. District forestry offices should ensure the timber produced is not misappropriated for commercial purposes or for supplying export-oriented industries by carrying out regular monitoring.
- If IPHHKs are adjusted to meet community needs for small-scale timber enterprises, and to create economically viable schemes, then existing regulations — such as those relating to timber felling quota limits — should be changed. This should be accompanied by the enforcement of rules and improved monitoring of IPHHKs. Half of IPHHK production should be allocated to local requirements. If this option to alter IPHHK provisions is chosen, then IPHHK owners should be obliged to have SVLK verification.
- In Papua, in addition to IPHHKs, there are Customary Community Timber Utilization Business Permits (IUPHHK-MHAs). These are 10-year natural timber utilization permits for 2000–5000 ha granted by the governor to communities that own customary forests. Through these permits, communities have the chance to conduct timber enterprises legally. Since this ruling came out in 2010, there have been 10 IUPHHK-MHAs, some of which have already secured annual cutting licenses (RKTs) for their first year. However, they have yet to begin production activities as there are no technicians (Ganis) and processed timber transport invoices (*Faktur Angkutan Kayu Olahan* (FAKO)) have yet to be issued. This appears to be linked to the Ministry of Forestry having yet to recognize IUPHHK-MHAs as timber utilization permits. Another problem facing community cooperatives is limited business capital for timber felling and processing. According to regulations, IUPHHK-MHAs are only allowed to use

portable sawmills. Efforts should be made by the provincial government to allocate provincial budget to aid community forestry groups obtaining their working capital for portable sawmills.

- Current IUPHHK-MHAs could act as demonstration models and material, helping to evaluate the extent to which community forest management achieves the objectives of improving communities' welfare and independence. Regional governments, together with NGOs and other institutions, play a role in providing facilitation and ensuring the attainment of these objectives.

6.4.4 Solution to misuse of timber transport documents

Timber originating from private forests plays a major role in supplying formal industries. In East Kalimantan, documents for timber from private forests were often misappropriated. In accordance with existing provisions, SKSKB Cap KB or log transport documents labeled "community timber" or forest production transportation documents such as *Nota Angkutan*, *Nota Angkutan Penggunaan Sendiri* and Certificate of Origins (SKAUs) should only be used for timber originating from private forests. In many cases, these documents were found on wood harvested from land clearing (land conversion permits from community timber, IPK-KR) to establish oil palm estates.

Policy options:

- Head of District Forestry Offices should strictly supervise the way forestry officers in charge of issuing forest product legality documents issue these documents.
- Forestry officers should issue these permits in appropriate field sites where timber can be directly observed, as stipulated by regulations, not in offices as often happens.

6.5 Lack of verification bodies

One of the main challenges involved in advancing SVLK verification in the small-scale sector has to do with the fact that as of December 2013, there were only 14 timber legality verifying bodies (VBs) in Indonesia qualified to undertake SVLK verification.

Given the large number of small-scale enterprises, there is clearly a disparity.

Therefore, effort is needed to increase both the number as well as the capacity of VBs in Indonesia. The existing regulatory framework for VBs prioritized Indonesian organizations. One way to increase the number of VBs relatively quickly and build up capacity could be to allow greater foreign participation. While foreign firms are not precluded from applying for accreditation by the National Forestry Council, out of several foreign applicants who have sought accreditation, none have been successful so far.

6.5.1 Lessons learnt regarding lack of VBs

Solutions and policy options:

- The number and capacity of verifiers (VBs) should be strengthened by revising relevant forestry regulations; for example by setting a target for the VBs to set up branch offices, at least at the provincial level.
- Increase donor funding and government support (tax breaks or deferrals) for VB start-ups in the country.
- The Ministry of Forestry should revise the verification targets for the small-scale forestry sector and implement SVLK over a longer period of time. The Ministry of Forestry would then have to revise the Regulation P.45/Menhut-II/2012 regarding Standards and Guidelines for Evaluating the Sustainability Performance of Production Forest Management (PHPL) and Timber Legality Verification.
- The Ministry of Forestry should simplify procedures for small-scale enterprises to apply to the Forestry Financial Unit (BLU) for financial assistance with SVLK certification and surveillance costs. This financial assistance should have low interest rates and longer payback times.
- The Ministry of Forestry should ensure that the Forestry Financial Unit (BLU) has representation in regional clusters where the forestry sector is significant to enable timber farmers and small-scale entrepreneurs easier access and provide direct assistance with the application process.

7. Conclusions — Challenges and opportunities facing the small-scale forestry sector

What are the potential implications in terms of opportunities / successes and challenges of the mandatory implementation of SVLK on the small-scale forestry sector of Indonesia? Is a mandatory approach to legality verification likely to achieve a greater impact in terms of assuring legality than voluntary certification? How does mandatory differ from voluntary certification? These points are all considered below.

7.1 So what does mandatory mean?

The Indonesian government has decided that SVLK will be mandatory for large companies by the beginning of 2013, while small enterprises are expected to be compliant by the beginning of 2014. In light of this and the results of the survey work, several important considerations need to be thought through and ideally implemented to make full compliance with SVLK in the Indonesian forestry sector a reality.

Mandatory means that it is required by law and is therefore compulsory. A key consideration is how this will be enforced, and what the implications are if it is not enforced. This enforcement is indeed a main difference between voluntary schemes and SVLK. What penalties will be handed out if businesses do not take up the mandatory certification? If the uptake of SVLK verification is going to be greater than the voluntary certification, businesses have to be told what the consequences are for not doing so. These consequences should be reported through social media, for example.

7.2 Scale of issue

It is difficult to ascertain the scale of the sector, and to identify the number of actors due to the unreliability and lack of available data. It is therefore problematic to not only target funding and capacity assistance where needed, but also to know what the general impact will be on the industry. There are significant levels of informality in the 'unofficial' small-scale sector, and from the case study data, it has been shown

that the 4000 small-scale processors officially registered with MoF could only be a small part of the total number which operate unregistered. The number of small-scale timber processing industries recorded in two sample districts in East Kalimantan province was almost twice that of formally registered enterprises, and in Java (Yogyakarta region), in 2011 the number of unlicensed timber processing industries with the capacity of 2000 m³ per annum or less was almost three times the number of those licensed (Astana et al. 2013).

Based on the statutory mandatory date for achieving INDO-TLAS/SVLK certification, it is highly likely that a large portion of forestry operations, especially small-scale enterprises, will not meet the deadlines. Findings from Central Java, East Kalimantan and Papua show that progress with SVLK verification has been slow. Central Java has the largest number of certified timber companies but these represent only a small portion of the total number of timber enterprises in the province. Very few community forests have been certified. In East Kalimantan, most progress has been made with certifying logging concessions; however, these represent only 18% of active concession permits. Little has been done to advance certification in the processing sector. In Papua, most progress has been achieved with large-scale operators (four out of six), but virtually no developments have been made in other segments of forestry. However, it is likely that SVLK will become more 'mainstream' as more businesses become aware of the mandatory certification scheme, especially if the government moves forward with enforcement of the requirement.

7.3 Mandatory SVLK versus voluntary certification

The similarities between voluntary certification (e.g. PEFC and FSC) and for that of SVLK — knowledge, capacity, cost, the need for donor and government support — are mirrored. So although SVLK is mandatory, the practicalities of meeting SVLK compliance will face many of the same challenges as voluntary certification.

As SVLK was designed based on voluntary systems, the barriers of voluntary certification schemes may also apply and lessons could be learnt for SVLK. These include:

- **Capacity and training.** The requirement of specialized forestry experts to train operational staff on environmental and social issues is often not accounted for in any business model (for large or small businesses, processing or producers) that might exist. The high turnover of staff in many operations means that regular ongoing training programs are needed. This issue is relevant for both voluntary and mandatory certification, as there is an apparent need for training in both compliance (processors and producers) and in verification (VBs).
- **Certification costs are high, including annual surveillance costs.** With voluntary certification, the cost burden of 5-yearly certification audits plus annual surveillance is often not fully considered. SVLK audit timescales are slightly different, and have not yet been agreed by the EU, but surveillance certification costs and costs related to the renewal of SVLK certification are still relatively high and many operators fail to take account of these costs in their annual business plan, if they have one. This makes both the resourcing costs of working towards certification or SVLK and the surveillance costs very expensive.
- **Reliance on donor or philanthropic funding.** For both certification of voluntary schemes and SVLK, there is a reliance on donor funding for both initial costs of training, capacity building and surveillance, but also in the longer term. This is unsustainable as shown already in Java. A reliance on external funding shows that a business model does not exist.
- **Robust economic business case required.** These schemes and programs to support certification need to be based upon the assumption that the operator / producer (for both the large- and small-scale forest sector) will become economically viable after certification. This is not always realistic, given ongoing resource costs and lack of revenue. This has been shown already by the revoking of the Javan APHR Wonosobo's SVLK certificate status due to the lack of funds to pay for the annual surveillance. There is a need for a supply of sustainable legally verified products and a market for them at a price that makes economic sense.

As SVLK is mandatory and there is donor support to ensure effective implementation, the level of impact can be expected to be bigger than voluntary certification. The business case for SVLK is based on the existence of a market, manageable costs, presence of a legal supply of raw material, and a demand for legal products.

Without price premiums and assuming that the main drive behind obtaining SVLK or certification is market access — export and EU markets rather than domestic — then the business case needs to be sufficient to ensure sustainable financing of the compliance and surveillance costs can be met. This is an issue that still faces many companies pursuing voluntary certification and as shown in the case studies is an issue for small-scale forest sector operators for mandatory SVLK.

Some large-scale concessions can overcome these barriers, should they have large volumes of commercial timbers that are appropriately priced and good links to international markets/supply chains. Group certification of smaller community forest projects tend to require long-term support, after certification; particularly in relation to certification audit and surveillance audit costs; as well as long-term support in maintaining links with international markets/supply chains. Historically some donors have failed to plan for this need. However, as the Indonesian government will want to ensure that SVLK implementation is successful and is maintained, support, advice and financial help to reduce the cost burden, this should be taken into account.

7.4 Concluding remarks

To conclude, achieving SVLK compliance in the Indonesian forestry sector as a whole will not be easy. However, it is possible to make significant progress by providing more time and information to stakeholders, expanding the capacity of verification bodies, making SVLK simpler and more financially attractive, supporting market access, and strengthening anti-corruption measures.

Lessons can be learned from the practical challenges of certification in the tropics. The policy recommendations need to draw on these to ensure effective (cost and timely) implementation of SVLK that can be sustained, in particular for the small-scale forestry sector.

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Annex 1 List of regulations pertinent to SVLK

Number of regulation	About
<i>Law</i>	
Law No. 41/1999	Forestry, particularly Article 50 paragraph (3) letter (h) on Bans on the Transportation, Control or Ownership of Forest Products without Certificates of Legitimacy
Law No. 14/2008	Open Public Information
<i>Government Regulations</i>	
Republic of Indonesia Government Regulation No. 6/2007	Forest Management and Forest Management Planning and Forest Utilization
Republic of Indonesia Government Regulation No. 3/2008	Change over Republic of Indonesia Government Regulation No. 6/2007 on Forest Management and Forest Management Planning and Forest Utilization
Republic of Indonesia Government Regulation No. 72/2010	Public Company/Corporation (PERUM) for State Forestry
<i>Ministry of Forestry Regulations</i>	
Ministry of Forestry P.55/Menhut-II/2006	Administration of Forest Products from State Forests
Ministry of Forestry P.7/Menhut-II/2009	Guidelines for Fulfilling Local Raw Material Requirements
Ministry of Forestry P.38/Menhut-II/2009	Performance Appraisal Standards and Guidelines of Sustainable Production Forest Management and Timber Legality Verification
Ministry of Forestry P. 46/Menhut-II/2009	Procedures for Issuing Permits for Extracting Timber and Non-Timber Products from Production Forests
Ministry of Forestry P.50/Menhut-II/2010	Procedures for Granting and Expanding Permits for Forest Timber Product Utilisation (IUPHHK) in Natural Forests, Ecosystem Restoration IUPHHKs or Industrial Plantation Forest IUPHHKs in Production Forests
Ministry of Forestry P.7/Menhut-II/2011	Public Information Service in the Ministry of Forestry
Ministry of Forestry P.55/Menhut-II/2011	Procedures for Applying for Forest Timber Product Utilisation Permits for Community Plantation Forests in Plantation Forests
Ministry of Forestry P.68/Menhut-II/2011	First 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 P.9/Menhut-II-2012	Raw material supply plan for timber industry (RPBBI)
Ministry of Forestry P.30/Menhut-II2012	Administration of forest products originating from forests under rights
Ministry of Forestry 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 P. 18/Menhut-II/2013	Timber Legality Verification Information through the Portal of Timber Legality Verification Information System (SILK) and The Publication of V-Legal Documents
Ministry of Forestry 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

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Annex 1. Continued

Number of regulation	About
<i>Directorate General Regulations</i>	
Director General of Forest Production P.6/VI-Set/2009	Performance Appraisal Standards and Guidelines of Sustainable Production Forest Management (PHPL) and Timber Legality Verification (VLK)
Director General of Forest Production P.2/VI-Set/2009	Performance Appraisal Standards and Guidelines of Sustainable Production Forest Management (PHPL) and Timber Legality Verification (VLK)
Directorate General of Forestry Enterprise Development P.8/VI-BPPHH/2011	Standards and Guidelines for Evaluating the Sustainability Performance of Production Forest Management (PHPL) and Timber Legality Verification
Directorate General of Forestry Enterprise Development P.8/VI-BPPHH/2013	Performance Appraisal Standards and Guidelines of Sustainable Production Forest Management (PHPL) and Timber Legality Verification (VLK)
Directorate General of Forestry Enterprise Development P.5/VI-BPPHH/2013	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)
<i>Other Ministerial Regulations</i>	
Ministry of Trade Regulation 09/M-DAG/PER/2/2007	Export of Forestry Industry Export
Ministry of Trade Regulation 20/M-DAG/PER/5/2008	Export of Forestry Industry Export
Ministry of Trade Regulation 12/M-DAG/PER/3/2012	Standard Price of Forest Production for Forest Provision Estimation
Ministry of Trade Regulation P.64/M-DAG/PER/10/2013	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
<i>Provincial regulations</i>	
Papua Governor Regulation No. 13/2010	Utilisation Permits for Timber from Customary Community Forests (IUPHHK-MHA) in Papua Province
Papua Governor Regulation No. 18/2010	Instructions for Timber Extraction Permit Implementation (IPHHK) in Papua Province

Annex 2 Chronology of events related to SVLK

Year	Significant Achievement	
2001	Bali Declaration – Forest Law Enforcement and Governance (FLEG).	Forest Law Enforcement and Governance (FLEG) Ministerial Conference was signed. The declaration committed the countries represented there (both timber producing and consuming nations) to intensify national and international efforts to combat illegal logging and the trade in illegal wood products (Canby 2011).
2002–2005	International cooperation on combating illegal logging and associated trade.	Development of the definition of legality or “Legality Standard”. The process to develop a legality standard for Indonesian timber progressed very slowly. Many Stakeholders (including civil society groups) were not happy with the process, feeling some issues were not properly accommodated (Telapak 2007).
2003	Formulation of legal definition through multi-stakeholder process.	Multistakeholder Forestry Programme (2012): RI-UK signed MoU for combating illegal logging (April) EU FLEGT Action Plan (May)
2003–2005	Development of timber legality standards through multi-stakeholder processes.	Telapak (2007): The 1 st draft of Timber Legality Standard version 1.0 consisting of Principles, Criteria, Indicators and Guiding Verification. Indonesian Ecolabelling Institute (LEI) would lead and facilitate the process. To develop an accountable and participative legality standard that would take into account the concerns of stakeholders and be acceptable by the market and public. The harmonization of these initiatives resulted in draft legality standard version 2.0. It would become the basis to further develop a verification system for timber legality in Indonesia. Recommended setting up an ad hoc team consisting of Government representative: Ministry of Forestry; Private sector: Indonesia’s Forest Companies Association (APHI), Sucofindo, Tropical Forest Foundation (TFF), Civil Society: LEI, Telapak, The Nature Conservancy (TNC), Indigenous People Alliance (AMAN).
2006	Field tests and improvement of the standards.	Telapak (2007): Reformulate the standard by specifying the standard according to the source, transportation, and the processing of the timber. Field test was conducted in Sanggau, West Kalimantan, and Balikpapan, East Kalimantan. Timber Legality Standard version 3.3 Consultation and Socialization in Ministry of Forestry
2007	Development of Timber Legality Verification System (Sistem Verifikasi Legalitas Kayu (SVLK)), Signing of Initiation of VPA negotiation between GOI and EU.	The core of the VPA process is to define the set of laws and regulations that apply to the Indonesian forest sector (the legality definition), and to develop the control systems and verification procedures that ensure that all timber and timber products exported from Indonesia to EU are legal (European Union 2011).
2009	Adoption of SFM assessment and SVLK.	Ministerial Regulation No. P.38/2009 as the standard and guidelines for the performance appraisal of sustainable forest management and Timber Legality Verification System (Setyarso 2011).

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Annex 3. Continued

Year	Significant Achievement	
2010	Timber Regulation adopted by EU Parliament (MFP 2012).	<p>Regulation (EU) No. 995/2010, three key obligations in European Commission (2012):</p> <p>It prohibits the placing on the EU market for the first time illegally harvested timber and products derived from such timber;</p> <p>It requires EU traders who place timber products on the EU market for the first time to exercise 'due diligence' (Information, Risk Assessment, Risk Mitigation);</p> <p>Keep records of their supplier and customers.</p>
2011	VPA agreed in the Senior Official Meeting-3 at Brussels (15 April 2011) initialized by Minister of Forestry and Commissioner on Trade UE (4 May 2011).	<p>Multistakeholder Forestry Programme (2012):</p> <p>Joint Statement VPA concluded on Senior Official Meeting, Brussels (April)</p> <p>Initialing VPA by Minister of Forestry RI and Trade Commissioner EU (May)</p> <p>Minister of Forestry launched V-Legal Logo</p> <p>Amendment of SVLK Regulation as P.68/2011 (before: P.38/2009)</p>
2012	Developed and launched Timber Legality Information System (August) and developed Run Test Shipment to EU (MFP 2012).	<p>The information system of timber legality verification is directly connected to INATRADE system in Directorate General of Foreign Trade, Ministry of Trade, and will concluded at the Indonesian National Single Window (INSW) in Directorate General of Customs and Excise, Ministry of Finance, for exports registration (Utomo 2012).</p>
2013	EU Timber Regulation fully implemented.	<p>The application of the regulation will start from 3 March 2013 to allow sufficient time for EU operators, timber producers, and member states (EC 2012).</p>

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In September 2013, Indonesia officially signed a Voluntary Partnership Agreement (VPA) to guarantee the legality of all timber products exported to the EU. Under the Indonesian VPA, a timber legality assurance system known as SVLK (*Sistem Verifikasi Legalitas Kayu*) has already been developed and has been in effect since 1 January 2013 for woodworking, wood panels, and pulp and paper. When the VPA is fully implemented, SVLK will become FLEGT legality license and will meet European Union Timber Regulation (EUTR) requirements for legal timber.

The objective of this paper is to analyze the challenges of implementing SVLK in the small-scale forestry sector of Indonesia. The paper also assesses whether a mandatory approach to legality verification will be more effective in terms of assuring legality than voluntary approaches, such as certification. The analysis involved desk-based analysis of government statistics, policy documents, key stakeholder interviews, and field surveys in three major timber-producing provinces of Indonesia — Central Java, East Kalimantan and Papua.

The paper discusses a number of challenges facing the implementation of SVLK, among others the cost of timber legality verification, limited societal awareness of SVLK, business legality issues among small-scale enterprises, and high levels of illegality in their timber supply chains. The paper closes by presenting a detailed set of policy options to address the observed challenges.



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