



Certification, Verification and Governance in Forestry in Southeast Asia



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1818 H Street, NW
Washington, DC 20433, U.S.A.
Telephone: 202-473-1000
Internet: www.worldbank.org/eapenvironment/sea-asia
E-mail: feedback@worldbank.org

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Program on Forests (PROFOR)

1818 H Street, NW

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ABBREVIATIONS

ADB	Asian Development Bank
AES	Agriculture & Environmental Services Unit, World Bank
AfDB	African Development Bank
Agribank	Bank for Agriculture and Rural Development
APB	Agriculture Promotion Bank
APEC	Asia-Pacific Economic Cooperation
APFSOS	Asia Pacific Forestry Sector Outlook Study
APHI	Indonesian Forest Concession Holders Association
ASEAN	Association of Southeast Asian Nations
ASEM	Asia-Europe Meeting
ASI	Accreditation Services International GmbH
B&Q	Retail chain, United Kingdom
BCEL	Banque Pour Le Commerce Extérieur Lao
BoA	Bank of America
BREEAM	Building Research Establishment Environmental Assessment Method
BRI	Bank Rakyat Indonesia
BRIC	Indonesian Forest Industry Revitalization Agency
BV	Bureau Veritas Certification
CBD	Convention on Biological Diversity
C&I	Criteria and Indicators of Sustainable Forest Management
CEPI	Confederation of European Paper Industries
CFCC	China Forest Certification Council
CIA	Central Intelligence Agency
CIFOR	Centre for International Forestry Research
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoC	Chain of custody
COP	Conference of the parties
CPET	Central Point of Expertise on Timber Procurement

CPF	Collaborative Partnership on Forests
CPIA	Country Policy and Institutional Assessment of The World Bank
CSA	Canadian Standards Association
CSR	Corporate social responsibility
CU	Control Union Certifications
DFID	Department for International Development
DLH	Dalhoff Larsen & Horneman, Danish international timber and wood products trader
DMC	Department of Marine and Coastal Resources, Ministry of Natural Resources and Environment, Thailand
DNP	National Park, Wildlife and Plant Conservation Department, Ministry of Natural Resources and Environment, Thailand
DNV	Det Norske Veritas Certification AB
DOFI	Department of Forest Inspection
DR	Dana Reboisasi/ Reforestation Fund, Indonesia
EASER	Environment, Social and Rural Development Unit, East Asia and Pacific Region, World Bank
EASIS	Indonesia Sustainable Development Unit, World Bank
EASTS	Southeast Asia Sustainable Development Unit, World Bank
EASVS	Vietnam Sustainable Development Unit, World Bank
EHS	Environment, health and safety
EIA	Environmental Impact Assessment
EPFI	Equator Principles Financial Institution
ESG	Environmental, social and governance
ESMS	Environmental and social management system
ESRM	Environmental and social risk management
ETFRN	European Tropical Forest Research Network
EU	European Union
EUTR	EU <i>Timber Trade Regulation</i>
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FIO	Forest Industry Organization, Thailand
FIP	Forest investment program
FLEG	Forest Law enforcement and governance
FLEGT	Forest law enforcement, governance and trade
FMU	Forest management unit
FOMACOP	Forest Management and Conservation Program, Lao PDR
FPIC	Free prior and informed consultation or consent
FPOs	Forest products obligors
FRA	Global Forest Resources Assessment of FAO

FSC	Forest Stewardship Council
G8	Group of Eight Largest Economies (Canada, France, Germany, Italy, Japan, Russia, United Kingdom, United States)
GATT	General Agreements on Tariffs and Trade
GEF	Global environment facility
GFA	GFA Consulting Group GmbH
GFS	Global Forestry Services Inc.
GFR	Global Forest Registry for risk evaluation
GFTN	Global Forest & Trade Network, a WWF lead partnership
GII	Global Integrity Index
GIZ	Used to be GTZ: Deutsche Gesellschaft für Internationale Zusammenarbeit
GSP	Good Supplier Program of DLH
Ha	hectare
HCVF	High conservation value forest
HSBC	Hong Kong Shanghai Banking Corporation
IADB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IBRA	Indonesian Bank Restructuring Agency
IC	LGA InterCert GmbH
IFC	International finance corporation
IFCC	Indonesion Forestry Certification Cooperation
IIED	International Institute for Environment and Development
ILO	International Labour Organization
IPK	Forest Conversion Areas, Indonesia
ISEAL	ISEAL Alliance
ISL	Other Legal Permits, Indonesia
ISO	International Organization for Standardization
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
JGAIA	Japan Gas Appliances Inspection Association
KAN	National Accreditation committee, Indonesia
KF	KPMG Forest Certification Services Inc.
KYC	Know-your-client
LEED	Leadership in Energy and Environmental Design
LEI	Lembaga Ekolabel Indonesia
LPI	Lembaga Penilai Independen (Independent Valuation Institute, Department of Forestry, Indonesia)
m ³	Cubic meter
MAF	Ministry of Agriculture and Forestry, Lao PDR

MARD	Ministry of Agriculture and Rural Development, Vietnam
MC&I	Malaysia Criteria and Indicators
MDF	Medium-density fiberboard
MIV	Modular Implementation and Verification Scheme
MPRM	Minister for Planning and Resource Management, Malaysia
MTCC	Malaysian Timber Certification Council
MTCS	Malaysian Timber Certification Scheme
MTIB	Malaysian Timber Industry Board
NFC	National Forestry Council
NGO	Non-governmental organization
NLBI	Non-Legally Binding Instrument of the UNFF
NTLAS	National Timber Legality Assurance System
NWFA	National Wood Flooring Association
NWFP	Non-wood forest product
ODA	Official development assistance
OECD	Organization for Economic Co-operation and Development
PACt	Phased approach to forest certification
PEFC	Program for Endorsement of Forest Certification Schemes
PFA	Production forest area
PFE	Permanent forest estate
PHL	Compliance with SFM in Indonesia
PRF	Permanent forest reserves/permanent reserved Forests, Malaysia
PRI	Principles of responsible investment
PROFOR	Program on Forests, multi-donor partnership
PSDH	Provisi Sumber Daya Hutan Log Royalty, Indonesia
RAMSAR	Convention on Wetlands of International Importance
RECOFTC	Regional Community Forestry Training Center for Asia and the Pacific
REDD	Reducing emissions from deforestation and forest degradation
REDD-plus	Mechanism to mitigate climate change by reducing greenhouse gas emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests and enhancement of carbon stocks
RFD	Royal Forestry Department, Ministry of Natural Resources and Environment, Thailand
RIL	Reduced impact logging
RM	Malaysian currency (ringgit)
RPP	Responsible procurement program
SA	Soil Association Woodmark
SAPU	Security and asset protection business unit
SASDA	Agriculture, Irrigation & Natural Resources Unit, South Asia Region, World Bank
SCB	Standard Chartered Bank

SCS	Scientific Certification System
SET	Stock Exchange of Thailand
SF&C	Sustainable Forestry and Compliance Business Unit, State of Sarawak
SFC	Sarawak Forestry Corporation
SFI	Sustainable Forestry Initiative
SFM	Sustainable forest management
SFMLA	Sustainable Forest Management License Agreements, State of Sabah, Malaysia
SGS	Société Générale de Surveillance
SKH	Stichting Keuringsbureau Hout
SLIMF	Small Low Intensity Managed Forest Certification
SMF	Sustainable management of forests
SPS	Safeguard policy statement
SQS	Swiss Association for Quality and Management Systems
STIDC	Sarawak Timber Industry Development Corporation
SUFORD	Sustainable Forestry and Rural Development Project, Lao PDR
SVLK	Indonesian Timber Legality Verification System (Standar Verifikasi Legalitas Kayu)
TFT	The Forest Trust (formerly the Tropical Forest Trust)
TI	Transparency International
TLAS	Timber legality assurance systems
TLTV	Timber legality and traceability verification
TNC	The Nature Conservancy
TPAC	Timber Procurement Assessment Committee, Netherlands
TRAFFIC	Wildlife Trade Monitoring Network
TSUD	Tüv Süd
TT	BM TRADA Certification Ltd
TTAP	Timber Trade Action Plan
TTF	Timber Trade Federation
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	UNDP, FAO, UNEP Partnership to support REDD-plus
UK	United Kingdom
USA	United States of America

USDA	United States Department of Agriculture
US\$	United States Dollar
VietinBank	The Vietnam Bank for Industry and Trade
VLC	Verification of legal compliance
VLO	Verification of legal origin
VPA	Voluntary partnership agreement
WFP	World Food Programme
WRI	World Resources Institute
WTO	World Trade Organization
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

Illegal Logging and Unsustainable Forest Management in Southeast Asia

The forests of Southeast Asia face high levels of deforestation and forest degradation, which are driven by a variety of forces both inside and outside of the forestry sector. Evidence demonstrates that key drivers include the aggressive expansion of palm oil, rising demand for agricultural products and biofuels, residential developments, infrastructure expansion and mining developments. Pressures on land resources are further exacerbated by climate change and uncontrolled natural causes. In addition, the exploitation of HCVPs and the degradation of forest ecosystems threaten not only biodiversity conservation and other ecosystem services, but also livelihoods of local communities and indigenous peoples.

Unsustainable and illegal forest management practices persist at unacceptable levels in the region, with illegal forest products being traded internationally. Southeast Asia accounted for 5% of global forest cover but 17% of global forest loss in 2000 to 2010. A large share of this forest cover loss is driven by illegal logging, with estimates varying from 22% to 35% in Malaysia to 40% to 88% in Indonesia. China, the largest importer of forest products in Asia, is rapidly expanding forest and Chain of Custody (CoC) certification (Forest Stewardship Council [FSC], Program for Endorsement of Forest Certification [PEFC] and China Forest Certification Council [CFCC]), but remains a major importer of illegal forest products. A significant proportion of these forest products are processed in-country and then

exported to markets around the world. There is optimism that rapid expansion of forest and CoC certification in China (and India) will become drivers for more certification in Southeast Asia.

Strong Global Calls for Sustainability and Legality of Forests

Increasingly strong calls are made globally for sustainability and legality in forests, forest industries and related trade. The United Nations (UN) Conventions and treaties (United Nations Framework Convention on Climate Change [UNFCCC], United Nations Convention to Combat Desertification [UNCCD], Convention on Biological Diversity [CBD], World Heritage, Convention on International Trade in Endangered Species of Wild Fauna and Flora [CITES] and Convention on Wetlands of International Importance [RAMSAR]), international processes (United Nations Forum on Forests [UNFF], International Tropical Timber Agreement [ITTA] and Montreal Process) and political summit recommendations (Group of Eight Largest Economies [G8], Asia-Pacific Economic Cooperation [APEC] and Association of Southeast Asian Nations [ASEAN]) provide a strong political message. Those funding the forestry sector, including multilateral and bilateral donors, development banks and international commercial banks, have principles, policies, safeguards, guidelines and procedures to which their clients increasingly must conform. Additionally,

non-governmental organizations (NGOs), forest and forest industries investors, wholesalers, retailers, buyers and governments, particularly in industrialized countries of Europe, North America, Oceania and Japan, are increasingly demanding proof of legality and sustainability through verification and sustainability.

Given the growing need to prove the legality and sustainability of forest management, wood processing and related trade, this study explores the current and future effectiveness of certification and verification schemes in Southeast Asia in addressing these concerns. In particular, it analyzes how the linkages between credible certification and verification schemes and the enforcement of forest laws can be strengthened. The main focus is on five case study countries, which are major producers and wood-processing hubs in the region: Indonesia, Lao People's Democratic Republic (PDR), Malaysia, Thailand, and Vietnam.

ASEAN Initiatives for Verification and Certification

ASEAN has initiated political, policy and technical processes and guidance to address legality and sustainability issues. ASEAN Groups have been established on Forest Policy and Timber Certification and a Strategic Plan of Action for Cooperation in Forestry (2011–2015) prepared. Key Tools include the ASEAN Criteria and Indicators for Sustainable Forest Management (SFM) in Tropical Countries (2000); ASEAN Monitoring, Assessment and Reporting (2007); and the ASEAN Regional Guideline for a Phased Approach to Forest Certification (2009), commonly known as PACT. The PACT pillars include a Forest Policy Framework; ASEAN Criteria and Indicators for Legality of Timber (2009); ASEAN Guideline for Chain of Custody for Legal Timber (2010); and ASEAN Guideline for Chain of Custody for Sustainable Timber (2010) to assist countries to derive their National Timber Legality Assurance System by 2015.

Despite these priority actions, the ASEAN initiatives have been reported as having limited impact on illegal

logging and the associated forest product trade in the Southeast Asian case study countries thus far. Food and Agriculture Organization of the United Nations (FAO) and International Tropical Timber Organization (ITTO) recently reported that the high demand for land and forest products, low institutional capacity, weak governance and deeply entrenched social causes of deforestation and forest degradation remain challenges. Nonetheless, the ASEAN initiatives for verification and certification provide the technical and institutional framework to guide, assess, attest to, monitor and report on progress toward sustainability. This guidance and support both for the ASEAN and other international treaties and political process is gaining importance given the strong global calls for sustainability and legality of forests.

Weak Governance

The reported root causes of illegal logging are inconsistent and unclear government policies that have an impact on food security and poverty, which are further exacerbated by corruption, cronyism, weak law enforcement and a lack of transparency and stakeholder participation. Additionally, the disclosure by enterprises of their environmental, social and governance screening policies and practices has been weak. Legality verification and certification provide legality and sustainability standards and best practices, but application in Southeast Asia to date has been minimal.

The legal and regulatory frameworks governing the forest sector have proven complex, unclear and subject to dispute. Therefore, it is often a challenge to agree upon legality verification standards. This can be made more complex because the legal and regulatory frameworks need to span not only forest management and forest industries wood processing but also export licensing and trade requirements.

Progress toward SFM and improved forest governance has been slow and insufficient in the case study countries, as reported by FAO and ITTO. Much greater

political commitment, institutional capacity building and strengthened law enforcement are needed to improve forest governance and make a significant and irreversible impact in reducing illegal logging, corruption, encroachment and violations of tenure and ownership rights. Reforms in forest governance will need to move away from the piecemeal approach toward more integrated approaches. Without good forest governance and promotion of legality and sustainability in the wider forest sector, achievement of the objectives of SFM, the European Union (EU) Forest Law Enforcement, Governance & Trade (FLEGT) Action Plan and related programs will be jeopardized.

International Regulatory Processes as Drivers for Good Forest Governance

Through forest law enforcement and governance (FLEG) and FLEGT, with funding from the European Commission, the World Bank and partners are supporting initiatives for good forest governance at the global, regional and national levels. The FLEGT program of the European Union has initiated leverage over countries exporting forest products to the European Union to increasingly comply with legality and forest governance criteria through national Timber Legality Assurance Schemes (TLAS) and Voluntary Partnership Agreements (VPAs). Thus far, Indonesia signed a VPA with the European Union in May 2011 and Malaysia and Vietnam are currently negotiating with the European Union. Lao PDR and Thailand are in the information and pre-negotiation phase.

The US Congress passed an amendment to the *Lacey Act* in May 2008 that will require importers in the United States to exercise “due care” and demonstrate that plant products are not from officially protected areas or contrary to authorizations, including laws governing export and trans-shipment and the non-payment of royalties and fees. Similarly, the EU *Timber Trade Regulation* (EUTR), which will come in effect in

March 2013, prohibits the import of illegal forest products and requires importers to exercise due diligence. The Australian *Illegal Logging Prohibition Bill* will also restrict the importation and sale of illegally logged timber within Australia. The recent proliferation of new green public procurement policies and green building requirements in Europe, North America, Oceania and Japan also request evidence of legality and sustainability, though their requirements vary widely. The Ministry of Commerce and State Forest Administration in China has issued guidelines on activities of Chinese companies logging overseas that require adherence to national laws in producer countries. All importing countries should be held to the standards they promote.

Synergies between FLEGT Action Plan and Voluntary Verification and Certification

Evidence supports that FLEGT VPAs and voluntary certification processes differ in standards, scope, approach and procedures, but they are potentially mutually supportive. VPAs can benefit from verification and certification traceability mechanisms and auditing processes at the forest management unit level. Voluntary schemes can be a testing ground for (i) case-based and practical solutions for understanding application of national laws and regulations, (ii) multi-stakeholder processes that can feed into VPA processes and (iii) the use of tracking and tracing procedures that can feed into traceability systems under VPAs. Voluntary approaches also can pioneer best practices approaches in countries that are not ready for nation-wide regulatory approaches. In these circumstances, countries can prepare for new export market challenges and opportunities (e.g., EUTR and US *Lacey Act*).

In turn, it is reported that voluntary certification may benefit from VPAs, particularly in greater clarity on legality definitions, standards, indicators and verification procedures, multi-stakeholder processes in the sector and enhanced transparency and public disclosure.

Evidence demonstrates that improved governance and law enforcement should reduce the risk for stakeholder conflicts and help streamline the process toward achieving sustainability certification. In these ways, good forest governance may be viewed as a prerequisite for certification. The two approaches are mutually reinforcing. Voluntary certification deepens management commitments to social, environmental and economic sustainability at the enterprise level, and VPAs are intended to strengthen legality requirements and good governance in the forest sector as a whole.

Although verification and certification schemes and standards differ, evidence indicates that the principles, criteria, policies and standards are becoming increasingly harmonized. Certification is increasingly including both legality and sustainability criteria, or at least certification and verification are functioning in a more mutually supportive way. The scope of legality and law enforcement has been contentious, increasingly being extended beyond the immediate forest laws and regulations to include policies, laws, regulations, plans, tools and practices of SFM and sustainable land-use (i.e., ecosystem and landscape approaches), sustainable livelihoods, food security and poverty alleviation, and strategies for the mitigation of, and adaptation to, climate change, among others.

Need for Critical Mass

Data show that voluntary certification is at early stages of acceptance and application in the Southeast Asian case study countries, where there is significant potential to expand use of this tool. Only 11% of the production forest area is certified (8% of total forest area) and less than 6% of forest plantations. However, these averages mask significant differences across countries. Malaysia has certified 40% of its production forest area and, together with Indonesia, is leading the certification efforts in the sub-region. In contrast, Laos, Vietnam and Thailand are lagging behind significantly. However, the countries in the region are aiming to increase timber production from forest plantations and consequently

promote certification of these areas. It is estimated that the potential to increase certification in natural and plantation forests in the case study countries is large, particularly in Indonesia and Malaysia.

Trends show that continued pressures from the environmentally sensitive markets will oblige “producer” countries to provide evidence of legality and sustainability if they wish to retain their export markets. Legality verification, third party certification and stepwise programs offered by independent third party assessors can potentially provide evidence of legality and sustainability to meet the requirements of these discerning markets.

Role of Financial Institutions

Financial credit institutions seeking to evaluate the legality and sustainability risk of their forestry clients use verification and certification as useful tools to reduce environmental, social and governance risk. In fact, global financial credit institutions have demonstrated use of Environmental, Social and Governance (ESG) screening tools (and exclusion lists) to identify, quantify and address risks associated with financing forest sector activities in Southeast Asia. These tools are used for the purpose of foreseeing and mitigating banks’ risk for financing illegal and unsustainable forestry operations. Many international commercial banks have policies that require forest certification schemes, some with a stated preference for FSC certification. In this way these financing institutions reduce legal, social, environmental and financial risks and ensure that their client’s projects commit to legal and sustainable practices. Most international commercial bank staff are not specialists in SFM; thus, third party certification fulfills a critical role in monitoring legality and sustainability of forests and forest products trade. Evidence shows that local banks in Southeast Asia have focused on traditional financial risk, with little reference to social or environmental criteria or a prerequisite of certification. As a significant funding source for the forestry sector in Southeast Asia, this is a key target area to encourage greater legality and sustainability awareness in their “know your client” guidelines.

Recommendations

The complementarities among law enforcement, certification and legality verification schemes can be realized only if promoted aggressively and attempts are made to better define and systematically harmonize the legality and sustainability standards, followed by better enforcement and monitoring systems. The key areas for engagement cover a broad range of issues involving public as well as private stakeholders, including:

- (i) *Harmonization and integration of standards:* Harmonize legality verification and certification standards, building upon synergies in procedures, methods and standards to systematically include the legal requirements defined in national legality assurance standards and international legality standards for the certifiable activities in the supply chain (including EUTR and FLEGT requirements).
- (ii) *Capacity building in producing countries:* Increase capacity and resources in producing countries to develop credible internal monitoring systems, as well as effective and independent certification and verification bodies.
- (iii) *Incentives to the private sector:* Encourage certification by providing incentives for stepwise approaches coupled with financial and non-financial incentives (e.g., fiscal incentives, reputational gains for certified companies, linking business and SFM managers, government regulations on green building codes and green public procurement).
- (iv) *Incentives to smallholders:* Encourage group certification by providing streamlined procedures and lower certification costs to small-scale producer, groups or communities, providing access to markets and smallholder training programs and offering financial support to cover part of the certification cost.
- (v) *Access to credit:* Encourage and motivate local banks toward stronger legality and sustainability criteria that can lead to an ordinance with legal implications for banks that do not apply stronger legality and sustainability criteria in their financing decisions.

Each stakeholder group needs to ensure that the complementarities between voluntary certification and legality verification schemes as well as good forest governance and law enforcement are built upon. The detailed policy

recommendations to target organizations to achieve this are summarized below. Given the limited uptake of certification in Southeast Asia so far and the large potential to increase certification in each study country, these policy recommendations broadly apply to all of them.

Development Banks and Other Donors

- Continue to provide technical support to timber-producing and timber-processing countries to harmonize, demonstrate and implement forest and CoC certification and/or legal verification in stepwise approaches to legality and sustainability.
- Encourage countries to recognize and strengthen voluntary certification as evidence on legal compliance and encourage markets to recognize and accept such evidence for legal compliance and SFM.
- Provide long-term assistance in development and comparison of experiences of national timber legality standards and verification systems in cooperation with other VPA signatory countries, civil society and the private sector familiar with implementation of voluntary certification in forestry and timber industry.
- Increase capacity and resources in producing countries to develop monitoring systems to improve internal control in private and public forestry organizations and integrate third party certificates as optional evidence on compliance.
- Increase technical assistance and improve cooperation with certification and regional governmental bodies for building capacity of certification bodies in-country.
- Facilitate and enhance cooperation among wood-producing countries, ASEAN importing countries and China, as well as key consumer countries to harmonize legality verification and certification requirements.
- Continue to support good forest governance in collaboration with the FLEGT Action Plan and other national and international regulatory initiatives and encourage strengthening of cross-sector linkages.

Government Institutions

- Provide incentives to enterprises to encourage stepwise approaches to put in place verification schemes that demonstrate legal conformance while developing national certification criteria and standards, ultimately reaching the required performance level of SFM (which should be higher than the legal requirements).
- Provide targeted fiscal incentives to encourage SFM in public and private forests, ranging from simplified auditing procedures to reductions in timber royalty rates for certified companies with preferential treatment for small-scale producers.
- Introduce and enhance government regulations on green building codes and green public procurement.
- With Certification Bodies and other key stakeholders, lead processes to harmonize legality verification and certification standards to systematically include legal requirements defined in national legality assurance standards for the certifiable activities in the supply chain.
- Integrate, as appropriate, reliable, impartial and efficient audit and verification procedures implemented in voluntary certification into the legality verification.
- Recognize certification as an impartial, reliable, controlled and transparent tool contributing toward (but not guaranteeing) legal compliance and sustainability of all forest operations.
- Review how legality is defined in each certification standard compared to the legality standards of FLEGT-VPAs and to meet EUTR, *Lacey Act*, *Australian Illegal Logging Prohibition Bill* and other international regulatory requirements.
- Improve cooperation with technical assistance providers and certification bodies to build capacity of certification bodies in-country.
- Improve cooperation with ASEAN importing countries and China, as well as key consumer countries to harmonize legality verification and certification requirements.
- Encourage and motivate local banks toward stronger legality and sustainability criteria that can lead to an ordinance with legal implications for those banks that do not apply stronger legality and sustainability criteria in their financing decisions.

Certification Bodies

- Continue efforts to increase the area under certification or legal verification in stepwise approaches.
- Provide early orientation and guidance on procedures to potential clients and follow up their certification requests in a swift and efficient manner.
- Offer group certification with streamlined procedures and lower certification costs to small-scale producers and groups of producers, while offering financial support to cover part of the certification cost.
- With government institutions and other key stakeholders, harmonize legality verification and certification standards, building upon synergies in procedures, methods and standards to systematically include the legal requirements defined in national legality assurance standards for the certifiable activities in the supply chain.
- Review how legality is defined in each certification standard compared to the legality standards for FLEGT-VPAs and to meet EUTR, *Lacey Act*, *Australian Illegal Logging Prohibition Bill* and other international regulatory requirements.
- Improve cooperation with technical assistance providers and regional governmental bodies to build capacity of certification bodies in-country.

Enterprises in the Forestry Sector

- Review the business case for certification and verification for legality and sustainability and share through forestry and forest industries networks.
- Demonstrate leadership in corporate responsibility by responding to market preference by adopting existing processes for legal verification and certification (forest and CoC) as proof of legality and sustainability.
- Participate actively and support efforts by governments and regional governmental bodies to improve transparency and to strengthen laws and procedures to control illegal logging and associated trade in illegal forest products.

- Industry associations demonstrate their commitment to fight illegal logging and associated trade in illegal forest products by adopting codes of conduct and encouraging their members to subscribe to such codes.

International Commercial Banks in Southeast Asia

- Integrate legality and sustainability criteria in banks' financing evaluation and risk assessment.
- Evaluate projects and clients for legality, sustainability and other risks against agreed upon standards as applied in their unique local contexts and risks.
- Introduce progressive finance facilities structured to support SFM, certification and sensible risk management strategy.
- Enhance networking with key stakeholder groups to use their knowledge of the Southeast Asian forests and forestry context and establish external partnerships to provide capacity building and third party independent and credible services.
- Improve market intelligence and communication between producer and buyers on the availability of

certified forest products and the potential markets and price premiums that can be achieved.

Local Banks in Southeast Asia

- Adopt international principles, standards, safeguards and procedures for greater transparency on client evaluation procedures, risk assessment practices and more sustainable business modes.
- Cooperate and make joint efforts when improving client evaluation procedures and risk assessment practices to reduce associated costs and bureaucracy.

Non-Governmental Organizations (NGOs)

- Disseminate knowledge of grass-root level challenges in the forest sector to decision makers, financiers and forest companies.
- Share knowledge on legal and sustainable practices and benefits as benchmarks and on the penalties and consequences of unsustainable and illegal business practices.

SECTION 1

OBJECTIVE

The overall objective of the study is to explore the current effectiveness of certification and verification schemes in Southeast Asia to strengthen the legality and sustainability of future forest management, wood processing and related trade. It analyzes how the linkages among credible certification and verification schemes and the enforcement of forest laws can be strengthened in Southeast Asia. The analysis will in particular focus on five case study countries, which are important producer or wood processing hubs in the region: Indonesia, Lao PDR, Malaysia, Thailand and Vietnam.

In particular, the study assesses the status and perceived credibility of certification and verification schemes in Southeast Asia and illustrates the extent to which they offer proof of compliance with national laws and regulations. The analysis also explores the potential impact certification could have on facilitating law enforcement and influencing market practices and sector governance. Finally, it illustrates the potential role certification could play in determining a company's qualifications with financial institutions and, hence, its access to finance.

SECTION 2

BACKGROUND

This section introduces key concepts and definitions for sustainable forest management and tools for achieving it, including certification, verification, legality, law enforcement and good forest governance. The linkages among the concepts are highlighted in a simple theoretical framework. Additionally, international and national initiatives supporting legality and sustainability in forest governance (e.g., the EU FLEGT Action Plan, *Lacey Act*, green public procurement and green building initiatives and others) are introduced.

2.1 Concepts and Definitions

2.1.1 Sustainable Forest Management

The “Forest Principles” that initially captured the international understanding of *sustainable forest management (SFM)* in 1992 (UN–General Assembly, 1992) have been redefined to a more widely agreed upon language used by intergovernmental bodies in the non-legally binding instrument (NLBI) on all types of forests of the United Nations Forum on Forests (UNFF) that states that:

“SFM is a dynamic and evolving concept, which aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations (UN–General Assembly, 2007).”

The SFM concept encompasses natural and planted forests in all geographic regions and climatic zones, and all forest functions, managed for conservation, production or multiple purposes, at the local, national and global levels. SFM and sustainable management of forests (SMF) were used synonymously (UN–General Assembly, 2007).

In 2007, the United Nations Framework Convention on Climate Change (UNFCCC), Bali Action Plan used the sustainable management of forests in a narrower context, relating to the productive functions of forests, but not including conservation functions and the enhancement of carbon stocks through afforestation, reforestation and forest restoration (UNFCCC, 2008). The Collaborative Partnership on Forests (CPF)¹ is supporting harmonization of terminology across United Nations (UN) conventions to help facilitate communications and synergies among them.

For the purposes of this report, the definition of SFM used in the NLBI on all types of forests, geographic regions and functions is used.

2.1.2 Criteria and Indicators of SFM

Criteria and indicators (C&I) of SFM provide a framework to conceptualize, evaluate and implement sustainable forest management.

1. Collaborative Partnership on Forests – CIFOR, CBD, FAO (Chair), GEF, ITTO, IUCN, IUFRO, UNCCD, UNDP, UNEP, UNFCCC, UNFF, World Agroforestry Centre, The World Bank: <http://www.cpfweb.org/en/>

Criteria define and characterize the essential seven thematic elements, as well as a set of conditions or processes, by which SFM may be assessed. These include extent of forest resources; biological diversity; forest health and vitality; productive functions of forest resources; protective functions of forest resources; socioeconomic functions; and the legal, policy and institutional framework.

Indicators, periodically measured, reveal the direction and scale of change with respect to each criterion. (Centre for International Forestry Research [CIFOR], 1999).

Criteria and indicators (C&I) of SFM can be used at the national or management unit level to report and assess progress toward achieving SFM. Nine international and regional C&I processes are operational across various forest zones (boreal, temperate and tropical), including more than 150 countries.

2.1.3 Certification

Certification is a voluntary, market-based tool that supports SFM or responsible forest management worldwide, verified by an independent third party in compliance with established principles, criteria, policies and standards prepared in multi-stakeholder processes that are transparent, democratic and inclusive.

Forest management certification is granted when independent inspection certifies that forest management meets internationally agreed upon principles, criteria and standards of SFM or responsible forest management.

Chain of custody (CoC) certification is granted when independent inspection tracks certified wood and paper products through the production process from the forest to the final product and to the consumer, including all successive stages of processing, transformation, manufacturing and distribution. The certified label ensures that the forest products used are from responsibly harvested and verified sources² or forests under SFM.³

2. Forest Stewardship Council: <http://www.fsc.org/certification.html>

3. Pinchot Institute for Conservation: http://www.pinchot.org/about_pic/mission

No single forest management standard is accepted worldwide, and in the past each system has taken a somewhat different approach in defining standards for SFM. Over the years, many of the issues that previously divided certification systems have become much less distinct. The largest certification systems now, generally, have the same structural programmatic requirements.⁴

The global association for sustainability standards – the ISEAL Alliance – has developed Draft Credibility Principles for sustainability standards systems, which aim to achieve positive social, environmental and economic impacts. These include the draft Performance Related Principles to ensure that the standard and supporting systems work effectively, as well as the Uptake Related Principles to build stakeholders trust and use the standards system (listed in Table 2.1 below).

Forest and CoC Certification systems were designed to tackle deforestation by creating market demand for timber from sustainably managed forests. According to the FAO, a major condition for the adoption of SFM is a demand for products that are produced sustainably and consumer willingness to pay for the higher costs entailed. Certification represents a different focus from the regulatory approaches to market incentives to promote SFM. By promoting the positive attributes of forest products from sustainably managed forests, certification focuses on the demand side of environmental conservation (FAO, 2009a).

Certification as a market-driven tool has tended to focus on wood, fiber and fuel products; however, forests also provide valuable ecosystem services (soil and water protection, conservation of biodiversity, carbon storage and sequestration, etc.) that, thus far, have been treated mainly as non-market benefits to society. The Forest Stewardship Council (FSC) is working on this issue through the ForCES project, with the Global Environment Facility (GEF), UN Environment Program (UNEP) and Centre for International Forestry Research (CIFOR).⁵ Additionally NWFPs, which are

4. Wikipedia on sustainable forest management: http://en.wikipedia.org/wiki/Sustainable_forest_management

5. ForCES Project: <http://www.fsc.org/forces-pilot.129.htm> or <http://www.fsc.org/ecosystem-services.124.htm>

TABLE 2.1 ISEAL Draft Credibility Principles

<i>Performance-Related Principles</i>	
Effectiveness	Standards systems measure and demonstrate progress toward their objectives and integrate learning to increase their impacts.
Relevance	Standards address the critical sustainability hotspots in the lifecycle of the product or service, only include requirements that contribute to their objectives, and are adapted where necessary to be locally applicable.
Rigor	Requirements in a standard reflect best scientific understanding and relevant international norms and are of a performance level that results in measurable improvements toward the objectives of the system.
Accuracy	Assessments of compliance provide an accurate picture of whether an entity meets the requirements in a standard.
Impartiality	Assessments of compliance are objective and the auditor and assurance personnel are not inappropriately influenced in their decisions.
Coordination	Standards systems build on or refer to existing standards where relevant and collaborate with other standards systems to improve consistency and efficiency in operating practices.
Operational efficiency	Standards systems have sound business and financial models and efficient governance systems that support their operations, while applying the most effective model to achieve their objectives.
<i>Uptake-Related Principles</i>	
Engagement	Standards systems engage a balanced and representative group of stakeholders in standards development, and engage relevant stakeholders in assurance and monitoring and evaluation.
Transparency	Standards systems make information easily available about the content of the standard, how a standards system operates, who is certified and how, impact information and various ways that stakeholders can engage.
Truthfulness	Claims and communications about the benefits that derive from the purchase or use of a product or service are accurate and enable an informed and comparable choice.
Accountability	Standards systems provide stakeholders with mechanisms for recourse where they feel their position or point of view has not been adequately taken into account.
Accessibility	Standards systems minimize costs and overly burdensome requirements to be accessible to stakeholders, the enterprises seeking assurance and the end users of the system.
Capacity	Standards systems facilitate training and access to resources for enterprises seeking assurance and support the development of local or regional assurance.

Source: ISEAL Alliance draft Credibility Principles, 2012: <http://www.isealliance.org/online-community/resources/draft-iseal-credibility-principles-v02-and-comment-submission-form-september-2012>

used for subsistence and trade to support the livelihoods of hundreds of millions of indigenous communities and smallholders are generally not certified. A significant proportion of the harvesting and trade in NWFPs is informal, so it has been difficult to secure sound data to evaluate the opportunities, constraints and impacts of NWFP certification.

In the past, certification was mainly available to large and well-resourced enterprises. However, a significant proportion of natural and planted forests are owned or managed by communities, small to medium enterprises and smallholders. Until recently, certification penalized these groups because they did not have the understanding of certification, the resources, capacity or technical know-how to access certification and

thus lost access to market opportunities that required certification and denied price premiums for certified products. In recent years, group certification has been introduced to bring these owners or managers of forests together under a group manager, who provides information and manages the certification process to take advantage of the economies of scale without losing control of their own forest and its management. In response to the realities and needs of small and low intensity managed forests the FSC introduced the Small and Low Intensity Managed Forests (SLIMFs) Program.⁶

6. SLIMFS Programme: <http://www.fsc.org/options-for-certification.167.htm> or <http://www.fsc.org/policy-for-labeling-community-and-slimf-products.316.htm>

2.1.4 Verification

Verification is granted by an independent, third party assurer when compliance exists with laws, regulations, standards and procedures for forest management, wood harvesting at the forest, wood processing and CoC throughout the supply chain and downstream entities, ensuring traceability of legal timber at all points in the supply chain. It is available to wood producers, processors and buyers and considered by some as a first step toward full certification.⁷ Verification of the legality of internationally traded wood products is an important dimension of the Forest Law Enforcement, Governance and Trade movement (FLEGT).

Voluntary legality verification schemes are divided into two categories:

Verification of Legal Origin (VLO) applies to forestry operations on the forest site; it verifies that the timber comes from a known and licensed source and that the entity, which has carried out the harvest, had a documented legal right to do so.⁸ Suppliers of VLO wood must follow and maintain documented CoC systems in meeting the administrative requirements of permitting, planning, taxes or fees and harvesting of defined areas.

Verification of Legal Compliance (VLC) verifies that wood harvesting complies with a broader range of applicable and relevant laws and regulations related not only to forestry but also a broader range of laws on environmental protection, wildlife, water and soil conservation, harvesting codes and practices, worker health and safety and fairness to communities. A VLC thus expands on the basic component of a VLO by verifying that timber harvesting and other relevant management activities in the forest, where it was harvested, have complied with all applicable and relevant laws and regulations⁹ (Proforest, 2011a).

7. Rainforest Alliance, Timber Legality Verification: <http://www.rainforest-alliance.org/forestry/verification/legal>

8. Requirements of VLO include (i) evidence of legal right to harvest wood from an FMU, (ii) evidence the use right is given by legal holder of tenure right, (iii) compliance with all requirements set for management planning and plan approval and (iv) payment of all statutory fees, royalties, taxes and other charges paid to authorities.

9. Requirements of a VLC include those of a VLO and, in addition, compliance with harvesting, environmental and social and labour regulations. It also outlines the manager's responsibility to prevent unauthorized activities within the management unit.

Verification involves audits of forest management units and processing facilities, including field inspections and reviews of management systems and documents. They may be:

- *Voluntary legality verification programs* developed by certification bodies (e.g., Bureau Veritas [BV], Scientific Certification Systems [SCS], Société Générale de Surveillance (SGS), SmartWood Rainforest Alliance and Double Helix Tracking Technologies (DoubleHelix) generally do not have a common approach.
- *Mandatory legality verification programs* developed by governments are of three types: (i) those that will meet the Voluntary Partnership Agreements (VPA) under the EU FLEGT Action Plan, (ii) national or sub-national government regulation and documentation and (iii) control services delegated by government to private sector firms.
- *NGO initiatives* with a focus on legality include the Tropical Forest Foundation, which has a legality component within the reduced impact logging (RLI) standard and Timber Trade Action Plan legality (TTAP) checklist that provides technical assistance to suppliers to achieve legality verification of their supply chain (Proforest, 2010).

Key dimensions of verification systems include (Brown et al, 2008):

- Ownership and the ability to control the objectives, process and outcomes (reciprocity between signatories, adoption of a systems approach, focus on the distribution and balance of powers)
- Legality standards, including clear, unambiguous sets of rules to determine compliance (clarity of assessment standards, clear definition of problem areas, creation of incentives to comply and report)
- Independence, with detachment in the system, compatible with national sovereignty (migration to non-parties, independent third party oversight)
- Inclusion of all stages in the CoC and special efforts to secure the most vulnerable stages
- Broad participation in enhancing the effectiveness of verification processes

- Development impacts that positively influence economic outcomes for small-scale operators and forest-dependent people¹⁰ (incorporation of pro-poor approaches into the design of verification systems)

2.1.5 Legality

Verification of *legality* demands a set of unambiguous standards for determining compliance. However, no universally agreed upon definition of legality exists that sets out which aspects of law are to be included. In fact, in the forestry sector, legality standards vary depending on whether they are intended to serve national or sub-national interests, bilateral trade agreements, government procurement contracts or voluntary certification initiatives. In most countries, the legal and regulatory frameworks governing the forest sector are highly complex and efforts at legal standard setting have had varying success. Most legal frameworks do not provide a clear basis against which to measure compliance and can be costly to demonstrate.

Existing legal frameworks, particularly in developing countries, may be weak, unclear, incomplete, contradictory and the subject of legal dispute, thus giving the perception (rather than the reality) of legitimacy. For example, some countries may have weak provisions for the protection of local communities and customary or indigenous peoples' rights, land tenure or the lack of provisions to sustain goods and ecosystem services from forests. In the process of defining legality standards, legal and institutional reform may first be needed to ensure that the government defines and fulfills its own obligations (Wells, 2006).

Determination of which laws and regulations to exclude or include under a standard can be highly contentious in terms of whose rights may be subordinated in the process or who ends up bearing the transaction costs of compliance. The process for deciding which laws are included in a definition of legality is the responsibility of the country in which the laws apply, and, if a definition

is to be a component of a legality assurance system to underpin a trade agreement, it must be endorsed by the country's government.¹¹

Regional and bilateral processes under FLEG promote mandatory standard-setting processes. These had a narrower remit than the C&I for SFM, but by focusing on existing laws and regulations the standards were applied to a wider range of activities than most criteria and indicators for SFM processes, spanning not only forest management but also forest industries processing, forest products trade and export licensing. The European Union's FLEGT program mandated the negotiation of license agreements (VPAs) for imports of legality of forest products into the European Union (European Union, 2005). Due in part to the constraints on agreeing upon unilateral mandatory standard setting according to the World Trade Organization General Agreements on Tariffs and Trade (WTO GATT), the EU FLEGT policy envisaged that each producer country develop its own definition of legality and legally produced wood with the aim of an unambiguous, objectively verifiable and operationally workable standard.

The definition of legality under the FLEGT VPA, EU *Timber Trade Regulation* and United Kingdom, Denmark, Belgium and the Netherlands Public Procurement Policies are broadly consistent, as detailed in Table 2.2.

The focus on legality should not, however, distract attention from the goal of sustainability or responsible forest management, but aim toward legal compliance and sustainability.

2.1.6 Law Enforcement

Law enforcement is one of the essential functions of governments. Criminal justice systems vary on the basis of many historical, philosophical, political and economic factors. Forest law enforcement systems are even more varied and based, in part, on issues related to the nature and value of the forest resource. Forest and natural

10. Verifor, Principles in Forest Verification: <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3472.pdf>

11. FLEGT Briefing Note No 2: http://www.euflegt.efi.int/files/attachments/euflegt/efi_briefing_note_02_eng_221010.pdf

TABLE 2.2 Consistency in Definition of Legality in Europe

<i>FLEGT VPA</i> ¹²	<i>EU Timber Regulation</i> ¹³	<i>Country Procurement Policies</i> ¹⁴
Granting of, and compliance with, rights to harvest timber within legally gazetted boundaries	Rights to harvest timber within legally gazetted boundaries	The standard requires that the forest owner/manager holds legal use rights to the forest.
Compliance with requirements regarding forest management, including compliance with relevant environmental labor and community welfare legislation	Timber harvesting, including environmental and forest legislation, including forest management and biodiversity conservation, where directly related to timber harvesting	The standard requires compliance from both the forest management organization and any contractors with local and national legal requirements, including those relevant to: <ul style="list-style-type: none"> ■ Forest management ■ Environment ■ Labor and welfare ■ Health and safety ■ Other parties' tenure and use rights
Compliance with requirements concerning taxes, import and export duties, royalties and fees directly related to timber harvest rights, where such rights exist	Payments for harvest rights and timber, including duties related to timber harvesting	The standard requires payment of all relevant royalties and taxes.
Respect for tenure on use rights to land and resources that may be affected by timber harvest rights, where such rights exist	Third parties' legal rights concerning use and tenure that is affected by timber harvesting	Compliance with 'Other parties' tenure and use rights (addressed earlier)
Compliance with requirements for trade and export procedures	Trace and customs legislation, in so far as the forest sector is concerned	The standard requires compliance with the requirements of CITES in signatory countries

Source: Proforest (2011a).

12. FLEGT Briefing Note No 2. What is legal timber?

13. Regulation (EU) No 995/2010 of the European Parliament and of the Council, 20 October, 2010.

14. Procurement policies of the Netherlands, United Kingdom, Belgium and Denmark.

resource law enforcement tends to differ from general law enforcement, because of the merger of the territorial and operational management functions of forestry agencies, with those of law enforcement. Planning and execution of forest products sales, for example, involves the forestry agency with compliance monitoring and enforcement of forest products sales contracts, enforcement of harvesting practice requirements and rate of cut constraints. Compliance monitoring and enforcement constitutes one phase of a continuum that continues on to criminal investigation and prosecution (World Bank, 2006a).

Forest law enforcement is not the exclusive domain of forestry agencies and requires coordination and cooperation with other mainstream criminal law enforcement organs of national and/or local government authority. All the issues of intersector cooperation and coordination that arise in other, more

conventional aspects of natural resource management and development arise in forest law enforcement (World Bank, 2006a).

Few developing country forestry agencies possess capabilities in criminology, law enforcement, forensics, and law necessary to meet today's needs. The FLEG and FLEGT mechanisms are strengthening the capacities and capabilities of governments and the functions of forest inspection authorities in the prevention, detection and suppression of forest crime.

2.1.7 Good Forest Governance

No common understanding of what constitutes good forest governance exists, and different people focus on limited perspectives and facets of it. Focusing change on a few aspects, without appreciating

the interconnections is likely to compromise its effectiveness at best and be counter-productive at worst. Certification, verification and law enforcement are important tools and sub-components of good forest governance. However, each alone is insufficient to reduce illegal logging, corruption, encroachment and violations of tenure and ownership rights (World Bank, 2009).

It is important to recognize that unsustainable management of forests, including illegal logging, are significant, but not the main drivers of deforestation, which come from outside the forestry sector (refer to 3.2.1). Forest managers, forest and forest industries investors, forest authorities, forest products traders and consumers all can play their part toward achieving legality and sustainability in forest management and forest products trade, in those political, technical and geographic areas for which they have an influence. However, good forest governance needs to address the scope, challenges and opportunities that link SFM with sustainable natural resources management, land use and livelihoods.

National forest programs, forest policies, laws and regulations and SFM tools and practices (including certification, and verification) are not well known and do not have significant influence beyond the forestry sector. The forestry sector is often marginalized, and the multiple functions and values of forests often invisible. It will thus be crucial to integrate national forest programs, policies, tools and practices into the wider climate change, population growth, natural resource management, national development and alleviation of poverty and hunger strategies, policies and plans. This will help balance SFM, food security and sustainable livelihoods in developing countries, but demands a wider and more challenging platform for good forest governance.

Gaps in knowledge and in readiness to plan and make reforms have hindered the achievement of this wider scope of good forest governance. Politicians can lack the political will or are reluctant to make the hard decisions required to initiate and sustain reforms. Better understanding of the political economy of reform processes, underpinned by stakeholder

analysis, are critical elements in deriving a comprehensive framework for good forest governance (World Bank, 2009).

2.2 Linking Certification, Verification, Law Enforcement and Good Forest Governance

Importing countries are increasingly demanding conformance with both legality and sustainability standards pressuring certification and verification to function in a more mutually supportive way. Based upon the C&I for SFM, the principles, criteria, policies and standards for certification are becoming increasingly harmonized among different certification schemes. However, differences remain between FSC, Program for Endorsement of Forest Certification Schemes (PEFC), and national certification systems in the region, particularly in treatment of indigenous peoples' rights, forest conversion, community rights, HCVPs and quality of audits. Purchasing policies of some countries and companies increasingly accept certification as proof of legality and sustainability compliance. However, legality verification (VLOs, VLCs and mandatory verification) that ascertain compliance with forest harvesting, transport and trade legality standards, remain the main tools for legality.

To achieve both legality and sustainability the fundamental building blocks for good forest governance are:

- Transparency, accountability and public participation
- Stability of forest institutions and conflict management
- Quality of forest administration
- Coherence of forest legislation and rule of law
- Economic efficiency, equity and incentives

An indicative framework of building blocks, components and sub-components of good forest governance actions to achieve good forest outcomes is summarized in Table 2.3. The full framework, including indicative sub-components is detailed in Annex 1. Verification,

TABLE 2.3 Building Blocks and Principal Components of Good Forest Governance

<i>Building Blocks</i>	<i>Principal components</i>
Transparency, accountability and public participation	<ul style="list-style-type: none"> ■ Transparency in the forest sector ■ Decentralization, devolution and public participation in forest management ■ Accountability of forest officials to stakeholders ■ Accountability within forest agencies
Stability of forest institutions and conflict management	<ul style="list-style-type: none"> ■ General stability of forest institutions ■ Management of conflict over forest resources
Quality of forest administration	<ul style="list-style-type: none"> ■ Willingness to address forest sector issues ■ Capacity and effectiveness of forest agencies ■ Corruption control within the forest sector ■ Forest monitoring and evaluation (M&E)
Coherence of forest legislation and rule of law LEGALITY	<ul style="list-style-type: none"> ■ Quality of domestic forest legislation ■ Quality of civil law implementation ■ Quality of criminal forest law enforcement ■ Quality of forest adjudication ■ Property rights recognized, honored and enforced
Economic efficiency, equity and incentives SUSTAINABILITY	<ul style="list-style-type: none"> ■ Maintenance of ecosystem integrity: sustainable forest use ■ Incentives for sustainable use and penalties for violations ■ Forest products pricing ■ Commercial forest products trade and forest businesses ■ Equitable allocation of forest benefits ■ Market institutions ■ Forest revenues and expenditures

Source: World Bank (2009).

certification and law enforcement are critical elements within the wider building blocks and components of good forest governance (World Bank, 2009).

Forest certification and legality verification have links to all building blocks. However, legality verification is a critical tool for deriving legality standards and monitoring compliance within the building block on the coherence of forest legislation and rule of law. Forest certification is a critical tool to derive the SFM standards and monitoring progress toward wider ecosystem integrity and SFM components within the building block on economic efficiency, equity and incentives, but also has criteria relating to governance and legality. However, all building blocks need to be functioning in a mutually supportive way to achieve good forest governance.

The framework of building blocks, components and sub-components of good forest governance can be used by experts to derive country-specific indicators that reflect the local contexts, benchmark the state of governance, highlight the strengths and weaknesses, identify priority reform areas and, by periodic

measurement, enable tracking of changes and trends in reforms.

2.3 International Initiatives Supporting Legality and/or Sustainability

In the past, certification and verification were considered too forestry oriented. Forest managers, investors and forest authorities used to engage with NGOs, community-based organizations, forest users, academics, scientists and other stakeholder groups to formulate principles, policies, criteria and standards for legality and sustainability of forest and forestry management. Independent, third party assessors monitored compliance of management with forest and forest industries standards.

Today, key advocates for greater integration and complementarity of forest certification, legality verification and good forest governance include international treaties and

processes, international environmental and social NGOs, multilateral and bilateral donors, financial institutions and market retailers and forest products traders, particularly from industrialized countries of Europe, North America, Japan and Oceania. These players also have been calling for greater integration of forest and forestry policies and strategic planning in more multidisciplinary and intersectoral approaches. Furthermore, they expect their principles, policies, criteria and standards to be adapted and adopted by Southern hemisphere actors in developing countries and countries in economic transition.

2.3.1 International Treaties and Political Processes

The most relevant legality and sustainability actions by international treaties and political processes, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), G8, Asia-Pacific Economic Cooperation (APEC), Association of Southeast Asian Nations (ASEAN), Montreal Process and International Tropical Timber Organization (ITTO), that provide the political and technical framework for legality and sustainability in Southeast Asia are summarized in Table 2.4.

From the highest political levels in the largest economies globally, represented by the G8 leaders (primarily buyers/importers), to the industrialized, transition and developing countries of the Asia Pacific region, represented by APEC leaders (mix of producers/exporters and buyers/importers), and to Southeast Asia, represented by ASEAN leaders (primarily producers/exporters) have been moving more in unison in prioritizing actions by producers/exporters and buyers/importers to reduce illegal logging and associated forest products trade. Priority actions, among others, target increased verification of legality and forest certification to monitor sustainability.

Despite these priority actions, the ASEAN initiatives and other international treaties and processes have so far had limited impact on illegal logging and the associated forest product trade in the Southeast Asian case study countries. The high demand for land and forest products, low institutional capacity, weak governance and deeply entrenched social causes of deforestation and

forest degradation remain challenges. Nonetheless, the Montreal, ITTO and Dry Zone Asia C&I processes, certification processes and best practices guidelines provide the technical and institutional framework to guide, assess, attest to, monitor and report on progress toward sustainability. This guidance and support for both the ASEAN and other international treaties and political processes are gaining importance given the strong global calls for sustainability and legality of forests.

2.3.2 The EU's Forest Law Enforcement, Governance and Trade (FLEGT) Initiative

The European Union has been active to tackle the legality and sustainability of wood-based products most prominently through the voluntary FLEGT licensing scheme. The EU Action Plan for FLEGT sets out a process and package of measures based on the view that illegal logging is both a producer and a consumer concern, which is both supply and demand driven. As a consequence, solutions are applied through the supply chain of wood-based products, which include (i) support for timber-producing countries in their governance reforms and capacity building, (ii) efforts to develop multilateral collaboration to eliminate the trade in illegally harvested timber, (iii) public procurement policy reform and (iv) voluntary measures and initiatives. In particular, FLEGT is based upon:

- *Bilateral Voluntary Partnership Agreements (VPAs)*: A legally binding agreement between the European Union and individual partner producer countries, which support trade in legal forest products produced according to standards of legality defined through a multi-stakeholder dialogue and subject to independent audit
- *National Timber Legality Assurance System (NTLAS)*: A system to control and independently audit production forests and supply chains of timber bound for the European market
- *Public Procurement Policies*: EU Member State government policies setting out requirements for officials and agencies with purchasing power. Member States are encouraged to develop criteria for all relevant forest products, which ensure that they are independently verified as legal and/or sustainable.

TABLE 2.4 International Treaties and Political Processes Supporting Legality and/or Sustainability

Process/Organization	Initiative
<i>Treaties and Political Processes</i>	
CITES Signatories include Indonesia, Malaysia, Vietnam, Thailand and Lao PDR	1975 International agreement to monitor and regulate international trade in endangered wild animals and plants. Action in timber trade and illegal logging to: <ul style="list-style-type: none"> ■ Monitor trade reporting ■ Maintain trade database ■ Require sustainable harvesting ■ Require adherence to national laws for protecting fauna and flora ■ Require enactment and enforcement of national laws to implement CITES ■ Facilitate international cooperation in monitoring and regulating trade SE Asian tree species ramin (<i>Gonystylus</i> spp.) and agarwood (<i>Aquilaria malaccensis</i>) are listed by CITES.
The G8 Forestry Action Program Members are Canada, France, Germany, Italy, Japan, Russia and the United States and United Kingdom	In 1998, illegal logging identified as priority action area, reinforced by the United Kingdom (2005) and Japan (2008) to catalyze actions by both timber-producing and buyer countries. ¹⁵
APEC 21 member countries, including Indonesia, Malaysia, Vietnam and Thailand	2011, APEC Leaders and First Meeting of Ministers for Forestry, ¹⁶ agreed upon measures to combat illegal logging and associated trade (APEC, 2011). 2012, APEC Experts Group on Illegal Logging and Associated Trade agreed to: <ul style="list-style-type: none"> ■ Strengthen dialogue and share successful policies and procedures ■ Exchange experiences and analyses on laws, regulations, data and information on production, processing, exports, imports and consumption of forest products ■ Facilitate law enforcement cooperation and information sharing consistent with domestic law and applicable international agreements ■ Collaborate with international and regional forestry organizations on SFM and rehabilitation to complement their activities ■ Targeted capacity building assistance ■ Collaborate with industry and civil society to raise awareness and contribute to national and regional efforts
<i>Political/Technical Processes</i>	
ASEAN. 10 member countries, including Indonesia, Malaysia, Vietnam, Thailand and Lao PDR	ASEAN initiatives supporting legality and sustainability in forestry: <ul style="list-style-type: none"> ■ 1997, Vision 2020 for Food, Agriculture and Forestry promoted the sub-region as a leading forest products producer and model forest manager ■ 2000, ASEAN C&I for SFM in Natural Tropical Forests for describing, assessing and evaluating progress toward SFM (ASEAN, 2000) ■ 2002, Pan-ASEAN Timber Certification Working Group to strengthen enabling conditions for forest certification ■ 2004, Strategic Plan of Action (2005–2010),¹⁷ supported a common ASEAN forest certification scheme, RIL, a forestry database, reduced trade in illegal wood products, regional cooperation on CITES and promotion of intra- and extra-ASEAN trade in forest products ■ 2006, Experts Group on International Forest Policy Processes promoted use of international forest-related commitments and agreements in the sub-region¹⁸ ■ 2007, monitoring, assessment and reporting format and forestry clearing house mechanism strengthened country reporting toward SFM ■ 2008, Work Plan on FLEG (2009–2015) highlighted ASEAN C&I for Legality of Timber and supply of legal timber and timber products to markets ■ 2009, Regional Guideline for PACt provided a step-by-step framework toward SFM. Tools included: <ul style="list-style-type: none"> ■ Forest Policy Framework through National Forest Programs ■ ASEAN Criteria and Indicators for Legality of Timber, adopted 2009 ■ ASEAN Guideline for Chain of Custody for Legal Timber, adopted, 2010 ■ ASEAN Guideline for Chain of Custody for Sustainable Timber, adopted 2010. ■ 2011, ASEAN Commitment to REDD-plus¹⁹ ■ 2012, Strategic Plan of Action in Forestry (2011–2015) included capacity building in certification, legality, verification and good forest governance and commitment to have all member countries prepare Timber Legality Assurance System by 2015 ■ 2012, 15th ASEAN Senior Officials in Forestry Meeting in Vietnam called for more profound cooperation at all levels to promote SFM and development through sharing information, experiences and effective policies²⁰

(continued)

TABLE 2.4 International Treaties and Political Processes Supporting Legality and/or Sustainability (continued)

Process/Organization	Initiative
<i>Technical Processes</i>	
Montreal Process Working Group on C&I for Conservation & SFM in Temperate and Boreal Forests 13 parties, including Australia, China, Japan, New Zealand and the Republic of Korea	Follow-up to The Forest Principles (1992) the C&I agreed in 1995 in Santiago, Chile, provided a framework of 7 criteria and 67 indicators to monitor, assess and report on national progress toward SFM and good forest governance ²¹ in temperate and boreal forests in countries outside Europe.
ITTO Initiative on C&I for SFM in Natural Tropical Forests 60 members, including Indonesia and Malaysia	C&I for SFM in natural tropical forests concept and terminology in 1992, revised in 1998 (with related policy guidelines) and 2005 to monitor and evaluate achievements toward SFM and to track effects of forest reforms.
Regional Initiative on C&I for SFM in Dry Zone Asia 9 members, including Thailand	C&I framework of 8 criteria and 49 indicators to monitor national progress toward SFM, Bhopal, India, 1999.

Source: Authors' compilation.

15. G8 Action Program on Forests: Final Report: http://www.illegal-logging.info/item_single.php?it_id538&it5document

16. APEC First Meeting of Ministers Responsible for Forestry: http://www.apec.org/Meeting-Papers/Ministerial-Statements/Forestry/2011_forestry.aspx

17. ASEAN Strategic Plan of Action on Cooperation in Food, Agriculture and Forestry (2005–2010): <http://www.asean.org/news/item/strategic-plan-of-action-on-asean-cooperation-in-food-agriculture-and-forestry>

18. ASEAN Ad-hoc Experts Working Group on International Forest Policy Process (2004): <http://www.aseanforest-chm.org/asean-ministers-on-agriculture-forestry/>

19. ASEAN commitment to REDD-plus: <http://www.aseanforest-chm.org/asean-regional-knowledge-network-on-forests-and-climate-change-fcc/>

20. 15th ASEAN Senior Officials in Forestry, Vietnam, June 2012: <http://www.eco-business.com/features/vietnam-urges-asean-nations-to-save-forests/>

21. Montreal Process. Criteria and Indicators for Conservation and Sustainable Management of Temperate and Boreal Forests: <http://www.rinya.maff.go.jp/mpci/>

Export licensing to the European Union will be based on national standards for forest management, rooted in the national laws and regulations of individual partner countries. These include environmental protection, logging rules, payment of fees, forest products trade and transport regulation and property rights of forest dependent communities. A VPA includes a package of technical assistance and institutional and policy support.

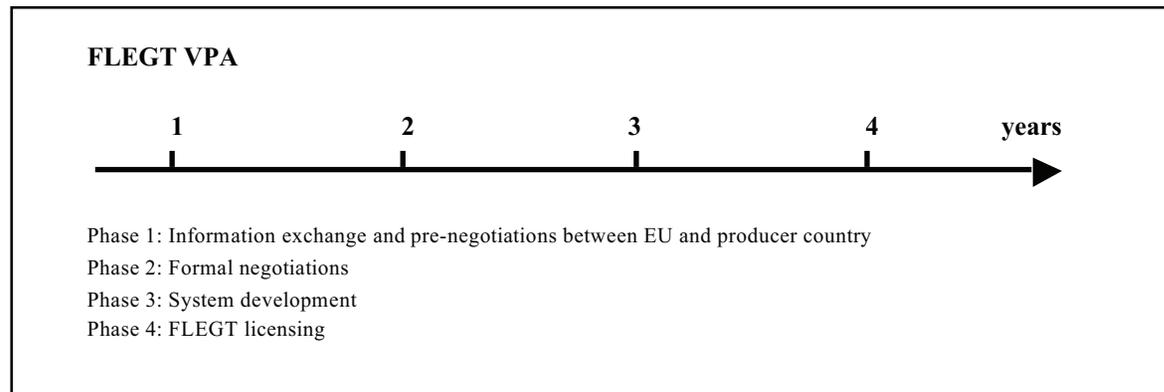
Formal negotiations for VPAs opened in February 2008 between the European Union and producer countries. The FLEGT Action Plan process with each country involves four phases, as summarized in Figure 2.1. Indonesia signed a VPA with the European Union in May 2011, the only country in Southeast Asia to do so to date. Malaysia and Vietnam are currently negotiating and Lao PDR and Thailand are in the information and pre-negotiation phase.²² China, the largest Asian

importer and exporter of forest products, is not currently pursuing a VPA with EU FLEGT.

2.3.3 EU Timber Trade Regulation (EUTR)

In October 2010, an EU *Timber Trade Regulation* (EUTR) detailed the obligations of importers to the European Union to counter the trade in illegally harvested forest products by prohibiting import of illegal forest products and requiring importers to exercise due diligence and keep records of suppliers and customers. The due diligence requires the trader to: (i) access information describing the timber and timber products, the country of harvest, species, quantity; details on the supplier and compliance with national legislation; (ii) assess the risk for illegal timber in the supply chain based on the information provided, taking into account criteria set out in the regulation; and (iii) demonstrate risk mitigation if assessment shows a risk for illegal timber by requiring additional information and verification from the supplier (European Union, 2010).

22. FLEGT: http://www.euflegt.efi.int/portal/home/flegt_intro/

FIGURE 2.1 Process Phases for the FLEGT Licensing System

Source: http://www.euflegt.efi.int/portal/home/vpas/the_process/

Application of the EUTR will commence on 3 March, 2013 and detailed implementing rules for the due diligence will be adopted by 3 June, 2012. It is legally binding for all 27 EU Member States, which are responsible for laying down effective, proportionate and dissuasive penalties and designating a competent authority responsible for enforcement.

Certification and third party verification schemes may be used to satisfy elements of the due diligence requirements to show steps taken to demonstrate legality and sustainability; however, until the implementing rules for due diligence are detailed, the extent to which these tools can be used is not yet clear. Certification schemes are negotiating with the EU authorities to confirm their certification fulfils the requirements of the EUTR, so that certificate holders do not have to undertake additional due diligence activities for their certified forest products when the EUTR comes into force in 2013.²³

2.3.4 Lacey Act

The US Congress passed a law in May 2008 to amend the 100-year-old *Lacey Act* to ban commerce in illegally sourced plants and their products, including forest products (United States Department of Agriculture [USDA], 2008). The amended *Lacey Act*:

- Prohibits trade in plant and plant products that are illegal to import, export, transport, sell, receive,

acquire or purchase in domestic or international commerce, traded in violation of the laws of the United States, a US state, or relevant foreign law

- Requires importers to declare country of origin of harvest and species name of plants contained in their products
- Establishes penalties for violation of the *Lacey Act*

The *Lacey Act* applies legality criteria as defined by the sovereign nation's own laws, regulations and standards that protect against the theft of plants; taking plants from officially protected areas (e.g., parks or reserves), other "officially designated areas" or contrary to authorizations; non-payment of harvest, transport or commerce royalties, taxes or fees; or contrary to laws governing export or trans-shipment (e.g., log export ban).

Amendments to the *Lacey Act* have not been supported by a clear framework of regulation that sets guidelines for importers, exporters and traders. However, it is suggested that operators exhibit due care and implement due diligence systems to minimize the risk for illegal wood entering supply chains and declare key information to Customs and Border Protection and the Department of Homeland Security. Importers are encouraged to use supply chain tracking procedures such as bar codes or tracing systems, legality verification, third party certification or stepwise programs offered by independent third party assessors and other innovative public-private partnership models.

Due care can be established by putting in place supply chain management systems, including verification of

23. EU-FSC Timber Regulation negotiations: <http://www.fsc.org/timber-regulation.46.htm>

legality and third party auditing. Even though verification cannot guarantee protection from prosecution, it can limit the risk for illegal timber entering the supply chain. Most certification systems for forest products include legality of harvest among their criteria, in addition to sustainability. Thus, certification systems may provide information useful to manufacturers and importers in their efforts to exercise due diligence regarding sources and species of timber.

2.3.5 The Australian *Illegal Logging Prohibition Bill*

On 29 November 2012, the Australian government passed the *Illegal Logging Prohibition Bill* to restrict the importation and sale of illegally logged timber within Australia. The Bill restricts the importation and sale of illegally logged timber in Australia through:

- Prohibiting import of timber products containing illegally logged timber
- Prohibiting domestically grown raw logs that have been illegally logged
- Requiring importers of regulated timber products and processors of raw logs to fulfill due diligence
- Establishing comprehensive monitoring and investigation powers to enforce requirements of the Bill

The Bill provides for due diligence guidelines and code of conduct to be developed in consultation with stakeholders and proposed to come into effect two years after the proposed legislation passes through Parliament. The Bill will establish offences and penalties for importing illegal timber products and a comprehensive monitoring and enforcement regimen that will give consumers and businesses greater certainty about the legality of the timber products they buy. Additionally, the Bill will be supported by continued bilateral cooperation with Asia-Pacific countries and multilateral engagement on forestry through existing forums.²⁴

Certification and third party verification schemes have the potential to satisfy elements of the due diligence requirements, but until the guidelines and code of conduct are approved, the extent to which these tools can be used is not yet clear.

24. *Illegal Logging Prohibition Bill*, 2011: <http://www.daff.gov.au/forestry/international/illegal-logging>

2.3.6 REDD-plus

REDD-plus is a new mechanism for encouraging developing countries to strengthen forest governance (institutions, policies, laws, regulations and enforcement); undertake timely and reliable forest measuring, reporting and verification; and achieve SFM through financial incentives to contribute to mitigation in the forest sector by reducing greenhouse gas emissions from deforestation and forest degradation, conservation of forest carbon stocks, the sustainable management of forests and the enhancement of forest carbon stocks.

Approximately 20% of global greenhouse gas emissions are from deforestation and forest degradation; therefore, effective implementation of REDD-plus will substantially contribute to reducing these emissions. To achieve reductions in emissions, developing countries are being encouraged to address the drivers of deforestation and forest degradation. REDD-plus payments could help compensate those who have been involved in the past with illegal logging or unsustainable forest management or forest conversion. To be successful, payment distribution must be done equitably and include indigenous peoples and local communities and avoid the collusion and corruption associated with forest products trade in the past. The REDD-plus and FLEGT initiatives are working in close collaboration, including in Indonesia, Malaysia, Vietnam, Thailand and Lao PDR.²⁵ Legality verification and forest certification as proof of legality and sustainability can contribute to the good forest governance and forest management objectives of REDD-plus (and vice versa).

2.3.7 Green Public Procurement Policies

Green public procurement policies for wood products are in the early phases, mostly in Europe, where public procurement makes up to 15% to 25% of all timber products purchased. Currently, approximately a dozen national governments in Europe, Oceania and to a lesser extent Asia and Latin America have operational green procurement policies, including specific criteria for forest products. Other countries are currently in the planning phase, although none exist in Southeast Asia.²⁶ In

25. REDD-plus portal: <http://redd-plus.com/drupal/>

26. The concept of green public procurement has been entered in article 105 Presidential Degree 54/2010 in Indonesia, but how to apply and implement these concepts has been debated.

the United States, no federal procurement policy exists that specifically restricts or encourages the purchasing of wood products. City and state governments thus have to reassess their own procurement policies to promote environmentally sustainable practices, particularly in the environmentally leading states in the West and Northeast of the United States. In most cases, this should benefit overall wood product use, but it is creating a fragmented and complicated regulatory landscape. Furthermore, emerging issues, such as “buy local” provisions or FSC-preferred certification requirements, have the potential to affect international wood product imports.

A proliferation of governmental purchasing policies has developed in the European Union that differ widely in their legality and sustainability requirements. The European Union recommends that governmental purchasing policies at the country level should include environmental, social or economic criteria, as relevant. For instance, the British government recently expanded the scope of procurement requirements to include social issues along with the existing environmental concerns, as detailed in Box 2.1.

The Olympic Delivery Authority in the United Kingdom specified FSC and PEFC certified timber be used for the construction of venues for the 2012 London Olympics. The Olympic Park was the first construction project to gain joint FSC and PEFC certification.²⁸ Similarly, the French government specified that wood purchases in government contracts be 100% “legal and sustainable.” France has recently committed to amending its existing relatively flexible definition of “legal and sustainable” timber and to defining “the modalities for recognition of forest management certification schemes.” The Dutch, German, UK and Belgian governments also require that all wood be verified as “legal and sustainable.” The two best known government mechanisms to ensure that these objectives are achieved are the Netherlands, with their Timber Procurement Assessment Committee (TPAC),²⁹ and the United Kingdom, with their Central

28. Joint FSC and PEFC certification of Olympic Park, London: <http://www.fsc.org/newsroom.9.99.htm>

29. Timber Procurement Assessment Committee (TPAC) of the Netherlands: <http://www.tpac.smk.nl/>

BOX 2.1

UK Government Timber Procurement Policy

The UK government’s timber procurement policy requires central government departments, their executive agencies and non-departmental public bodies to procure timber and wood-derived products originating exclusively from legal and sustainable or FLEGT licensed or equivalent sources.²⁷ However, where a particular type of product or timber species is required and no sustainable timber or FLEGT-licensed timber or alternative is available, timber that can be verified to meet the UK government requirements for legality will be accepted. Voluntary legality verification systems can therefore play an important role in ensuring legality and ensuring compliance with the UK government’s timber procurement policy, particularly where no sustainable source is available. The United Kingdom’s policy requires compliance with legislation related to forest management, environment, labor and welfare and health and safety. As a consequence, VLO standards from SGS and SmartWood Rainforest Alliance or FSC controlled wood are not acceptable, whereas voluntary legality verification systems ensuring full legal compliance as delivered by the VLC definition will be accepted.

Source: <http://www.cpet.org.uk>

27. UK government timber procurement policy: <http://www.cpet.org.uk/uk-government-timber-procurement-policy>

Point of Expertise on Timber Procurement (CPET).³⁰ The Netherlands, Germany and Belgium accept FSC and PEFC certification schemes as complying with the requirements of public procurement policies for timber and timber products.

Due to the different government procurement policies, timber producers face difficulties when they supply several markets. On some occasions, consumer-country governments, responding to the wishes of their domestic stakeholders, have demanded amendments to international certification standards and procedures before acknowledging sustainability credentials. This creates challenges for international certification frameworks when it is necessary to comply with internal

30. Central Point of Expertise on Timber Procurement (CPET): <http://www.cpet.org.uk/>

rules and timetables for review of standards and when a global consensus must be built for almost every change. Despite these problems, the governing bodies of FSC and PEFC certification have been able to ensure that their frameworks are accepted as conforming to the highest sustainability standards. As a result, achieving certification to FSC or PEFC standards is the most effective way to overcome the potential barriers to trade presented by the diversity of national timber procurement policies.

2.3.8 Sector-Specific Sustainability Requirements

Green Building

The emergence of green building codes in both the commercial and residential sectors is favorable to the promotion and use of wood products. The construction sector, which accounts for an estimated 50% of global carbon emissions, has become a key focus of government policies to tackle climate change. Wood is much more favorable than concrete, steel, aluminum and plastic as a renewable product, indicated by the carbon cycle assessment. The development of certified wood markets in construction is now driven partly by credits awarded by green building programs for the use of certified wood. As in green public procurement, an increasing trend has been seen toward inclusiveness in green building initiatives so that a range of forest certification systems are credited.

Green building initiatives have recently emerged in the European Union, North America and Asia. The European Union has established directives specifying energy standards to all new buildings and substantial renovations. A comprehensive strategy toward lowering the carbon footprint by 2015 is currently under development, which should involve more aggressive green building targets. North America has more than 40 active green building programs. The Leadership in Energy and Environmental Design (LEED, United States) system is the current leading industry standard. The demand for green buildings also has grown significantly in Asia, with Singapore, Taiwan, Japan, Hong Kong, the Philippines, the Republic of Korea and India among those with green building councils. Among the Southeast Asian countries introduction of green building policies has been limited.

Many green building codes, including Green Globes (United States and Canada), Comprehensive Assessment System for Built Environmental Efficiency (CASBEE, Japan), Building Research Establishment Environmental Assessment Method (BREEAM, United Kingdom) and Green Building Councils of Australia, Spain and Italy recognize multiple forest certification standards, including FSC and PEFC endorsed schemes. LEED currently has FSC preference; however, a PEFC pilot under way could lead to acceptance of both PEFC and FSC in the near future. Table 2.5 summarizes the Asian countries

TABLE 2.5 Asian Green Building Rating Systems

Country	Rating System	Policy on Wood
International	LEED	50% wood-based materials and products used for building components must be certified by FSC
India	Green Rating for Integrated Habitat Assessment (GRIHA) LEED India	No specific certification requirement Allows credits for FSC certified wood. Currently 40,000 ha of forest group certificates in multiple sites and 229 CoC certificates in India
Singapore	Greenmark	Not detailed
Hong Kong	Hong Kong Building Environmental Assessment Method	Credit for 50% wood and composite wood products certified by FSC or AFPA
China	The Star Scheme, Ministry of Housing, Urban and Rural Development	Not detailed
Taiwan	The Green Building Program and Green Remodelling	Not detailed
Japan	CASBEE	Wood from SFM, but details not available
Malaysia	Green Building Index	Over 50% of wood-based materials and products used to be certified by FSC, MTCS/PEFC

Source: Cheng and Le Clue (2010).

TABLE 2.6 International Organizations and Tools Supporting Legality and Sustainability

Organization	Tool	Function
Central Point of Access for Timber Procurement	Framework to assess compatibility of forest certification systems	Provides advice to evaluate supply chains, including contractual requirements ³¹
Centre for International Forestry Research	Toolbox of Principles, C&I and Standards for Forest Management in Different Ecological Regions	Field testing C&I and standards at forest management unit level, less so for higher level initiatives on sustainability or forest governance (CIFOR, 2011).
Chatham House	Assessment of global response to illegal logging and associated trade	Assessments of indicators for producer, processor and consumer countries to track global responses to illegal logging and associated trade. ³²
Chatham House and EU FLEGT Facility	IllegalLogging.Info	A country database and network to share information on key issues in the debate around illegal logging and associated trade and access to documents, events and links to other websites ³³ .
Global Integrity	Global Integrity Index	Monitored governance and corruption trends around the world from 2006 (discontinued 2006). ^{34,35}
International Institute for Environment and Development	Diagnostic & Planning Tool: The Pyramid of Key Elements for Good Forest Governance	This was based upon certification as a tool, together with policy and critical institutional issues within a wider context of various efforts toward SFM (International Institute for Environment and Development, 2002).
NEPCon, FSC, Rainforest Alliance	The Global Forest Registry	Open access to risk evaluation information in 150 countries. Version 2 launched in 2010 to access information at sub-national level. ³⁶
PricewaterhouseCoopers, World Business Council for Sustainable Development	Sustainable Forest Finance Toolkit	Overview of sustainability issues along supply chains of forest products for financial institutions to assess and manage risks. ³⁷
Sustainable Forest Products	Network on Sustainable Forest Management, Sustainable Forest Products	Website to provide access to members on Sustainable Forest Management, Forest and Wood Products, Wood Energy, Forest Certification and Fire Management ³⁸
Transparency International	Corruption Perceptions Index	Monitors level of corruption perceived to exist among public officials and politicians, by country. ³⁹
World Bank	Country Policy and Institutional Assessment	Monitors criteria to assess the quality of policies and institutions related to economic growth, poverty reduction and aid effectiveness. ⁴⁰
World Bank Institute, Research Department World Bank	Worldwide Governance Database	Monitors governance indicators in a country, change across time and country comparisons. ⁴¹
World Resources Institute, Instituto do Homem e Meio Ambiente da Amazonia and Instituto Centro d Via	Governance of Forests Initiative Indicator Framework of Good Forest Governance	Principles, processes, institutions and practices that protect forests and improve livelihoods of forest dependent communities. ⁴²
World Wide Fund for Nature lead partnership	Global Forest and Trade Network (GFTN)	Links companies, communities, NGOs and entrepreneurs globally to coordinate efforts to expand credible forest management certification, verification, technical assistance and marketing opportunities. ⁴³ Useful references include: National Legality Verification Frameworks (WWF, GFTN, TRAFFIC) ⁴⁴ ; Exporting in a Shifting Legal Landscape (WWF, GFTN) ⁴⁵ ; Keep it Legal (WWF, GFTN) ⁴⁶ ; General Guidance for Legal and Responsible Sourcing (WWF, GFTN). ⁴⁷
World Wide Fund for Nature/ World Bank Global Forest Alliance	Forest Certification Assessment Guide	Assesses certification systems' provisions for the control of CoC from forest origin to product. ⁴⁸

Source: Author's compilation

31. CPET website: <http://www.cpet.org.uk/>

32. Chatham House. Measuring the Response to Illegal Logging: Indicators of Progress: <http://www.chathamhouse.org/research/eedp/current-projects/measuring-response-illegal-logging-indicators-progress>

33. Illegal-Logging.Info: <http://www.illegal-logging.info/>

34. Global Integrity, 2011. Why we killed the Global Integrity Index: <http://www.globalintegrity.org/node/792>

35. Global Integrity Report: <http://www.globalintegrity.org/report>

36. Global Forestry Registry: <http://www.globalforestryregistry.org/>

37. Sustainable Forest Finance Toolkit: <http://www.pwc.co.uk/sustainability-climate-change/issues/forest-finance-home.jhtml>

38. Sustainable Forest Products: <http://www.sustainableforestproducts.org/>

39. Transparency International, Corruption Perceptions Index, 2011: <http://cpi.transparency.org/cpi2011/>

40. The World Bank. CPIA: <http://data.worldbank.org/data-catalog/CPIA>

41. The World Bank. World Wide Governance indicators database: http://info.worldbank.org/governance/wgi/sc_country.asp

42. World Resources Institute. Governance of Forests Initiative: <http://www.wri.org/project/governance-of-forests-initiative>

43. WWF. Global Forests and Trade Network: <http://gftn.panda.org/>

44. WWF, GFTN, TRAFFIC, Legality Verification Frameworks: <http://sourcing.gftn.panda.org/index.php?id=86>

45. WWF, GFTN: Exporting in a Shifting Legal Landscape: <http://gftn.panda.org/resources/tools/?193890/Exporting-in-a-Shifting-Legal-Landscape>

46. WWF, GFTN: Keep it Legal. Best Practices for Keeping Illegally Harvested Timber Out of Your Supply Chain: http://www.wwf.or.id/en/about_wwf/whatwedo/forest_species/what_we_do/gftn_indonesia/resources/?4321/Keep-It-Legal-Best-Practices-for-Keeping-Illegally-Harvested-Timber-Out-of-Your-Supply-Chain&desktop=1

47. WWF, GFTN: General Guidance for Legal and Responsible Sourcing: <http://sourcing.gftn.panda.org/>

48. Forest Certification Assessment Guide: http://siteresources.worldbank.org/EXTFORESTS/Resources/FCAG_WB_English.pdf

that have developed or are developing their own green building rating systems. All these countries are important markets for the Southeast Asian case study countries.

Publishing, printing and packaging sectors

Environmental campaigns in the publishing sector of the United States have led to Canadian pulp producers without FSC certification having challenges in accessing these markets. FSC is thus gaining traction as the preferred approach to certification; particularly for consumer product producers. In the EU, the new government purchasing policies mainly focus on certified paper products rather than pulp. There are currently no serious and widespread purchasing policies for certified pulp and paper products in Southeast Asia.

2.3.9 International Organizations and Tools Supporting Legality and Sustainability

Many organizations and tools fulfill functions in support of CoC legality and sustainability. These organizations and tools assist key stakeholders to make decisions about governance, investment and procurement risks, to compare verification and certification systems and promote the role of legality verification and certification in making sound decisions in forest management and forest products trade.

Table 2.6 summarizes international organizations and tools that support legality and sustainability in CoC initiatives and highlights the key functions.

SECTION 3

TOWARD SUSTAINABLE FOREST MANAGEMENT IN SOUTHEAST ASIA

This section highlights the pivotal role of China and the performance of ASEAN countries with respect to deforestation, SFM, good forest governance and forest products trade. On a sub-regional and individual country basis, the impact of international market pressures is assessed in demanding legality and sustainability and the responses by countries in use of verification, timber legality assurance systems (TLAS), VPAs and certification (forest and CoC) in combination with law enforcement and good forest governance.

In addition, the verification and certification schemes, certification bodies and standards, scale and compatibility of use are summarized. A brief assessment of the impacts of major buyers and importing countries, NGOs, timber trading organizations and end users on verification, certification and law enforcement is undertaken. A comparative analysis is summarized for the different tools and standards and lessons are highlighted.

3.1 The Influence of China

3.1.1 China as a Market for Forest Products from Southeast Asia

According to the ITTO, the total value of China's national forest industry output value (including NWFPs) was US\$259 billion in 2009, up 21% from

2008. Despite the global economic crisis, the value is anticipated to increase to US\$333 billion by 2012. The average growth rate of output has been 20% annually since 2001. The government's target is to maintain growth at around 12% annually. Although China has a net gain in forest area, it remains a net importer of wood and the wood deficit is expected to increase substantially over the next 20 years. China is the dominant importer of forest products. In 2008, China imported 44% of its tropical timber requirements and 21% of all timber requirements (Cheng and Le Clue, 2010).

Between 1997 and 2005, the value of forest products imports rose from US\$6.4 billion to US\$16.4 billion and the volume trebled from 40 million m³ roundwood equivalent to 134 million m³, projected to more than double again to 300 million m³ by 2015. The rapid increase in imports reflects (i) China's increasing consumption, (ii) rising global demand for low-cost forest products manufactured in China and (iii) China's inability to meet rising demand through production from its own forests because of the logging ban (1998) and lower than anticipated productivity from their rapidly expanding plantation forests. The domestic supply of industrial wood from natural and planted forests has been less than projected; therefore, China cannot keep up with the escalating demand. This gap is met by illegal or unreported logging in China, estimated at 75 to 100 million m³ annually, and imports (Forest Trends,

TABLE 3.1 Major Wood Products Exporters to China (2005)

Total Forest Products		Logs		Lumber		Plywood		Wood Pulp		Paper	
Country	%	Country	%	Country	%	Country	%	Country	%	Country	%
Russia	48.8	Russia	68.2	Russia	17.7	Indonesia	65.0	Canada	26.7	Taiwan	16.0
Malaysia	8.3	Malaysia	6.3	USA	14.3	Malaysia	21.2	Indonesia	18.2	USA	12.5
Indonesia	5.7	Papua New Guinea	6.3	Thailand	12.8	Russia	3.1	Russia	12.9	Republic of Korea	11.6
Thailand	4.6	Myanmar	3.9	Indonesia	12.1	Japan	2.4	Chile	10.3	Japan	8.0
Papua New Guinea	4.2	Gabon	2.7	Malaysia	8.0	Taiwan	1.4	USA	9.5	Indonesia	6.9

Notes: Case study countries highlighted in green.

Source: Forest Trends (2006).

2006). Southeast Asian countries are key exporters to China, as highlighted in Table 3.1.

As China grapples with reducing illegal and unsustainable harvesting by regulation (1998 logging ban) and enforcement, exploitation and illegality have been displaced to developing countries with weaker regulations, including Southeast Asian countries, with Indonesia being a notable example. Illegal logging has deprived governments of tax revenues, depressed prices, frequently led to unsustainable harvesting, undermined the rule of law and sometimes generated funds to support and perpetuate armed conflicts. However, although China's demand for wood products is linked to an increase in unsustainable harvesting and illegal logging, they are only one link in a global commodity chain. Consumers and retailers around the globe, who buy Chinese furniture and plywood from illegally harvested wood products, are an integral part of the problem (Forest Trends, 2006; Lang and Chan, 2006).

3.1.2 China Forest Products Export Markets

Between 1997 and 2005, China's forest products export value rose from US\$3.6 billion to US\$17.2 billion. In 2006, China exported 50 million m³ roundwood equivalent forest products, forecast to double to 100 million m³ by 2015. China's exports of wood furniture increased from 3.2 to 12.7 million m³ roundwood equivalent between 1997 and 2005 and plywood exports increased 10-fold during the same period. The United States, Japan, Hong Kong and EU countries were China's main export destinations, with exponential growth in United States and European Union markets (Forest Trends, 2006).

3.1.3 Impact of Legality and Sustainability Measures on China

The global market for tropical timber is changing, with traditional export markets of Europe, Japan and North America declining but exports increasing to China and India and intraregionally. Domestic markets also are growing significantly. Some of these markets have placed little emphasis on certification or legality verification until recently (ITTO, 2011). However, in the past five years, public procurement and green building policies, particularly in the United States, European Union and Japan, have demanded evidence of legality verification and proof of sustainability through forest certification. In March 2009, China launched their regulation on Forestry Certification Practices as part of its initial steps to regulate the forestry sector.

In March 2012, FSC forest certification in China was approximately 3 million hectares and China Forest Certification Council (CFCC) 3.4 million hectares. The 6.4 million hectares of certified forests equates to only 7% of the 85 million hectares of production forest estate, the majority of which are natural forests. Over 90% of these certified forests are owned by state or regional forestry bureaus and affiliated forest management units. This reflects the "top-down" approach that many international NGOs led by the World Wide Fund for Nature (WWF) Global Forest & Trade Network (GFTN) are taking in promoting forest certification in China. Ambitious plans have been made to expand forest certification to 20 million hectares in the next five years. The CFCC application to join the PEFC forest certification system was approved in

September 2011.¹ By doing so, they achieved an important milestone toward international recognition and made a demonstrated commitment to fulfill an important prerequisite toward PEFC endorsement, a step that is expected in the near future.

Additionally, the Ministry of Commerce and State Forest Administration in China issued guidelines on activities of Chinese companies logging overseas that require adherence with national laws in producer countries.

In contrast to sluggish forest products markets and exports as a result of the global economic crisis, the demand for forest and CoC certification has been accelerating rapidly in China. FSC CoC certificates increased from 821 in 2009 to 2200 in March 2012 and PEFC CoC certificates from 31 to 155 in 2009 to 2011. However, because of the vast scale of imports, domestic production and exports, China needs an even greater commitment to verification and certification if they are to meet the legality and sustainability demands of the United States, European Union, Japan and other markets.²

3.2 Forestry at a Glance in Southeast Asia

3.2.1 Deforestation

Between 1990 and 2010, the forests of Southeast Asia contracted by nearly 33 million hectares, an area larger than Vietnam. The measured rate of forest loss increased after 2005, and degradation of natural forests, masked by broad definitions of “forest,” continued apace. Forest cover is projected to fall from 49% to 46% during the 2010 to 2020 period, a loss of 16 million hectares (FAO, 2011a).

Globally the overwhelming direct causes of deforestation are subsistence farming, 48%; commercial agriculture, 32% (dairy, oil palm, soy, etc.); illegal and unsustainable logging, 14%; and fuelwood removals, 5% (UNFCCC, 2007). In Southeast Asia, large-scale intensive agriculture for agricultural plantation development (e.g., oil palm) is responsible for 44% of deforestation; subsistence agriculture, 44%; illegal or unsustainable logging, 6%; and other causes, 6% (ClimateWorks Foundation, 2009).

Deforestation has been most intense in Indonesia (Sumatra, Kalimantan and West Papua) and Malaysia and less so in Vietnam and Lao PDR. Industrial rubber and oil palm plantation development have driven conversion of logged over forests in Indonesia and Southern Thailand. However, transitions are evident in Thailand, where forests are regenerating on former agricultural land, and in Vietnam, where large-scale afforestation and reforestation result in net forest cover gains, despite on-going pressures on natural forests (FAO, 2011a, ITTO, 2011).

Livelihoods and Development Needs

In Southeast Asia, population growth, infrastructure development, and expansion of industrial agriculture have been the primary drivers of deforestation and forest degradation. This process often has been catalyzed by new roads and ports giving access to markets and facilitating the in-migration of loggers, farmers, agribusiness and developers that bring investment and trade opportunities, but also increase pressures on forest resources (FAO, 2011a).

Rapid population growth in Southeast Asia has resulted in the conversion of forests for settlements and farming to meet increased demand for livestock and agricultural crops in response to increased food, fodder and fuel consumption needs. The sub-regional population is projected to increase even further by 11% to 657 million between 2010 and 2020. This development will pose major threats to the provision of ecosystem services such as carbon sinks, soil and water protection, biodiversity conservation, provision of livelihoods and food security for local communities and to the long-term provision of wood, fiber, fuel, food and non-wood forest products (FAO, 2011a).

1. CFCC joins PEFC, Sept, 2011: <http://www.pulp-paperworld.com/asian-news/item/1858-china-joins-pefc>

2. FSC, CFCC and PEFC databases.

In addition, government natural resources management strategies, policies, laws, regulations and economic incentives have stimulated expansion of industrial-scale agricultural investment into tropical forests or forest lands because conversion from forests to agriculture seems more profitable than managing forests on a sustainable basis. Other significant causes of deforestation in the region are urbanization and residential developments, mineral, oil and gas exploitation and infrastructure developments (i.e., highways, roads, ports, dams, electricity and communications). Additionally, climate change and associated extreme weather events are increasing the incidence, scale and impact of natural causes of deforestation (ITTO, 2011).

Illegal Logging and Unsustainable Forest Management

In Southeast Asia, forest concession planning has often been based on insufficient forest inventory and socio-economic data to make robust calculations of sustainable harvest volumes and integrate social, cultural, environmental and economic dimensions of SFM. Some concessionaires have treated forest management plans as a means to secure concession agreements without commitment to their implementation. In other instances, allocation of harvesting rights by the government has not been conducive to medium- and long-term commitment to SFM practices by concessionaires. As a result, overharvesting and high grading, multiple re-entry logging coupes and limited adoption of reduced-impact logging practices have been common.

Under these conditions it was not possible to achieve SFM or prevent illegal logging, with illegally logged timber mixed with legitimate logs, because of elastic concession boundaries. Furthermore, a lack of post-harvest forest management (i.e., regeneration, restoration, supplementary planting, tending, and silviculture), little or no forest protection (e.g., from fire, insects, diseases, encroachment and in-migration) and insufficient engagement with, and understanding of, the social and cultural needs and aspirations of local communities or the wider ecosystem or landscape context led to deforestation, forest degradation and environmental damage. This was exacerbated by weak royalty and tax collection, which undercut markets for products from sustainably managed sources while mounting social and

environmental costs were overlooked. In many instances of forest management, harvesting and related trade in the region met neither legality nor sustainability criteria (ITTO, 2006a; ITTO, 2011).

The true extent of illegal logging and trade in Southeast Asia is unknown because of the clandestine nature of illicit trade and difficulties in distinguishing between legally and illegally sourced resources. Table 3.2 details various estimates of illegal logging in the major wood-producing countries in East Asia.

The governments of China, Indonesia and Malaysia have revised their policies, laws and regulations to strengthen actions against illegal logging and promote SFM. Verification and certification are recent tools encouraged to address legality and sustainability. Indicators show that illegal logging in Indonesia has fallen by 50% and the export of illegal logs and sawn timber decreased by as much as 90% since 2005 (Chatham House, 2008).

TABLE 3.2 Estimates of Illegal Logging in Major East Asia Producing Countries

Country	Estimates of Illegal Logging	Source
Indonesia	50%–70% wood illegally logged	Global Forest, WRI, Forest Watch Indonesia, State of Forest Indonesia, 2002
	70%–80% of production	Seneca Creek Associates & Wood Resources International, 2004
	60%–80% of wood production	Department for International Development (DFID), CIFOR, 2004
	73%–88% of timber logged	UNEP, 2007
	76%–80% of logging operations	Greenpeace China, 2008
	40%–55% of production	Chatham house, 2008
Malaysia	35% of timber logged	Seneca Creek Associates & Wood Resources International, 2004
	22% of timber consumed	Chatham House 2007
China	75 million m ³ /year	Vice Head, SFA
	100–116 m ³ /year	CIFOR, 2006

Source: Cheng and Le Clue (2010).

TABLE 3.3 Forest Management Trends in Southeast Asian Case Study Countries: Annual Change Data, 2000 to 2010

Country	Indonesia		Lao PDR		Malaysia		Thailand		Vietnam		Unit
	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	
Extent Forest Resources											
Area forest	-0.5	-498	-0.5	-78	-0.5	-114	0.0	-3	1.6	207	000 ha
Area other wooded land	-0.7	-162	-1.5	68	—	—	—	—	-4.7	-69	000 ha
Growing forest atock	-1.5	-189	-0.5	-5	-1.0	-46	0.0	0	0.9	8	M m ³
Carbon atock (biomass)*	-1.5	-217	-0.5	-6	-1.0	-35	0.0	0	0.7	7	MT
Biological Diversity											
Area primary forest	-0.4	-203	0.0	0	0.0	0	0.0	0	-8.1	-11	000 ha
Area conserve biodiversity	-0.1	-18	0.8	23	5.7	83	0.2	15	3.2	57	000 ha
Total Forest Area (excl planted forests)	-0.5	-485	-0.6	-91	-0.7	-128	-0.6	-91	0.6	61	000 ha
Productive Functions											
Area productive forests	-0.4	-195	0.6	22	-0.1	-18	2.7	62	3.4	187	000 ha
Area planted forests [†]	2.9	79	33.3	15	-1.4	-26	0.1	1	6.8	75	000 ha
Total Wood Removals	-3.7	-737	-3.2	-12	-3.9	-1448	-16.9	-11	-1.6	-50	M m ³
Protective Functions											
Area protective	-0.3	-6.1	-1.3	-124	-0.8	-22	2.1	25	-0.7	-37	000 ha
Area protective planted [†]	—	—	0.0	0	—	—	3.5	29	7.6	40	000 ha
Socioeconomic											
Area private ownership [†]	-4.0	-472	0.0 ⁽¹⁾	0 ⁽¹⁾	-2.7	-11	1.0	20	25.1	201	000 ha

Source: FAO (2010a, 2010c).

*Forest carbon in living biomass (above and below ground).

[†]Trends 1990–2005

¹ No private forests in Cambodia and Lao PDR, none in Myanmar before 2005, no data in 1990 in the Philippines.

—, No data available; 0 or 0.0, no change.

■ = Positive change (> 0.5%), □ = no major change (> -0.5%, < 0.5%), ■ = negative change (< -0.5%).

Table 3.3 highlights the trends in forest management in Southeast Asian countries over the decade 2000 to 2010.

3.2.2 Performance in Forest Management

As outlined in 3.2.1, the main drivers of deforestation in Southeast Asia are overwhelmingly commercial and subsistence agriculture, so the potential for certification, verification and better law enforcement to reduce deforestation is limited to legality and sustainability of forest concession management, forest industries and related trade. The wider dimensions of good forest governance that link SFM with other land uses, livelihoods and economic development are also critical in minimizing deforestation and forest degradation, requiring wider land use governance and management initiatives.

In the future, active forest management, forest protection and restoration activities are essential to increase health and vitality of growing stock while improved harvesting techniques are required to achieve SFM. Forest certification and verification can demonstrate the legality and sustainability of forest management in accordance with stated international, national or sub-national criteria and standards. Additionally, investment for capacity building and institutional strengthening is necessary to ensure that this transition becomes a reality. Southeast Asian countries have committed to REDD-plus and FLEGT initiatives, which will assist in achieving SFM and greater recognition of the value of natural tropical forests in their provision of ecosystem services and sustainable production of forest products. However, high demand for land and forest products, low institutional capacity, weak governance and entrenched social

causes of deforestation and degradation remain challenges (FAO, 2011a, ITTO, 2011).

3.2.3 Forest Governance

Deforestation and forest degradation are driven by the economic, policy and institutional conditions prevailing in the sub-region, where political resolve, resources, law enforcement and other prerequisites are lacking. Several factors constrain expansion of SFM in the sub-region (ITTO, 2006a; ITTO 2011):

- SFM for production of timber is less profitable than other possible ways of using the land
- Insufficient resources (e.g., funds, staff, equipment, vehicles, and facilities) and technical support are invested into SFM practice
- Long-term government resolve and credible arrangements for tenure are inadequate
- Despite political dialogue on illegal logging and trade, laws and law enforcement remain weak
- Lack of timely and reliable data on status and change in forest resources, uses and users

Possible Impact of Trade Measures on Forest Governance and Management

In Southeast Asia, increased attention has been paid to forest law enforcement and governance but less progress has been made on changing forest management on the ground. This has been because of conflicting policies and priorities, lack of development resources and the reluctance of vested interests to stem the flow of illegal

or unsustainable forest products trade. As already introduced, good forest governance needs to do more to address the scope, challenges and opportunities that link SFM with wider sustainable natural resources management, land use and livelihoods (including food security and poverty alleviation).

Trade measures related to legality and sustainability of wood and wood products imports in industrialized markets is already influencing the forest and forest industries and may revitalize forest law enforcement, forest management and, to a certain degree, forest governance. The growing concerns over trade legality and sustainability in the European Union and United States will have a profound influence. In 2007, 10% of forest products and 72% of wooden furniture exports from the sub-region went to the European Union and United States. Vietnam, Malaysia and Indonesia are the most significant exporters to the European Union and United States. In the future, if legality and sustainability of forest management and forest products cannot be demonstrated, importers and buyers may cease sourcing tropical forest products from the sub-region. Although the impacts of trade legality measures are not yet clear, efforts to improve law enforcement and governance will be critical in maintaining access to markets and maintaining the value of, and conserving, natural tropical forests in the sub-region (FAO, 2011a, ITTO, 2011).

Recent Trends in Governance

Table 3.4 summarizes recent trends in governance indicators for Southeast Asian countries during 1998 to 2008 based upon three criteria: (i) *control of corruption*:

TABLE 3.4 Trends in Governance Indicators in Southeast Asian case study countries 1998–2008

Country	Governance Score (–2.5 to +2.5)								
	Control of Corruption			Rule of Law			Government Effectiveness		
	1998	2008	Trend	1998	2008	Trend	1998	2008	Trend
Indonesia	–1.1	–0.6	+	–0.8	–0.7	+	0.8	0.3	+
Malaysia	0.5	0.1	–	0.5	0.5	+	0.6	1.1	+
Lao PDR	–0.7	–1.2	–	–0.9	–0.9	–	–0.6	–0.8	–
Vietnam	–0.7	–0.8	–	–0.5	–0.4	+	–0.6	–0.3	+
Thailand	0.0	–0.4	–	0.4	0.0	–	0.1	0.1	+

Source: FAO (2010a, 2010c).

■ < –0.5, ■ –0.5–0.5, ■ > 0.5.

capturing perceptions of the extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as “capture” of the state by elites and private interests; (ii) *rule of law*: capturing perceptions of the extent to which agents have confidence in and abide by the rules of society and in particular quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence; and (iii) *government effectiveness*: capturing perceptions of the quality of public services, the quality of the civil service and the degree of independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies (FAO, 2010b; Kaufmann et al, 2009).

Control of corruption remains a significant challenge in all Southeast Asian countries and declined even in Malaysia, which was originally considered to control corruption. Indonesia showed some improvement, but started from a very low level. Rule of law improved but remains a challenge in Indonesia and Vietnam, remained moderate in Malaysia but worsened in Lao PDR and Thailand. Government effectiveness improved significantly in Indonesia, Malaysia and Vietnam and marginally in Thailand, but worsened in Lao PDR (FAO, 2010b).

Forest Governance Priorities toward 2020

Forest governance grapples with balancing the trade-offs between economic development and sustainable natural resources management (FAO, 2010c). Relevant sub-regional forest governance priorities toward 2020 include:

- Maintain forest ecosystem services, rural employment and the long-term supply of forest products
- Improve forest law enforcement, public awareness and financing for protected area management
- Use FLEGT, REDD-plus and other multilateral and bilateral mechanisms to achieve legality and sustainability
- Adopt multi-stakeholder, participatory approaches and more transparent governance in formulating policies, strategies and enforcement

- Reinvent forestry institutions to be facilitative and regulatory and more responsive and flexible to changing threats and opportunities
- Adopt best practices guides to revitalize forest management and protection operations
- Link forestry with sustainable natural resources management, land-use and livelihoods

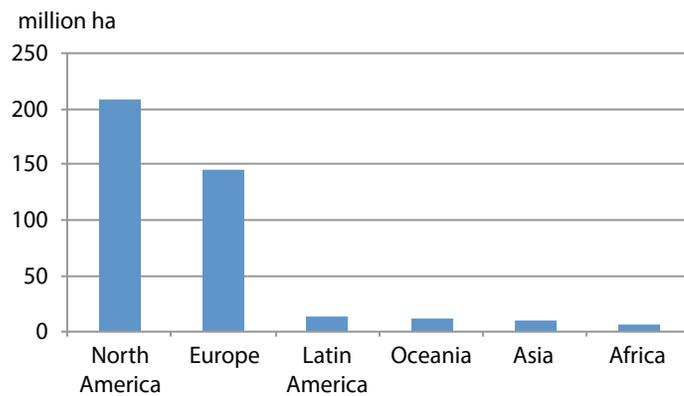
3.3 Forest Certification in Southeast Asian Countries in Context

In March 2012, approximately 360 million hectares of certified forests were endorsed by FSC or PEFC globally and a further 10% certified by both FSC and PEFC. Western Europe and North America accounted for about 88% of certified forests in the world. Asia, which had 15% of the world’s forests, accounted for less than 10 million hectares, or 2.5% of certified forests worldwide. The prevalence of corruption, weak rule of law and conflicting policy and legal frameworks between federal and state governments and a lack of confidence in the business case for certification are some of the stated causes in Southeast Asian countries. Because forest governance frameworks did not always encourage the most reputable investors in forest concession management, forest industries or marketing and trade investments, there was little incentive to pursue demonstration of legality and sustainability through verification and certification schemes, respectively. Southeast Asia has been slow to embrace these tools, despite strong encouragement from the highest political levels in APEC, ASEAN and national politicians and market pressures.

Figure 3.1 highlights the global certified forest areas by regions.³

In the Southeast Asian case study countries, the total forest area is 163.4 million hectares. FSC and PEFC certified forest areas reported in March 2012 are summarized in Table 3.5. The FSC certified forest area was

3. FSC database <http://info.fsc.org/> and PEFC information register <http://register.pefc.cz/>

FIGURE 3.1 Proportion of Global Certified Forest Areas by Regions, March 2012

Sources: FAO (2010a), UNECE-FAO (2010).

TABLE 3.5 FSC and PEFC Certified Forest Areas in Southeast Asian Case Study Countries and Global Regions, March 2012

Country/Region	FSC Certified Forest Area ⁴			PEFC Certified Forest Area ⁵			Total Forest Area ⁶	FSC-PEFC Certified Area
	No	1,000 ha	%	No	1,000 ha	%	1,000 ha	%
Indonesia	14	937.8					94,432	1.0
Malaysia	7	501.8		8	4,588.8 ⁷	1.9	20,456	24.9
Vietnam	5	41.4					13,797	0.3
Thailand	6	22.5					18,972	0.1
Lao PDR	2	82.9					15,751	0.5
Sub-total	34	1,586.4	1.0	8	4,588.8	1.9	163,408	3.8
Asia	140	4,987.0	3.3	8	4,588.8	1.9	592,512	1.6
L. America/Caribbean	222	9,552.3	6.3	na	3,173.7	1.3	890,783	1.4
Africa	46	7,362.6	4.9	na	—	—	674,419	1.1
Europe	454	65,415.8	43.7	na	80,004.8	32.6	1,005,001	14.7
North America	201	60,305.4	40.3	na	147,230.8	60.1	678,961	30.6
Oceania	33	2,226.9	1.5	na	10,069.6	4.1	191,384	6.4
Global Forest Area	1,096	149,850.0	100.0	na	245,067.0	100.0	4,033,060	9.8

Notes: na – no data available

Source: Authors' compilation from FSC/PEFC certification websites, March 2012; Total forest area (FAO, 2010a).

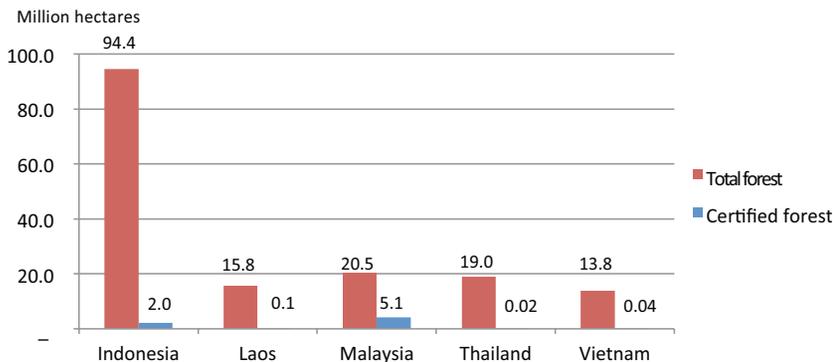
4. FSC website, dated 14 February 2012: http://www.fsc.org/fileadmin/web-data/public/document_center/powerpoints_graphs/facts_figures/2012-02-15-FSC-FIG-Global_FSC_certificates-EN.pdf

5. PEFC website portal on forest certification: <http://www.pefc.org/certification-services/forest>

6. FAO, 2010. Global Forest Resources Assessment, 2010. FAO Forestry Paper 163, FAO, Rome, Italy.

7. PEFC-MTC data available on the Malaysian Timber Certification Council website: [http://www.mtcc.com.my/mtcc_scheme_certs_holders%20-%20MC&l\(2002\).asp](http://www.mtcc.com.my/mtcc_scheme_certs_holders%20-%20MC&l(2002).asp)

FIGURE 3.2 Total Forest Area and Certified Forest Area in Southeast Asian Case Study Countries, March 2012



Source: FAO (2010a), Authors' compilation from forest certification websites PEFC, FSC, LEI, MTCS, March 2012.

1.6 million hectares, in order of magnitude, Indonesia, Malaysia, Lao PDR, Vietnam and Thailand, which accounted for 1% of the FSC global certified forest area. The equivalent Malaysian Timber Certification Scheme (MTCS)-PEFC certified forest area was 4.6 million hectares in Malaysia, which accounted for 1.9% of the PEFC global certified forest area. The forest area certified by FSC or PEFC combined is 6.2 million hectares, or less than 4% of total forest areas in the sub-region. This equates to 1.6% of the combined FSC and PEFC global certified forest areas.

Adding the Lembaga Ekolabel Indonesia (LEI) forest certification of 1.8 million hectares in Indonesia, the certified forest area is 8.0 million hectares or less than 5% of the total forest area in the Southeast Asian case study countries. The aim of the Indonesia Forestry Certification Cooperation (IFCC), established in October 2011, is to promote SFM by implementation of a national scheme with the intention to seek PEFC recognition. The scheme will include certification of forest management, forest products, forest product-processing industries and the CoC, among other issues.

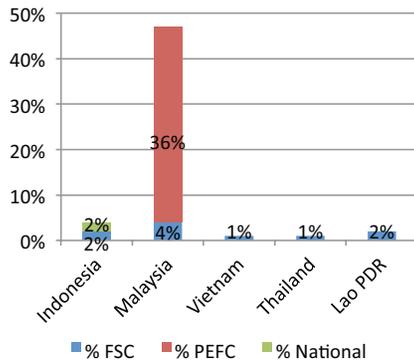
By September 2011, PEFC had endorsed 30 national forest certification programs,⁸ mostly in temperate and boreal

forest regions. However, more recently, national systems have been endorsed in Gabon, Uruguay and Malaysia, making the latter a forerunner in Southeast Asia. Likewise, the largest areas of FSC-certified forest were in North America, Sweden and the Russian Federation. FSC-endorsed standards existed in 13 countries in mid-2010, with interim standards developed by accredited certification bodies present in a further 66 countries. FSC thus penetrates most areas of the world, but gaps remain in parts of tropical Africa and Southeast Asia.

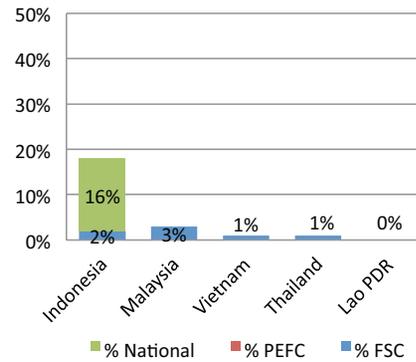
As detailed in Figure 3.2, Malaysia has the largest certified forest area in absolute (6 million hectares) and relative terms (25% of total forest area or 40% of production forest area). Although Indonesia has more than half of the forest resources in the sub-region, only 2.0 million hectares or 2.1% of their forest area is certified. The amount of certified forest in Lao PDR, Thailand and Vietnam is negligible.

The global industrial roundwood supply from certified forests in 2010 was estimated at 472 million m³, which equated to 26.4% of the global industrial roundwood supply. Western Europe and North America accounted for 95%, with Asia 3.4 million m³ or 0.7% (UNECE-FAO, 2010). Figure 3.3 and 3.4 outline the percentage of production forests and forest plantations certified in the Southeast Asian case study countries, according to certification scheme.

8. By July 2012, 31 national forest certification programs endorsed by PEFC.

FIGURE 3.3 Percentage Production Forests Certified in Southeast Asian Case Study Countries

Source: Information from national sub-consultants and Authors' compilation from FSC, LEI, PEFC internet home-pages, March 2012.

FIGURE 3.4 Percentage Forest Plantations Certified in Southeast Asian Case Study Countries

Source: Information from national sub-consultants and Authors' compilation from FSC, LEI, PEFC internet home-pages, March 2012.

Table 3.6 summarizes compliance with FSC Controlled Wood Standards in the Southeast Asian case study countries in March 2012.

Of the FSC Controlled Wood Standards in the Southeast Asian case study countries, three account for 346,582 hectares (53%) for natural forests and three account for 302,972 hectares (47%) for forest plantations. These were issued to the state 239,529 hectares (37%) and to the private sector 410,025 (63%).

Southeast Asian Study Countries have a diverse range of forest certification and governance contexts that present harmonization challenges, generally weak forest governance; forest types prone to degradation and deforestation; and nominal use of national and international certification and verification schemes and standards. Overall, forest certification, with the exception of Malaysia, has not been embraced as a tool for legality and sustainability of natural forest management, nor, with the exception of Indonesia, for forest plantations.

TABLE 3.6 Forest Managers Complying with FSC Controlled Wood Standards in Southeast Asian Case Study Countries, March 2012

Country	FSC Controlled Wood				
	Certification Body	Area (ha)	No	Type of forest	Ownership
Indonesia	Soil Association Woodmark	281,038	1	Plantation	Private
Sub-total	Indonesia FSC Controlled Wood	281,038	1		
Malaysia	SmartWood Rainforest Alliance	107,053	1	Natural	Private
	Scientific Certification System	5,616	1	Plantation	Private
Sub-total	Malaysia FSC Controlled Wood	112,669	2		
Vietnam	GFA Consulting Group GmbH	16,318	1	Plantation	Private
Sub-total	Vietnam FSC Controlled Wood	16,318	1		
Lao PDR	SmartWood Rainforest Alliance	239,529	2	Natural	State
Sub-total	Lao PDR FSC Controlled Wood	239,529	2		
TOTAL		649,554	6		

Source: Authors' compilation from FSC and PEFC certification databases, March 2012.

Considerable differences exist both across and within countries. More detailed analysis for each country is provided within the country sections in 3.5 “Status of Certification and Verification by Country.”

3.4 Chain of Custody Certification

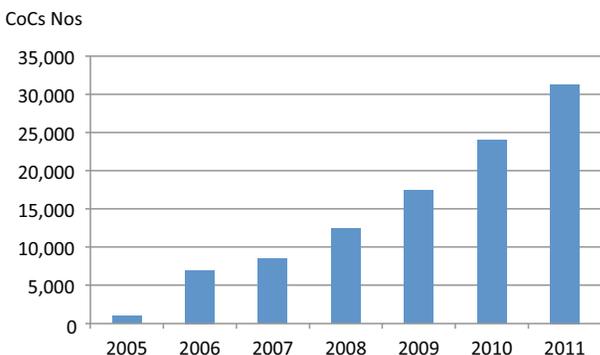
Despite the recent economic downturn, FSC CoC certificates increased from 11,847 in December 2008 to 22,466 (+90%) in February 2012. The United States, United Kingdom, Germany, France, Canada and the Netherlands continue to be the leading countries in CoC certificates issued. Growth in the United States has been particularly strong. In Asia, from December 2008 to March 2012, significant FSC CoC certification increases were recorded in China (821 to 2200, +167%), Hong Kong (189 to 445, +135%) and Japan (887 to 1126, +27%). Figure 3.5 outlines the global growth in CoC certification for 2005 to 2011.

In the Southeast Asian case study countries, in order, Malaysia (336), Vietnam (272) and Indonesia (209) are the leading countries in CoC certifications, with minor use being made in Thailand (38) and Lao PDR (15). The wood products industry dominates CoC certification, with paper and pulp a minor share (e.g., FSC CoC percentage of pulp and paper in Indonesia, 18%, Malaysia, 26% and Vietnam, 8%). Malaysia,

Vietnam and Indonesia dominate wood products CoC certification. Furniture companies represent almost 40% of CoC certificates, and companies involved in the sawnwood business account for another 30%. A great majority of these furniture manufacturers are located in Vietnam, followed by Indonesia and Malaysia. Sawnwood companies with CoC certificate are predominantly located in Malaysia and Vietnam. In contrast, only 60 paper and fewer than 10 pulp companies have CoC certification in the Southeast Asian case study area – most of the paper and pulp companies are located in Indonesia, Thailand and Malaysia. Figure 3.6 summarizes the CoC certificates in the Southeast Asian case study countries.

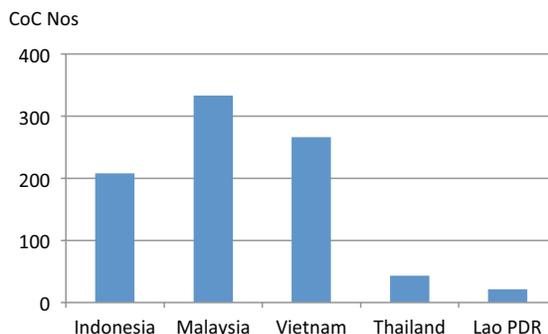
The Southeast Asian case study countries are making only limited use of the CoC certification tool. In February 2012, discounting the small number of joint FSC and PEFC CoC certificates, there were 680 FSC CoC certificates in the Southeast Asian case study countries, in order of magnitude, Vietnam, Indonesia, Malaysia, Thailand and Lao PDR. They accounted for only 3% of FSC CoC certificates globally, and all Asian countries combined accounted for 21.3%. In December 2011, the sub-region had 197 PEFC CoC certificates, in order of magnitude, Malaysia, Indonesia, Thailand and Vietnam, accounting for 2.2% of PEFC CoC certificates globally. Table 3.7 summarizes the FSC, PEFC and combined CoC certificates globally.

FIGURE 3.5 Global Growth of CoC Certification, 2005–2011



Source: UNECE-FAO, 2010 Forest Products Annual Market Review 2009–2010, Authors’ compilation from PEFC, FSC websites.

FIGURE 3.6 CoC Certificates in Southeast Asian Case Study Countries, March 2012



Source: Authors’ compilation from FSC and PEFC websites, February to March 2012.

TABLE 3.7 FSC, PEFC and Combined CoC Certificates Globally, FSC and PEFC Data, February 2012

Country/Region	FSC CoC Certificates ⁹		PEFC CoC Certificates ¹⁰		Combined FSC & PEFC CoC Certificates	
	No	%	No	%	No	%
Indonesia	195		14		209	
Lao PDR	15		–		15	
Malaysia	163		173		336	
Thailand	38		7		45	
Vietnam	269		3		272	
<i>Sub-total</i>	680	3.0	197	2.2	877	2.8
Asia	4,789	21.3	604	6.9	5,393	17.3
L. America/Caribbean	1,128	5.0	98	1.1	1,226	3.9
Africa	135	0.6	5	0.0	140	0.4
Europe	11,287	50.3	7,333	83.4	18,620	59.6
North America	4,713	21.0	537	6.1	5,250	16.8
Oceania	414	1.9	220	2.5	634	2.0
CoC Certificates	22,466	100.0	8,797	100.0	31,263	100.0

Source: Authors' compilation from FSC and PEFC CoC certification, February 2012.

9. FSC website, February 2012: http://www.fsc.org/fileadmin/web-data/public/document_center/powerpoints_graphs/facts_figures/2012-02-15-FSC-FIG-Global_FSC_certificates-EN.pdf

10. PEFC website portal on forest certification: <http://www.pefc.org/certification-services/forest>

3.5 Status of Certification and Verification by Country

This section is supplemented by Annex 2: *ASEAN Country Status and Trends*, which provides more details for the Southeast Asian case study countries, including forest management; forest products, marketing and trade; verification; certification; forest institutions, policy, legislation and law enforcement; forests and forestry toward 2020; and potential for certification and verification and NTLAS/VPAs.

3.5.1 Indonesia

Framework of Policies, Laws, Regulations and Targets

Indonesia's forestry policy in the 1990s aimed to reduce forest conversion while promoting sustained yield management, land rehabilitation, plantation development, forest protection and conservation, and community participation. The *Indonesian Forestry Act*, 1999, replaced the *Basic Forestry Law* of 1967 and introduced principles of good governance, such as transparency, justice,

people's participation and community rights for forest utilization, forest land tenure and forest uses and users.

The Bali Ministerial *Declaration on Forest Law Enforcement and Governance*, 2001, highlighted forest crime and associated illegal trade as a priority of government and trading partners. In 2005, presidential instructions were issued to eradicate illegal logging and associated trade activities. Various announcements and international and bilateral agreements have been made concerning illegal logging and trade, including a Memorandum of Understanding with Malaysia (FAO, 2010b).

In 2010, a two-year moratorium on new concessions was announced to stop clearing primary forests and peat lands as part of a US\$1 billion Letter of Intent with Norway. Other REDD-plus initiatives with the Forest Carbon Partnership Facility (FCPF) and the Forest Investment Program (FIP) of the World Bank and the UN-REDD Program will support reduction in illegal logging and associated trade and unsustainable forest management.

In May 2011, Indonesia signed a VPA with the European Union. The VPA, along with the amendment of the US *Lacey Act* in 2008, is stimulating greater awareness of, and commitment to, compliance with the Indonesian Timber Legality Standard (SVLK) to keep open forest products trade doors with the United States and European Union.

Verification

The Ministry of Forestry has strengthened its control of forest use by recentralizing the licensing process, issuance of concession licenses and mandatory certification of concessionaires. The Provincial and District Forest Offices do field checks and supervise planning and implementation of forest operations and timber transport.

The Indonesian Forest Industry Revitalization Agency (BRIK), established in 2002, issues export licenses for timber. Although BRIK is an NGO, all timber exporters are required to join. The license is issued based on the information on timber source, volumes and transportation documentation to monitor the legality of timber by reconciling the harvested and processed volumes over the supply chain. However, the credibility of BRIK verification was hampered by a lack of transparency and third party verification (Ogle Consulting, 2008).

The Ministry of Forestry provides financial support to improve capacity of concessionaires within the mandatory verification scheme. It may also allow concession organizations to “self-approve” annual forest management plans as part of general recognition of good management. This gives forestry companies a significant cost savings.

National Legal Verification System or Standar Verifikasi Legalitas Kayu (SVLK)

The European Union cooperation on FLEGT supported the Ministry of Forestry in developing a timber traceability and timber legality assurance system (SVLK). The central elements of SVLK are defined by ministerial regulations.¹¹ The SVLK regulation was ap-

proved by the Ministry of Forestry in July 2009 and the related field guidelines in February 2010 (Hakim, 2010). It applies to public and private operators and covers round log production and processed timber products for domestic and export markets. The Ministry of Forestry supports field implementation through an information raising and mandatory legality verification process. Mandatory verification is a tool to monitor legal compliance and screen concessionaires for allocation of concession licenses (Ministry of Forestry, 2009b). The SVLK includes two options for certificates, compliance with SFM (PHL) and verification of timber legality.

The Ministry of Forestry has appointed national third party verification bodies to assess compliance with the forest management or legality requirements. A total of 10 verification bodies do forest management audits, and five bodies carry out legality verifications. The verification bodies must also have accreditation from the National Accreditation committee (KAN) (Hakim, 2010). If a concession receives a certificate on SFM (PHL), this provides the evidence for legal compliance, as well. On the other hand, if a concessionaire fails to meet the PHL requirements, a legality certification is required. The objective is that all wood industries in the supply chain will have a legality certificate.

The scale of the audit results on forest management certification reads “bad - fair - good - very good.” In the first round, some concessions failed to meet the requirements, but currently most have reached the level “fair” (Brown & Bird, 2008; Ministry of Forestry, 2009a). For legality verification, the outcome is either “compliance” or “non-compliance.” The verification is valid for three years with annual surveillance audits (Hakim, 2010). The large majority of the concessions in natural forests and forest plantations have been rated as “fair” in their performance (Ministry of Forestry, 2009a). For a timber industry organization that has a legality certificate and uses certified forest raw material, self-verification is adequate evidence of legal compliance. Despite the intention to have mandatory certification as a precondition for a concession license, only 25% of natural forest concessions (6.5 million hectares) have passed the mandatory certification (Ministry of Forestry, 2009a).

11. P.38/Menhut-II/2009 stipulating institutional and operational framework for assessment of performance and verification of timber legality, and independent monitoring. P.6/IV-Set/2009 stipulating standards and guidelines for verification of timber legality and performance in sustainability production forest management.

Compliance with the European Union

The 2009 Indonesia-EU FLEGT VPA experts' meeting concluded that the SVLK met the EU expectations for FLEGT licensing on definition of legal timber, control of the supply chain and control and independent monitoring. Over the past few years multi-stakeholder processes have strengthened CoC mechanisms, improved complaint and dispute settlement mechanisms and addressed group certification schemes. These will make SVLK more robust and facilitate implementation among smallholders and complex business entities. A task force has been established to prepare a SVLK strategy and support for the forestry industry for implementation. The SVLK, the basis for the FLEGT VPA, has been praised by the European Union for transparent multi-stakeholder development, robust monitoring process and the inclusion of a continuous improvement mechanism.¹² The VPA approved in May 2011, was negotiated over seven years and is renewable for consecutive periods of five years.

The SVLK draws upon Indonesia's laws and regulations on forestry, trade, environment, agriculture and land ownership, as well as international treaties signed and ratified by Indonesia. Indonesia's legality definition is framed around key principles covering essential aspects of forest production and processing, depending on different forest contexts that include:

- State natural and plantation forests where principles cover (i) the legal status, area and right to utilize the forest; (ii) compliance with the legal requirements for harvesting; and (iii) compliance with the environmental and social aspects related to harvesting
- Privately owned forests, ownership of the timber as it relates to the land area, the logs, and the trading of logs, and this can be cross checked for traceability
- Principles that regulate logging from non-forest zones that may or may not lead to forest conversion
- General legality standard covering the supply chain management of timber from the forest through processing units to the point of export

For each principle, criteria, indicators and verifiers demonstrate compliance, together with verification guidelines describing the method and the appraisal norm to be used. These are closely linked to the criteria and indicators for SFM, which apply to all log production from concessions and cover production, social and ecological aspects. Conformity Assessment Bodies will audit operators annually for compliance with provisions of SVLK but also act as outsourced licensing authorities for shipments.

Indonesia started implementing the Indonesia-EU VPA and will test pilot licensing of products to the European Union in 2012, with full implementation in time for entry to force of the EUTR in March 2013. SVLK is being recognized by Indonesia's REDD-plus program as potentially contributing as an effective instrument toward good forest governance.¹³ The VPA is the first in Asia and will govern forest products trade estimated to be worth US\$1 billion/year. Once the VPA is operational, Indonesian authorities will permit the export only of timber licensed under SVLK standards and EU customs authorities will prevent any unlicensed Indonesian forest products from entering the European Union.

Forest Management and Chain of Custody Certification

The Indonesian Eco-Label Institute (LEI) developed national voluntary forest certification standards for the management of natural forests, plantation forests and community forests. So far, the scheme has not been endorsed by FSC or PEFC. However, FSC is in discussions with LEI for it to be the Standard Development Group to develop a FSC National Standard for Indonesia in line with the new FSC Principles and Criteria and the International Generic Indicators under development. The aim is for National Standards to be completed for implementation in 2014.

Various NGOs and donor organizations have supported voluntary certification in Indonesia with the purpose of promoting FSC certification among the concession holders. In contrast to the concession

12. Tropical Forest Trust news, 11 Oct 2011: <http://www.tft-forests.org/>

13. EU FLEGT News, July-August, 2011.

TABLE 3.8 Certified Forests in Indonesia, March 2012

<i>Forest Certification</i>				
<i>Scheme</i>	<i>Area (ha)</i>	<i>No</i>	<i>Type of forest</i>	<i>Ownership</i>
LEI	502,000		Natural forests	Private
	540,000		Planted forests	Private
	25,000		Community forests	Community group
LEI	1,067,000			
FSC				
SmartWood Rainforest Alliance	560,864	4	Natural	Private
	1,038	3	Plantation	Private
Soil Association Woodmark	38,043	2	Plantation	State
	1,005	1	Plantation	Private group
SGS Qualifor	33,047	1	Plantation	State
	90,956	1	Natural	Private
Control Union Certifications (CU)	212,880	2	Natural	Private
FSC Sub-total	937,833	14		
Total	2,004,833 (4%)	14+		

Source: Authors' compilation; <http://info.fsc.org/>, March 2012.

licenses covering 26.16 million hectares of natural forests in 2008 (Ministry of Forestry, 2009a), the total certified area of 938 thousand hectares is minimal. Forests certified under the LEI or FSC schemes are detailed in Table 3.8.

Indonesia has a low level of forest certification, with only 2.0 million hectares (4%) of designated production forests certified, of which 1.4 million hectares are natural forests and 0.6 million hectares forest plantations (18% of designated planted forests). Forest certificates are issued to the private sector for 1.9 million hectares (95%), the public sector for 0.07 million hectares (4%) and private or

community groups for 0.03 million hectares (1%). FSC accounts for 937,833 hectares of certified forests, of which 864,700 hectares are natural forests and 73,133 hectares forest plantations. The private sector accounts for 865,738 hectares (92%), the state for 71,090 hectares (7%) and private groups for 1,005 hectares (1%).¹⁴ LEI accounts for 1.1 million hectares of forests certified of which 502,000 hectares are natural forests and 565,000 hectares forest plantations. The private sector accounts for 1.4 million hectares (98%) and private groups for 25,000 hectares (2%).¹⁵

The Controlled Wood standard helps forest management enterprises demonstrate compliance with legal harvesting but not implementation of all applicable national and international laws. FSC controlled wood can be supplied to CoC certified operations for mixing with FSC certified materials in production of FSC mixed-wood products. Compliance

TABLE 3.9 Forest Managers Complying with FSC Controlled Wood Standards in Indonesia, March 2012

<i>FSC Controlled Wood</i>				
<i>Certification Body</i>	<i>Area (ha)</i>	<i>No</i>	<i>Type of forest</i>	<i>Ownership</i>
Soil Association Woodmark	281,038	1	Plantation	Private

Source: Authors' compilation; <http://info.fsc.org/>, March 2012.

14. FSC: <http://info.fsc.org>

15. Lembaga Ekolabel Indonesia: <http://www.lei.or.id>

with Controlled Wood Standards allows forest management enterprises to demonstrate best efforts to avoid the trade in illegally harvested timber and implement responsible sourcing policies. At this stage, the Controlled Wood Standards are 100% private owned and 100% on planted forests (FSC database, accessed in March 2012).

The number of CoC certificates rose sharply in 2011; by March 2012 there were a total of 209 CoC certificates of which FSC, 195 and PEFC 14. Additionally, two forest management units (FMUs) and four pulp and paper companies have passed the LEI CoC certification. The LEI is implementing programs to increase certification, especially in plantation forestry (FSC 2011 and LEI 2011). Table 3.10 summarizes FSC and PEFC CoC status for Indonesia. The significant increase in CoC certificates is an indication that companies are responding to international market demands for uncontroversial sources of timber to protect market access.

TABLE 3.10 FSC and PEFC CoC Summary for Indonesia, March 2012

Certification Body	FSC	PEFC	Total	
	No	No	No	%
BM TRADA Certification Ltd	59		59	28
SGS Qualifor	45	10	55	26
SmartWood Rainforest Alliance	54		54	26
LGA InterCert GmbH	22	1	23	11
SCS	7		7	3
BV Certification – Eurocertifor	2	2	4	2
Det Norske Veritas Certification AB	3		3	2
KPMG Forest Certification Services Inc.	1		1	0.5
CU Certifications	1		1	0.5
Swiss Association for Quality and Management Systems	1		1	0.5
Stichting Keuringsbureau Hout		1	1	0.5
Total	195	14	209	100

Source: Authors' compilation <http://info.fsc.org/> March 2012, <http://register.pefc.cz/> March 2012.

All the major international certification bodies having accreditation to do third party certification under the FSC or other certification frameworks well established in Indonesia. The voluntary forest and CoC certification standards implemented in the country are presented in Table 3.11.

Trends and Influence

Indonesia's industrial roundwood production levels in 1997, 2002 and 2007 were, respectively, 46 million m³, 33 million m³ and 36 million m³ (FAO, 2009b). An industrial roundwood deficit exists for the sawnwood, plywood and veneer industries in Indonesia, which generates a strong demand for domestic as well as imported forest products (increased seven-fold in the past three decades). Forest products imports by proportion of value in 2000 were: Brazil, 23%, the United States, 22%, Canada, 21%, ASEAN countries 6% and China and Japan, 3% each. In 2009, reductions occurred in imports from Brazil, 19%; United States, 8%; and Canada, 8%; imports remained similar in China, at 4%, and Japan, at 2%; and imports from ASEAN countries doubled to 6% (mainly Malaysia and Singapore).¹⁶ The increase of imports from ASEAN countries may reflect their leniency on legality and sustainability. The reductions in imports from the United States, Canada and Brazil that require demonstration of legality and sustainability of forest management and trade seem to go against the trend. It is possible that the decisions to reduce may be based upon other criteria. There was little evidence for domestic trade in forest products having to demonstrate legality or sustainability (FAO, 2009b).

In 2000, Indonesian forest products exports, in order of value, were Japan, 18%; China, 18%; the European Union, 9%; ASEAN countries, 8%; the Republic of Korea, 6%; United States, 5%; and Australia, 2%. In 2009, the distribution was similar, except exports to the European Union had nearly halved to 5% and Japan and China reduced to 16% and 15%, respectively. Exports to ASEAN countries remained similar, at 9%. The reduction of forest products trade with EU countries and Japan may reflect their greater demand for proof of

16. FAOStat Forest Products Statistics 2000 and 2009.

TABLE 3.11 Forest and CoC Certification Standards Implemented in Indonesia, March 2012

<i>Scheme</i>	<i>Standard Forest Management</i>	<i>Owner</i>
FSC Forest Management	SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Indonesia (FM-32-Indonesia) (2008) SCS Draft Interim Standard for Natural Forest and Plantation Forest Management Certification in Indonesia V1-0 (2009)	SmartWood Rainforest Alliance Scientific Certification Systems
LEI	LEI standard 5000-1 System for Sustainable Natural Production Forests Management LEI standard 5000-2 Sustainable Plantation Forest Management system	LEI
Chain of Custody		
FSC CoC	FSC CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004) FSC standard for company evaluation of FSC controlled wood (FSC STD 40-005) FSC standard for forest management enterprises supplying non-FSC certified controlled wood (FSC STD 300-10) Sourcing reclaimed material (FSC STD 40-007) Multisite CoC certification (FSC STD 40-003 V1-0)	FSC
PEFC CoC	CoC of Forest Based Products (PEFC ST 2002:2010) from 26 November 2011	PEFC Council

Source: Authors' compilation, March 2012.

legality and sustainability, because Indonesia does not have the critical mass to demonstrate this yet. The maintenance of market share by China and ASEAN countries may reflect their flexibility with respect to proof of legality and sustainability.¹⁷

Forest certification has had a miniscule impact on management of natural forests, because only 3% to 4% of natural production forests were certified recently, but there is potentially greater impact on the 18% of planted forests certified to date. In general, impacts on forest products trade have been limited because a considerable proportion of CoC certification is held by traders, importers and retailers rather than producers or forest industries processors. The proportion of CoC certification across the various forest products remains low. International commercial banks funding forestry projects in Indonesia require forest and CoC certification; however, national banks, many with government majority shareholdings, do not at this stage.

Forest governance has improved in Indonesia, responding to several signals from within and outside

Indonesia to adopt independent, third party certification to protect access to the European and North American markets under new forest products trade conditions. FLEGT and REDD-plus programs are also providing critical capacity building in forest governance. Stated priorities of the government are to curb illegal logging by capacity building and institutional strengthening, amending national laws and regulations, strengthening law enforcement and prosecuting those behind major forest harvesting, processing, transporting and trade crimes. Promotion of transparency, independence and accountability, greater participation with key stakeholder groups, conflict resolution and compensation are also stated priorities (FAO, 2010b).

*Potential for Certification, Verification and NTLAs/VPA*s

The potential to expand voluntary certification in Indonesia depends on the one hand on the interest of private or state-owned companies to apply for certificates. On the other, it will depend on making certification more accessible to small-scale producers, who face substantial financial and procedural barriers to entry. The theoretical upper limit is around 35.5 million hectares, which is the forest area managed by members of the Indonesian Forest Concession Holders Association

17. FAOStat Forest Products Statistics 2000 and 2009.

(APHI). The conservative share of certified concessions in natural forests is anticipated to increase steadily to 10%.¹⁸ This would increase the certified forest area up to 3.6 million hectares from the current 2.0 million hectares.

Expansion of certification in forest plantations is more feasible, and the companies producing forest products for environmentally sensitive markets can readily apply for a certificate. A general precondition is that the plantation forests must not be established by conversion of natural forest. The area of forest plantations (currently 7% of production forest or 3.7% of forest area) is small in contrast to the forestry land, and only 18% of the current forest plantation area is certified. If current forest plantation owners applied for a certificate, the area would increase from the current 0.6 million hectares to 3.5 million hectares.

New licenses for industrial forest plantations have been issued for about 10 million hectares, but only one third of these have been planted to date (Ministry of Forestry, 2009a). Potential remains to expand forest certification in new plantings by an additional 3 to 4 million hectares in the future based on the assumption that the majority of the existing 3.5 million hectares of forest plantations and 10% of new forest plantations (not being converted from natural forests) will be certified. Currently, plantation wood is mainly used for pulp production in Indonesia, and only limited, but gradually increasing, demand exists for certified origin. If paper-producing companies and related international markets increase the demand for products of sustainable origin, companies will gain more interest in voluntary certification.

Government requirements on mandatory certification, future EU FLEGT licensing procedures, the *Lacey Act* in the United States and public procurement policies require a strong commitment from forest concessionaires and forest industries organizations in Indonesia to provide evidence on legal compliance. The conformity to the national SVLK certification

standard provides evidence of either sustainable management or legal compliance according to the scope applied in audits. The SVLK certificate is recognized in the European Union as evidence of legal compliance as well as by major national procurement policies in Europe or the United States. The open issue is whether the SVLK certificate is adequate for specific client groups or financing institutions requiring both legal and sustainable timber production and certificates issued by internationally recognized accredited certification bodies. Currently only 25% of forest concessions have passed the SVLK legality or sustainability certification done by national verification bodies. This low figure indicates that the priority will be on promoting SVLK legality verification in the remaining 20 million hectares of active concession areas.

An option the companies have in striving for compliance with legality and/or sustainability requirements in Indonesia is to enroll in a stepwise forest certification process that is run most often by FSC-accredited certification bodies or organizations promoting FSC certification. Such an approach builds the resources and competencies to meet the SVLK legality requirements and to achieve an internationally recognized certificate for sustainable management. The market incentives for voluntary sustainability certification, often exclusively FSC certification, include better access to markets and premiums for certified timber. Recently some price premiums have been paid for logs and for tropical plantation wood produced for pulp production. Additional incentives could be provided through fiscal incentives, ranging from simplified auditing procedures to reductions in timber royalty rates for companies that have an FSC or LEI SFM certificate (Jarvis and Jacobson, 2006).

It will also be important to lower the barriers of entry for smallholders to avoid the risk for further reducing their access to forestland and barring them from access to environmentally sensitive markets. The main barrier of entry is cost, followed by onerous requirements for management plans and recordkeeping, overly complex or irrelevant procedures, limited institutional capacity to assist small-scale landowners, competition from cheaper plantation wood, lack of a

18. The calculated average for a concession area is 85,000 ha.

guaranteed price premium to offset costs, and an imposition of “community” on diverse and disconnected groups (e.g., Forest Trends, 2003, 2004, and 2005). Streamlined certification standards and lower certification costs can help improve access to smallholders or groups of farmers as offered, for example, by the SLIMF certification (Forest Stewardship Council [FSC], 2009). FSC has a dedicated smallholder support program¹⁹ that is active in Indonesia, including training for trainers with the Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC).²⁰

Another important caveat to bear in mind is that capacity of certification bodies in Indonesia is still low. Capacity has been increasing over recent years, but is likely to be insufficient to accommodate the potential expansion in certification. In particular, capacity building efforts should focus on (i) reaching out to potential clients to inform them about procedures, (ii) improving the processing of certification requests and (iii) ensuring effective and independent audits.

3.5.2 Malaysia

Framework of Policies, Laws, Regulations and Targets

Forestry is under the jurisdiction of the state governments – Peninsular Malaysia and the States of Sabah and Sarawak. The cornerstone of the National Forest Policy (1978, revised 1992) was the establishment of Permanent Forest Estate as the basis for achieving SFM. The 1992 revision reflected concern over sustainability, biodiversity and the role of local communities while reducing focus on production, recognizing the multiple roles of forests and encouragement of private sector investment in plantation establishment. The States of Sabah and Sarawak have their own forestry policies. The State of Sabah has placed greater emphasis on production and trade, with less focus on biodiversity and community participation. The State of

Sarawak emphasizes production and revenue generation, whereas social and environmental objectives are absent (FAO, 2010b).

The Malaysia *National Forest Act 1984* focused on ensuring sustainable forest resource management and conservation. The Act provided for forest planning, management and development and safeguarding and protecting forest resources from encroachment and illegal harvesting. The 1993 amendments included illegal logging as a joint liability of license holders and contractors, increased penalties for illegal logging and empowerment of police and armed forces to undertake surveillance of forestry activities. Illegal logging on Peninsular Malaysia reduced, but challenges between loggers and indigenous peoples remain, particularly in the State of Sarawak. Malaysia is committed to eliminating illegal logging and to combating trade in illegal timber, but policy and institutional structures regulating wood-based industries have not been able to contain the problem (FAO, 2010b).

Federal-level changes in institutional structure separated forest conservation and production functions. The Ministry of Primary Industries was responsible for forestry and timber issues, until 2004, when the Ministry of Natural Resources and Environment and the Ministry of Plantation Industries and Commodities were formed. In 2004, the State of Sarawak Forestry Department devolved powers to the Sarawak Forestry Corporation, a government company, for management of forest resources and timber administration. The Sarawak Forestry Department role is limited to policy development and regulation (FAO, 2010b).

Verification

In Peninsular Malaysia and the State of Sabah, the government has a central role in the control of forestry and timber processing. In the State of Sarawak, concession license holders bear a greater responsibility for demonstrating legal compliance. However, evidence indicates that licensed companies operating in the licensed harvesting areas are responsible for a large part of the illegal logging, estimated at 14% to 25% of timber production (Lawson and MacFaul, 2010).

19. FSC Smallholder support program in Indonesia: <http://www.fsc.org/smallholder-support.152.htm>

20. FSC training of trainers in Asia: <http://www.fsc.org/train-the-trainers-asia.392.htm>

Considerable differences exist between the states in forest control and monitoring procedures. These differences have an impact on policies, licensing and enforcement procedures (Lounasvuori et al, 2009; Wells, 2008b). In general, the control procedures for permanent forest estate (PFE) and permanent reserved forest (PRF) are more comprehensive than those designed for alienated or state lands, where land conversion is allowed. The Federal Forestry Department audits the monitoring procedures of the State Forestry Departments in Peninsular Malaysia, but in the State of Sarawak the monitoring is outsourced to the state-owned company Sarawak Forestry Corporation Sdn. Bhd (SFC), which controls planning and monitoring procedures through different business units.

Malaysia introduced the ISO 9001 standard quality management system to state-level forest administration. Initially, the country proposed that certified quality management covering the administrative procedures of state forestry departments would provide adequate assurance of viable forest management to international markets. This turned out to be a false assumption that led to the development of mandatory and voluntary verification systems and combinations of both. Composite and multiagency structures responsible for monitoring make Malaysia a complex case (Wells, 2008b). Verification audit alternatives include:

- Mandatory SFM audits of legality on license holders by state authorities
- Mandatory SFM audits of law enforcement of state authorities by the federal government (Peninsular Malaysia and the State of Sabah)
- Audits by accredited certification bodies against ISO 9001 standards voluntarily adopted by federal and state forest authorities
- Audits by accredited certification bodies against SFM and CoC standards (Malaysian C&I²¹ or interim FSC) adopted by state forest authorities and individual licensees

21. Malaysia Criteria and Indicators (MC&I) for natural and plantations forests are endorsed by the PEFC.

In the State of Sabah, voluntary certification is linked to law enforcement procedures; in Peninsular Malaysia and the State of Sarawak they provide additional evidence for compliance that authorities may take into account.

In Malaysia, voluntary and mandatory audits complement each other in the state-level monitoring framework. The Federal Forestry Department performs annual SFM audits of state FMUs using Malaysian Timber Certification Council (MTCC) procedures, and these mandatory and voluntary audits are mutually reinforcing (Wells, 2008b).

More detailed descriptions of verification in each of Peninsular Malaysia and the States of Sabah and Sarawak are outlined in Annex 2, relating to Malaysia.

Malaysian Timber Legality Assurance System

Malaysia and the European Union commenced formal negotiations in September 2006 on the development of a VPA under the EU FLEGT Action Plan. Malaysia has developed a TLAS to provide assurance that all logs, sawn timber, veneer and plywood licensed for export to the European Union under the VPA are produced legally as defined in the TLAS and that all timber products of unknown or illegal origin are excluded.

In October 2008, an independent technical evaluation of the TLAS to test legality of timber and timber products licensed for export to the European Union under the VPA and identified weaknesses in implementation procedures and capacity-building needs for implementation (Lounasvuori et al, 2009). The evaluation concluded that the TLAS control and implementation procedures were generally of a good standard, but the social and environmental issues were inadequately addressed or absent. Issues for further development included:

- Native and customary rights addressed the right to collect forest produce but gave no guidance on issues of land occupation rights.
- Workers' safety and health were referenced, but no clear indication how compliance was to be determined and no requirement that linked compliance with export licensing was given.

- Environmental legislation was included and required companies to make environmental impact assessments and take actions that mitigated environmental degradation, but the circumstances and the practices to be followed were not clearly defined.

In addition, NGOs considered that TLAS inadequately addressed the rights of indigenous peoples and land tenure rights, especially when the forest licensing procedures and forestry legislation fail to take indigenous people issues into account. Reflecting the state-level legislation, TLAS set different requirements for different states and it did not make a consistent link between the legislation implemented in the forestry and timber industry and the export licenses, which decreases the value of an export license in providing proof of legality.

The TLAS has since undergone further revisions and improvement through joint expert meetings, working groups and public consultations, the latest of which took place in July 2012.

Control of Timber Imports to Malaysia

In general, imported round logs need to have an import license issued by the Malaysian Timber Industry Board (MTIB) and a customs declaration. In the State of Sarawak, the license is issued by the Sarawak Timber Industry Development Corporation (STIDC). The origin of timber needs to be recognized in “good faith,” but Malaysian embassies in the export countries that issue the certificate of origin do not have sufficient information to adequately assess legal compliance. No certificate of origin is required for small-dimension sawn timber and other processed products to demonstrate that the imported product is legally sourced in the country of export (Lounasvuori et al., 2009).

Malaysia has free trade zones; for example, in the State of Sarawak bordering Kalimantan, Indonesia. Small-dimension timber may enter the country through these areas with a transit removal pass, and information concerning origin is not requested. The STIDC licensing body for timber imports in the State of Sarawak has restricted the imports of sawn timber to five designated points of entry, which improves the control possibilities (Wells, 2008b). Free trade zones provide a pathway

for timber with incomplete information on origin. Malaysian regulations on imports do not take prompt actions when changes in regulations of exporting countries (e.g., Indonesian ban on export logs), creates a situation in which demand may encourage unauthorized exports.

The TLAS as described in 2008 verifies the existence of timber import licenses for logs and custom declaration forms for sawnwood, plywood and veneer. It does not describe how the different authorities, MTIB/STIDC, customs and the state forestry departments inspect the imported logs and processed timber products (Lounasvuori et al., 2009) to gain reliable evidence on legality.

Forest Management and CoC Certification

The National Timber Certification Council of Malaysia (including government, scientists, academics, timber trade organizations and associations, environmental NGOs and the standards organization) was established in 1998 to develop and operate the MTCS. The scheme has standards and procedures for certification of natural and plantation forests and for CoC verification. The certification scheme for natural forests was endorsed by the PEFC in May 2009, and the MTCC applied for endorsement for their certification standard for sustainable management of plantation forests.

The PEFC endorsement process brought changes to the MTCS scheme, and the MTCC gave a transition period for those FMUs already certified to adopt the scheme revisions. At that time some areas were certified according to the internationally endorsed MTCS-PEFC procedures and some areas certified by the former MTCS procedures.

The MTCS-PEFC standard for natural forests is applicable for PRF only. In contrast, the standard for plantation forests is also applicable for PRFs and also for forests on “state land,” gazetted for land development where forest conversion for other uses can be allowed.

Before July 2008, MTCC played the role of governing body and certificate issuing body; the auditing was carried out by third party assessors. After July 2008,

TABLE 3.12 Forest and CoC certification in Malaysia, February 2012

Certification Body	Forest Management Certificates		Type of Forest	Ownership	CoC Certificates	
	Area (ha)	No			No	%
FSC						
SCS	400,169	3	3 natural	State	29	9
	46,433	3	3 plantation	Private		
SGS Qualifor	55,139	1	Natural	State	104	31
SmartWood Rainforest Alliance					11	3
SACoC					7	2
SQS					5	1
DNV					5	1
IC-CoC					1	–
TT-CoC					1	–
Sub-total FSC	501,751	7			163	49
MTCS-PEFC						
SGS Qualifor	2,711,657	4	Natural	State	112	33
SIRM QAS	1,877,164	4	Natural	State	52	16
Moody International					7	2
JGAIA					1	–
SCS					1	–
Sub-total MTCS-PEFC	4,588,821	8			173	51
Total	5,090,572 (40%)	15			336	100

Source: Authors' compilation from <http://www.fsc-info.org> and <http://register.pefc.cz/search1.asp>; February 2012.

the role of the certificate issuing body was taken over by the certification body, which carried out the audit. The condition for PEFC endorsement in 2009 was to revise the authorities and tasks in auditing and issuance of a certificate to meet international standards set for independent third party certification. Since February 2011, all certified FMUs have gained compliance with the PEFC-endorsed MTCS scheme through independent and internationally recognized audit procedures.²²

Current independent audit procedures need to deliver impartial statements on compliance. Through incorporating both audit approaches in state-level monitoring, the forest departments can reduce mandatory ad hoc audits without risking reliability of monitoring. Compliance to PEFC or FSC requirements provides assurance that certification procedures are impartial and meet international standards.

Before PEFC endorsement, the MTCS certification process was strongly controlled by the MTCC; therefore, the audits did not meet independent, third party certification requirements. The forest management and CoC certificates in Malaysia are summarized in Table 3.12.

Malaysia has forest certification over 5.1 million hectares (40% of designated production forests), of which over 5 million hectares are natural forests and only 46,433 hectares are forest plantations (3% of designated planted forests). Forest certification is issued overwhelmingly to the state, 5 million hectares (99%) over the private sector (1%). In summary:

- MTCS-PEFC certified, 4.6 million hectares, 100% natural forest, issued 100% to the state
- FSC certified 501,751 hectares, including 455,308 hectares of natural forests and 46,433 hectares of forest plantations, issued 91% to the state and 9% to the private sector

22. PEFC: <http://www.pefc.org>

Currently the eight MTCS-PEFC certificates and three of the seven FSC certificates are issued to state forest enterprises in Peninsular Malaysia. The State of Sabah has one MTCS-PEFC certificate and one FSC certificate for natural forests and one FSC certificate for plantations. Two FMUs in Peninsular Malaysia, a total area of 0.12 million hectares, have both MTCS-PEFC and FSC forest management certificates.

FSC approved a Standards Development Group of Forest Sustainability Malaysia²³ to develop the FSC National Forest Management Standards for Malaysia in 2011. The process aims to complete a standard in line with the FSC Principles and Criteria and the International Generic Indicators in 2013 for implementation in 2014.

The Malaysian timber industry exports timber products to a broad range of countries in Europe and Asia, and the interest in CoC certification has been high. Currently 173 timber companies have the PEFC CoC certificate²⁴ and 163 have the corresponding FSC CoC certificate²⁵ (FSC Certificate Database). The high number of CoC certificates is an indication of the interest to maintain market share in forest products and in procuring certified raw materials.

In 2011, Malaysia exported 6,000 to 7,000 m³ of certified forest products per month, including sawn timber, moldings, laminated finger-jointed timber and plywood to 22 countries, mainly to European countries that pay premiums (2%–4%) for the assurance. The interest in FSC controlled wood shows an elementary level of entry toward achieving legality of harvesting, an interim step toward forest certification. Natural forests account for 107,053 hectares (95%) and forest plantations 5616 hectares (5%) of Controlled Wood Standards. Private companies account for 100% of Controlled Wood Standards, as detailed in Table 3.13.

23. Forest Sustainability Malaysia: <http://www.forestsustainability.org>

24. PEFC: <http://www.pefc.org>, December 2011.

25. Global FSC Certificates: Type and Distribution, March 2012: <http://www.fsc-info.org>

TABLE 3.13 Forest Managers Complying with FSC Controlled Wood Standards in Malaysia, March 2012

FSC Controlled Wood				
Certification Body	Area (ha)	No	Type of forest	Ownership
SmartWood Rainforest Alliance	107,053	1	Natural	Private
SCS	5,616	1	Plantation	Private
Total FSC Controlled Wood	112,669	2		

Source: Authors' compilation; <http://info.fsc.org/>, March 2012.

The forest management and CoC standards used in forest certification in Malaysia are listed in Table 3.14.

Malaysian forestry companies have also applied for VLO and legal compliance against the standards detailed in Table 3.15.

Trends and Influence

Malaysia's production of industrial roundwood peaked in 1990 at 50 million m³; thereafter reducing in 2000 to 22 million m³ and in 2005 to 27 million m³ (FAO, 2010a). Because the installed capacity exceeded the raw material supply, imports have been important to Malaysia. Trends in forest products include industrial roundwood in 1990 at 294,000 m³, in 2000 at 758,000 m³ and in 2005 at 80,000 m³; sawnwood in 1990 at 28,000 m³, in 2000 at 488,000 m³ and in 2005 at 1.1 million m³; wood-based panels in 1990 at 60,000 m³, in 2000 at 189,000 m³ and in 2005 at 400,000 m³; and paper and paperboard products in 1990 at 612,000 tons, in 2000 at 1 million tons and in 2005 at 2.2 million tons (FAO, 2009c).

In 2000, imports, by proportion of value, were sourced from ASEAN countries: Japan, 30%; the United States, 15%; the Republic of Korea, 4%; New Zealand, 3%; and the European Union and China, 2% each. In 2009, the proportion from ASEAN countries, the Republic of Korea and New Zealand remained similar at 29%, 4% and 2%, respectively. Increases included EU countries to 14% and China to 8% but decreases to the United

TABLE 3.14 Forest Certification Standards Implemented in Malaysia, March 2012

<i>Scheme</i>	<i>Standard Forest Management</i>	<i>Owner</i>
FSC	FCP Interim Standard For Forest Management Certification in Malaysia Under the FSC Version 4-1 (2010) SGS Qualifor. Forest Management Generic Standard. State of Sabah, Malaysia (2010)	SCS SGS
PEFC-MTCS	Malaysian Criteria and Indicators for Forest Management Certification (MC&I, 2002)	MTCC
PEFC-MTCS ²⁶	MC&I for Forest Management Certification (Forest Plantations)	MTCC
<i>Chain of Custody</i>		
FSC CoC	<ul style="list-style-type: none"> ■ CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004) ■ Standard for company evaluation of FSC controlled wood (FSC STD 40-005) ■ FSC standard for forest management enterprises supplying non-FSC certified controlled wood (FSC STD 300-10) ■ Sourcing reclaimed material (FSC STD 40-007) ■ Multisite site CoC certification (FSC STD 40-003 V1-0) 	FSC
PEFC	CoC of Forest-Based Products (PEFC ST 2002:2010) from 26 November 2011	PEFC Council

Source: Authors' compilation from FSC, PEFC, MTCS databases, March 2012.

26. MTCC obtained PEFC endorsement for forest plantation standards in 2011.

States to 6% and Japan to 5%.²⁷ These demonstrate mixed messages regarding legality and sustainability. Heavy dependence of imports from ASEAN countries and increasingly China may reflect leniency on legality and sustainability, but increases from the European Union reflect a stronger commitment to legality and sustainability.

In 2000, Malaysia's forest products exports, in order of value, were Japan, 36%, China, 20%, the European Union, 16%, ASEAN countries, 9%, the Republic of Korea, 8% and the United States, 6%. In 2009, exports from Japan had reduced to 22%, China to 7%, the European Union to 7% and the United States to 2%. The Republic of Korea remained similar at 9%, but increased exports were to India 20% and to ASEAN countries 14%. Exports to ASEAN countries remained similar, at 9%. The reduction of forest products trade with EU countries, Japan and the United States may reflect their greater demand for proof of legality and sustainability, which Malaysia cannot yet demonstrate for a critical mass. The increased exports to India and ASEAN countries may

reflect their flexibility with respect to proof of legality and sustainability.

The State of Sabah, Malaysia has set the target of 2014 to have forest certification and CoC certification for all long-term forest concession licenses as a response to

TABLE 3.15 Voluntary Legality Verification Systems Implemented in Malaysia, March 2012

<i>Scheme</i>	<i>Standard</i>	<i>Owner</i>
Smart Wood	SmartWood Rainforest Alliance Standard for VLO in State of Sabah, Malaysia: SmartWood Rainforest Alliance document code VER-06 (2010) SmartWood Rainforest Alliance Standard for VLC in State of Sabah, Malaysia	SmartWood Rainforest Alliance
GFS	Global Forestry Services Inc. Legal Verification Services. Generic requirements to define legal compliance with national regulations include requirements for legal origin incl. the following elements (2009): Forest Concession Use Rights; Traceability & Identification of Material; Legal Requirements of Operation; Harvest Planning	GFS

Source: Authors' compilation, March 2012.

27. FAOStat Forest Products Statistics.

public procurement policies and green building policies of markets around the world. Forest certification of state enterprises has benefited from government funding. As a result, about half of Malaysian production forests are under forest certification, in most part, natural forests, managed by the state. However, only 3% of planted forests are certified to date. In general strong commitment has been given to CoC certification; however, a high proportion remains held by traders, importers and retailers rather than producers or forest industries processors. International commercial banks funding forestry projects in Malaysia require forest and CoC certification; however, national banks, many with government majority shareholdings, do not.

Control of corruption and government effectiveness are considered to have improved in Malaysia over the past 10 years; however, the rule of law has remained much the same. Certification is only one of the pillars catalyzing these improvements in forest governance. The EU FLEGT process for TLAS and VPA is getting serious attention at federal and state levels (FAO, 2010b).

Potential for Certification, Verification and NTLAs/VPAs

Potential exists to certify an additional 6.9 million hectares of natural production forests within the PRF and thus increase the area of certified natural forests by 140%. This figure is based on the uncertified share of PFEs classified as production forests. The natural forests of Peninsular Malaysia are largely already certified or will be certified in the near future with government financing. The certification rate is very low in the States of Sabah and Sarawak. Several concessionaires in these states have started the FSC certification process, but few have been issued a certificate. Forest certification would have the greatest impact in the State of Sarawak, where harvesting rights are given to private concessionaires and where the regulatory framework is the most liberal. The State of Sarawak, with its abundant forest resources, has become the focal state for timber production, with 6 million hectares of natural forests gazetted for forestry use.

The government is promoting forest plantation establishment with tax exemptions and other financial incentives to the private sector to establish plantations on alienated lands, such as on abandoned agricultural

land and “state land.” Restrictions on certifying plantations established on lands cleared from natural vegetation limit the expansion of certified forest plantations. However, the potential exists to have plantations on degraded lands or former agricultural lands that will be eligible for certification.

In terms of VLO, an area of 11.80 million hectares of forest land remains that could potentially be verified for legality of timber; these areas would include 2.30 million hectares of state land forests that are earmarked for non-permanent forestry uses.

Malaysia is challenged by outstanding issues related to applying a legally binding agreement nation-wide (particularly in the State of Sarawak) and engaging in stakeholder consultation in transparent processes.²⁸ The EU requirements for review of the TLAS, the approval of the new EUTR and Indonesia signing a VPA with the European Union has created concerns in Malaysia that the timber industry will lose exports to the European Union unless issues are resolved. Even the logging industry in the State of Sarawak, which was adamant about not signing a VPA with the European Union, is changing its stance. A VPA cannot be concluded with the European Union until particularly the State of Sarawak addresses native customary rights and forestry sector transparency issues. The Malaysian government has been challenged to adopt a more inclusive participatory, multi-stakeholder process and to seriously address governance in the State of Sarawak. Negotiations to conclude a VPA with the European Union have some way to go.

3.5.3 Vietnam

Framework of Policies, Laws, Regulations and Targets

The framework has changed significantly since the new economic mechanism and adoption of free market principles from 1986. Particularly during the last two decades, state forest enterprises have been reorganized and forest ownership and land-use rights have seen a growth in forest growing and forest products exports. Forests are

28. EU Forest Watch FLEGT-VPA Special Issue, November 2011: <http://www.fern.org>

classified into conservation, protection and production. Legislation was introduced to allocate land-use rights to companies, households and individuals for sustainable forest production, conservation and protection. Since 1998, the Five Million Hectare Reforestation Program has contributed significantly to restoring national forests however forest degradation remains a challenge (FAO, 2010b).

Forest policies, laws and regulations encourage decentralization and greater participation – from public to more people's and private sector forestry, improved forest protection, increased plantation and agroforestry establishment (particularly smallholders) and increased wood processing for domestic and export markets. Protection of existing natural forests, greening areas of degraded lands, planting of production forests and sustainable use of forest resources is expected to increase the importance of forestry as an economic sector, while contributing to income generation, livelihood improvement and poverty reduction.

The Vietnam *Forest Protection and Development Law*, 2004, provides for reform of state enterprises, reclassification of forests, allocation of forest land to households and other organizations and forest protection and reforestation/afforestation. In 1999, Decree No 163/1999/NZ-CP provided guidance for allocation and leasing of forest land to companies, households and individuals for forest management purposes (FAO, 2010b).

The Vietnam Forestry Development Strategy 2006–2020, approved in 2007 highlighted five key programs: SFM and development; forest protection and biodiversity conservation; forest product processing and trade; research, education, training and forestry extension; and renovating forest sector institutions, policy, planning and monitoring.

Verification

Legislation and procedures for controlling national timber production and targets for incorporating the national regulations in a legality assurance system exist to address tenure rights, harvesting, processing, import and export, statutory fees, and environmental and social regulations. The planned structure is in line with the EU expectations of the legality definition.

Vietnam has procedures to control the legality of imported timber. Custom authorities require log lists, invoices and landing bills, and they check the log codes (or hammer marks). However, the trade regulations do not ensure an efficient legality control of imported timber. The current enforcement mechanisms are accessible to authorities, but private sector timber processors or traders do not have the mandate to inquire into the legal compliance of the timber. Existing regulations include guidelines for verification of legality of timber origin (Government Regulation No. 44, 2006); verification of harvested timber (Government Decision No. 40, 2005); and verification of transported timber (Government Decision No. 59, 2005). These, together with regulated procedures to conform to the set harvesting quotas, the supervision of harvesting planning, implementation and post-harvest activities, set a framework for law enforcement.

However, law enforcement controls do not systematically cover the different stages of the supply chain, although a range of documentation requirements, such as transport and invoices, could potentially form the basis for such a system. Existing control elements are also governed by different authorities, depending on the stage of the supply chain (Proforest, 2009). However, the existing elements provide a good basis for further strengthening legal assurance verification (e.g., under the FLEGT process).

Imports of illegal timber have trebled between 2000 and 2007, now estimated at 17% of total timber imports due to the deficit in raw material supplies for forest industries. Illegal imports from Indonesia have decreased but are offset by increased imports from Cambodia, Lao PDR, Malaysia, Myanmar and the Republic of Congo. Most imported wood is re-exported after processing (Lawson & MacFaul, 2010).

The import of timber products from actual and potential VPA partner countries is considerable, which has implications on the import controls when the VPA agreements signed in the countries exporting to Vietnam (e.g., the Republic of Congo, Cameroon, Indonesia and ultimately, Malaysia). When Vietnam proceeds with the VPA negotiations with the European Union, it will also make commitments to control the imports of illegal timber.

TABLE 3.16: Forest and CoC Certification in Vietnam, February 2012

Certification body	FSC Forest Management certificates		Type of forest	Manager	FSC CoC certificates	
	Area (ha)	No			No	%
SGS Qualifor	9,777	1	Plantation	Private (foreign)	187	69
SmartWood Rainforest Alliance	10,175	1	Plantation	State	46	17
GFA Certification	9,761	2	Plantation	Private (group)	2	1
CU Certifications	11,696	1	Plantation	Private (group)	19	7
BV Certification					8	3
LGA InterCert GmbH (IC)					4	1
Tüv Süd (TSUD)					6	2
Total	41,409 (0.6%)	5			272	100

Source: Authors' compilation from <http://www.fsc-info.org/>; February 2012.

The ability to assure markets that the source of imported timber is legal will be a crucial issue for the Vietnamese timber industry, especially for the furniture industry exporting to the United States and European Union. Vietnamese authorities recently recognized the importance of developing mechanisms to verify the legal source of timber imports, thus allowing Vietnamese producers to meet the new market requirements. Concern exists among producers that additional verification will increase the timber prices and production costs, which could restrict small timber-processing companies from competing on international markets. Increasingly, Vietnamese exporters, particularly to the United States and European Union, are already facing requirements to demonstrate legality and sustainability of forest products imports, domestic production, wood processing and export trade through verification and certification (Proforest, 2009).

The majority of timber products exported to the United States, European Union and Japan are furniture items, and some retailers have already introduced responsible purchasing policies. Such retailers include B&Q, IKEA, Walmart, Home Depot, Castorama, Carrefour, and ScanCom. Many of them have adopted a stepwise approach to gradually eliminate timber of suspect legality and sustainability and to increase the proportion of certified timber. The minimum entry level is that timber is from a known legal source, but certification may be required in high-risk instances, such as tropical hardwood products.

The Ministry of Agriculture and Rural Development (MARD) and the EU Commission have started formal

negotiations for a FLEGT VPA and hope to conclude the negotiations by the end of 2012. However, Vietnam has not yet developed a timber legality standard that would set the basis for VLC, for example, for FLEGT licenses. Vietnam is a member of the ASEAN working group on forests that has defined the guiding legality standard for member countries.

Forest Management and Chain of Custody Certification

Table 3.16 summarizes forest and CoC certification in Vietnam. Voluntary forest certification is in its early stages of development in Vietnam, with no natural forests certified. Five forest plantation areas in the country are certified, covering only 41,409 ha. The certified forest is only 0.6% of production forest and 1.2% of planted forest area. According to area certified, certificate holders are state, 25%; private (foreign), 24%; and private (group) 51%. The forestry strategy has an optimistic target to achieve 30% of forest production certified by 2020. Currently only 2.7% of production (102,000 m³) is certified.²⁹

The number of FSC CoC certificates issued has almost doubled during the past four years, to 272 in February 2012, of which SGS issued 69%, SmartWood Rainforest Alliance 17% and Control Union 7%. Seven different international forest certification bodies undertake CoC certification assessments in Vietnam. At December 2011, 3 PEFC CoC certificates were issued in Vietnam. The rapid growth in CoC certificates in

29. Source: Data from Quy Nhon Plantation Forest Company of Vietnam Ltd.

TABLE 3.17 Forest Managers Complying with FSC Controlled Wood Standards in Vietnam, March 2012

FSC Controlled Wood				
Certification Body	Area (ha)	No	Type of forest	Ownership
GFA Consulting Group GmbH	16,318	1	Plantation	Private
Total FSC Controlled Wood	16,318	1		

Source: Authors' compilation; <http://info.fsc.org/>, March 2012.

Vietnam reflects a recent interest to demonstrate sustainability to buyers.

As shown in Table 3.17, the interest in FSC controlled wood shows an elementary level of entry toward achieving legality of harvesting, an interim step toward forest certification.

Interest toward forest management certification is increasing, which reflects the market demands in export countries for certified timber products. Eight forest enterprises managing natural forests are preparing for FSC forest certification under an internationally financed project. These projects, supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), WWF or government, account for 129,000 hectares of natural forests, ranging from 9,000 to 27,000 hectares each. In planted forests, five forest companies plan to apply for a certificate. The forest area covers 50,000 hectares, ranging from 5,000 to 20,000 hectares. In addition, groups of small plantation holders are preparing for group certification with the assistance of international project funding. The total area of smallholder groups is 30,000 hectares (MARD, 2007). When the certification of these planned areas is completed, the production of certified timber may reach up to 0.7 million m³/year.

The forest plantations are certified against the Interim FSC standards, as detailed in Table 3.18.

A national FSC working group is developing a national forest management standard.

Trends and Influence

Industrial roundwood production in 1990 was 3.4 million m³; in 2000, 2.4 million m³; and in 2005, 2.7 million m³

TABLE 3.18 Forest and CoC Certification Standards Implemented in Vietnam, March 2012

Scheme	Standard Forest Management	Owner
FSC	SmartWood Rainforest Alliance interim standard for Assessing Forest Management in Vietnam (Ver. 1 June 2010)	SmartWood Rainforest Alliance
FSC	GFA Generic FM Standard, adapted for Socialist Republic of Vietnam, Version 1.0	GFA
FSC	SGS Qualifor Forest management standard for Vietnam (2010)	SGS
Chain of Custody		
FSC	FSC Standard for CoC Certification (FSC STD 40-004 V2-0) Standard for Company Evaluation of FSC controlled wood (FSC STD 40-005 V2-0) Standard for Multi-site Certification of CoC Operations (FSC STD 40-003 V1-0)	FSC

Source: Authors' compilation; <http://info.fsc.org/>, March 2012.

(FAO, 2010a). Dependence on wood production from forest plantations has been increasing, but most industrial roundwood for the wood industry is imported. In 2000, imports based upon value were from ASEAN countries, 41% (Indonesia, Singapore); EU countries, 13%; Japan, 10%; United States, 9%; New Zealand, 8%; and China, 6%. In 2009, ASEAN countries remained at a similar level, 39%; the United States increased to 15%; China and the Republic of Korea doubled to 13% and 6%, respectively; and Japan and New Zealand reduced to 6% and 5%, respectively.³⁰ The heavy dependence on forest products imports from ASEAN countries, China and the Republic of Korea may reflect their greater leniency in legality and sustainability.

In 2000, Vietnam forest products exports, in order of value, were China, 16%; Japan, 8%; ASEAN countries, 1%; and the European Union and United States, negligible and "others," 73%. In 2009, China increased to 22%, the Republic of Korea to 13%, ASEAN countries to 9%, the United States to 7% and India to 2%. Japan reduced to 3% and EU countries remained negligible.³¹ The negligible forest products trade with EU countries and reduced

30. FAOStat, Forest Products Statistics.

31. FAOStat Forest Products Statistics.

exports to Japan may reflect their greater demand for proof of legality and sustainability, because Vietnam does not yet have the critical mass of certification and verification. The increased exports to China, ASEAN countries, the Republic of Korea and India may reflect their more lenient requirements for proof of legality and sustainability.

The National Forest Development Strategy (2006–2020), sets an optimistic target of achieving 30% of production meeting C&I and qualified for certification. Achievements to date have been modest. A national standard of SFM has not yet been completed to outline the principles, criteria, indicators and verifiers, although an Institute of SFM has been established. Expertise, technology and knowledge remain a constraint, relying heavily on external technical and financial assistance because the standards and costs for certification remain high. Land boundary issues, precluding forest owners from obtaining a legal land-use right certificate (Red Book) and compliance with transparency in financial management, have proven significant constraints to achieving SFM certification.

Forest certification has not had a significant impact on forest management in Vietnam because no natural forests are certified and only five forest plantations, totaling 0.6% of production forest area, were recently certified. However, interest has been shown to expand both natural and forest plantation certification. Commitment to CoC certification is the highest in the case study countries, but because most have been issued very recently, it is too soon to ascertain impact. National banks do not require forest or CoC certification for providing funding to forestry projects.

Over the last decade, Vietnam has been rated as having remained much the same in regard to control of corruption but has made major improvements in rule of law and government effectiveness. However, because most certification was very recent, this has had little impact. Certification, FLEGT and REDD-plus programs will support continued improvements in forest governance (FAO, 2010b).

Potential for Certification, Verification and NTLAs/VPAs

The target to achieve 30% of production forest qualified for certification equates to an estimated 2.5 million hectares by 2020. However, no action plan has

been developed for this, and therefore this target seems optimistic. State enterprises managing 27.3% of production forests have the greatest potential to increase the certified area, the theoretical upper limit consisting of 2.3 million hectares. Private companies managing 1.3% of the forests could theoretically increase the certified area by 100,000 hectares, which is 2.5 times the current level. Individual households manage 37.1% of production forests (3.2 million ha), but only two group certifications have been issued to this type of applicant, making large-scale certification unlikely.

A large number of CoC certificates and increasing market requirements from importing countries will keep the certification of SFM on the agenda. Direct market or fiscal incentives are needed, as well as external support, before state forest enterprises or private households take large-scale initiatives in voluntary certification. In parallel, the capacity of certification bodies should be further strengthened to accommodate any potential increase in the demand for SFM and CoC certificates. Nonetheless, the recent launching of FLEGT-VPA negotiations with the European Union will shift the focus and resources from voluntary certification to the development of national legality verification systems.

3.5.4 Thailand

Framework of Policies, Laws, Regulations and Targets

The first National Forest Policy (1985) was based on the principles of SFM and environmental protection. Agricultural intensification, provincial land-use planning, control of shifting cultivation, forest fires and land clearing by ethnic minorities were focus areas to reduce forest conversions. Harmonized public and private sector management of forests and reforestation for industrial roundwood production and protection were priorities. The forest cover target is 40%, of which 25% is for protection and 15% for production (FAO, 2010b).

In 2002, the forest-related policy, legislation and institutional frameworks distinguished protection and production. The Royal Forest Department (RFD) is now responsible for forests outside protected areas; the conservation and protected areas by the National Park, Wildlife and Plant Conservation Department and the

coastal mangroves by the Department of Marine and Coastal Resources. Decentralization and public participation in policy, planning and management of natural resources have been limited. After the coup d'état in 2006, the constitution was drafted to promote public participation in environmental conservation and sustainable natural resources use.

The Thailand 1941 Forest Act, amended in 1948 and 1982, originally focused on provisions for extraction and transportation of forest resources, although amendments progressively reflected the growing necessity for forest conservation. A logging ban was introduced in 1989. Opposition has existed between conservation-oriented and people-oriented groups, because more than 1 million households live within national parks, wildlife sanctuaries and national forest reserve lands, considered illegal by law. The *Community Forestry Bill*, introduced by the RFD in 1991 to allow involvement of local communities in managing forests in and around national reserves was controversial and was approved in 2007, but awaits royal approval before enactment. The Bill does not provide full resource-use rights to forest-dependent people. Illegal logging is still frequently reported, and conflicts between authorities, villagers and civil society organizations and environmental and social NGOs are widespread (FAO, 2010b).

Verification

Legally produced timber can be sourced only from forest, agricultural and rubber plantations planted on private or permitted degraded land. Any timber originating from natural forests is illegal because of the logging ban. During the ban, forest legislation has not been updated to tackle the current forms of unauthorized use

of natural forests. Consequently, the incidence of illegal logging in natural forests has recently increased.

According to the current control system, timber suppliers and processors must be able to demonstrate the legal origin of any timber and timber product. Processors also need to keep an account of timber stocks on site and to prevent any timber without appropriate evidence of legality from being mixed into the stock. Government authorities have the mandate to perform regular checks in timber procurement, transport and processing sites. Evidence of legal origin is also required for imported timber. The Customs Department controls timber imports and exports, whereas the RFD controls domestic timber production. The current control system is paper based and does not provide fully reliable, up-to-date data for tracing timber at the point of export or processing. The RFD is developing a digital, bar-code monitoring system that will provide a better basis for reliable legality verification. The digital system will allow closer cooperation between the Customs Department and RFD in preventing illegal timber imports and exports.

Thailand is making preparations and seeking a domestic consensus to start VPA negotiations with the European Union.

Forest Management and Chain of Custody Certification

Thailand is part of the ASEAN framework for timber legality, which defined the general criteria and indicators for legal timber in 2009 and aims at a phased approach for timber certification for sustainability by 2015. The first forest plantation was certified in 2006. Certification in Thailand is detailed in Table 3.19.

An FSC forest management certificate has been issued to six forest plantation units covering an area of

TABLE 3.19 Forest and CoC Certification in Thailand, February 2012

Certification Body	FSC Forest Management Certificates		Type of Forest	Manager	FSC CoC Certificates	
	ha	No			No	%
SGS Qualifor	11,134	5	Plantation	Private (group)	24	63
SmartWood Rainforest Alliance	11,360	1	Plantation	State company	3	8
BV					10	26
SQS					1	3
Total	22,494 (0.6%)	6			38	100

Source: Authors' compilation from <http://www.fsc-info.org>; February 2012.

22,494 hectares, 50% to state enterprise and 50% to private (group). That is only 0.6% of the total forest plantation area. Five certifications are group certifications of smallholders producing rubber, wood or eucalyptus on small farms ranging from 1 to 100 hectares. Two of the group certifications are organized by Siam Forestry Co Ltd and one by Metro MDF. SGS and SmartWood Rainforest Alliance are the predominant forest certification bodies and SGS and BV for CoC Certification. The Rainforest Alliance developed the Forest Management Standard for Thailand in 2008. SmartWood Rainforest Alliance certificates are issued to this standard.

Also, the state enterprise Forest Industry Organization (FIO), has been under the Rainforest Alliance’s SmartWood Program (SmartStep for Forest Operations) since 2008, and the 11,360 hectares of plantation teak in Northern Thailand have been audited. The FIO manages 86,493 hectares of plantation teak and plans ultimately to achieve a forest management certificate for the total area.

There were no instances of FSC controlled wood in Thailand.

Thailand has 38 FSC and 7 PEFC CoC certificates, which is extremely low and reflects the general low level in the production of certified timber. Due to the high number of developed private timber-processing and exporting companies, considerable potential exists to increase CoC certification in the country, and the policies to strengthen the legality verification will encourage companies to apply for a CoC certificate.

The forest and CoC standards used in Thailand are detailed in Table 3.20.

Trends and Influence

Industrial roundwood production in 1990 was 176,000 m³; in 2000, 45,000 m³; and in 2005, 11,000 m³. Dependence on production from forest plantations and forest products imports has been increasing (FAO, 2010a). In 2000, imports, based upon value, were from the United States, 11%; ASEAN countries, 7%; Japan, 7%; and Canada, 5%. In 2009, the proportion of ASEAN countries more than quadrupled to 31% and Japan increased to 10%, China to 9% and Canada to 7%, whereas the United

TABLE 3.20 Forest Certification Standards Implemented in Thailand, February 2012

Scheme	Standard	Owner
<i>Forest Management</i>		
4. FSC	SGS Qualifor. Forest management standard for Thailand AD33-02 (2010)	SGS
5. FSC	SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Thailand (FM-32-Thailand, 2008)	SmartWood Rainforest Alliance
<i>Chain of Custody</i>		
6. FSC	CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004) Standard for company evaluation of FSC controlled wood (FSC STD 40-005)	FSC

Source: Authors’ compilation from <http://www.fsc-info.org>; February 2012; and Rainforest Alliance, 2008.

States reduced to 8%.³² Thailand has a heavy dependence on forest products imports from ASEAN countries and China, which currently do not have mechanisms sufficiently in place to demonstrate legality and sustainability. Insufficient information was available on the level of domestic market forest products trade, but certification and verification are currently not critical requirements.

In 2000, Thailand’s forest products exports, in order of value, were to China, 48%; ASEAN countries, 10%; the European Union, 10%; the Republic of Korea, 8%; the United States, 6%; Japan, 4%; and Australia, 4%. In 2009, China had reduced to 29%, the European Union to 2%, the United States to 1%, Australia to 2%, and Japan to almost zero. The Republic of Korea remained similar at 9%, but exports to ASEAN countries nearly trebled to 28% (mainly Vietnam). The reduction of forest products trade with EU countries, the United States, Japan and Australia may reflect their greater demand for proof of legality and sustainability, which Thailand cannot yet demonstrate. The increased exports to ASEAN countries and maintenance of exports to the Republic of Korea may reflect their greater lenience in requirements for proof of legality and sustainability.

Because past commitment to forest or CoC certification has been limited, little or no impact on sustainability

32. FAOStat Forest Products Statistics.

and/or legality of forest management or forest products has been seen. In this instance, investors in forests and forest industries in Thailand will not have access to funds from international commercial banks that require independent, third party certification; however, national banks have more lenient sustainability and legality conditions.

Over the past decade, Thailand has been rated to have deteriorated in control of corruption and rule of law, but remained static on government effectiveness. Certification will have little or no impact on forest governance at this time (FAO, 2010b).

Potential for Certification, Verification and NTLAs/VPAs

Considerable potential exists to expand voluntary forest and CoC certification in Thailand. Due to the logging ban on natural forests, interest in certification is focused on forest plantations. However, companies are not willing to invest in certification if it is not supported by the government or timber-processing industry. Smallholder plantations and agroforestry production on private farms are typical in Thailand, which raises the need for group certifications to produce substantial amounts of certified timber. Such certifications have been successfully implemented in Thailand, but they need good organization and commitment on the part of the parties taking the initiative. Currently, 7,000 smallholders are participating in group certification schemes, but the potential for eucalyptus plantations alone is 20,000 farmers. The forest industry recognizes the need to provide evidence of legal compliance and sustainable management to the international markets. In addition to the locally produced plantation wood, legal compliance is urgently needed for imported timber originating from the natural forests of the neighboring countries Lao PDR, Myanmar and Cambodia.

In summary, potential exists to increase the supply of certified timber from forest plantations, but not to produce certified timber from natural forests. To facilitate this potential expansion in certified timber, the capacity of Thailand's certification bodies should be further strengthened to ensure efficient and effective processing and auditing procedures.

Thailand is struggling with requirements for defining legality and preparing a TLAS, so progress has

been slow. However, a study for understanding timber flows in Thailand and their control by Thailand's timber tracking systems is being undertaken as a preliminary step on rubber wood products, pulp and paper species (primarily eucalyptus species), products processed from imported timber from a non-VPA country in the Mekong region (e.g., Lao PDR or Cambodia) and products processed from another country (e.g., Malaysia).

3.5.5 Lao PDR

Framework of Policies, Laws, Regulations and Targets

The Forestry Strategy 2020, endorsed by the government in 2005 aims to balance multiple objectives in forest management. The priorities were to provide a sustainable flow of forest products and livelihoods; promote regeneration, reforestation and afforestation in natural and planted forests; and provide ecosystem services (e.g., soil, water, carbon, biodiversity, recreation).

Land-use planning, village-based natural resource management, sustainable harvesting, rationalization of the wood-processing industry, tree planting, law enforcement and participation to prevent unauthorized activities and protection of watersheds are focus areas. There is a shift toward achieving more community- and people-centered developments in an attempt to attain and maintain 70% forest cover (FAO, 2010b).

The *Forest Law* (2007) designates forest land according to production, conservation or protection functions. Timber harvesting is allowed only in production forests. Planted forests may be established only on fallow land. Forest land also may be allocated to villages as village conservation forest and village utility forests. Villages are given permits to harvest, for example, construction wood from the village utility forests.

Lack of consensus exists on the current forest cover levels because of different definitions for forest. According to Lao PDR country reporting to FRA 2000, forest cover was 54%; FRA 2005, 69.9% (backdated 2000 figure adjusted to 71.6%); and the FRA 2010, reported 68%. However, the Forestry Strategy 2020 used 41.5% forest cover. The scale of these variations is very significant

TABLE 3.21 Forest and CoC Certification in Lao PDR, March 2012

Certification Body	FSC Forest Management Certificates		Type of Forest	Ownership	FSC CoC Certificates	
	Area (ha)	No			No	%
SW Rainforest Alliance	82,760	1	Natural	State or village group	13	87
GFA Consulting GmbH	86	1	Plantation	Private group		
BV Certification					2	13
Total	82,846 (2%)	2			15	100

Source: Authors' compilation from <http://www.fsc-info.org>; March 2012.

when establishing the baseline for reducing deforestation and forest degradation (FAO, 2010b).

Verification

PM Decree 59/2002 on Sustainable Management of Production Forests sets the basic principles for establishment and management of Production Forest Areas (PFAs), but forest management planning lags behind and leads to uncontrolled forest use. The Ministry of Agriculture and Forestry and Prime Minister's Office have the overall control on forest management planning. They work in cooperation with local authorities on field surveys and monitoring. Village Forestry Organizations organize villagers to participate in implementation of forest management activities based on an agreement with villagers and District FMUs.

Lao PDR does not have a legality standard that could be used to monitor legal compliance.

Forest Management and Chain of Custody Certification

Two FSC forest management certificates cover 82,846 hectares of village-based forest management of natural forests, and one FSC forest management certificate covers 86 hectares of teak plantation in a private smallholder group. Fifteen CoC certificates are held. The certification has been done with the support of the World Bank-financed Sustainable Forestry and Rural Development (SUFORD) project. Despite the high export volumes of timber and timber products, the number of timber-processing companies with CoC certificates remains low. Table 3.21 summarizes these details.

Lao PDR has about 2% of production forests FSC certified, of which more than 99% is in natural forest, issued to state or village groups (supported by the SUFORD

project) and less than 1% in forest plantations, issued to private groups. Two forest plantation companies are undergoing preliminary certification procedures in Lao PDR (Oji Lao Plantation Forest Co Ltd and Stora Enso).

Table 3.22 details forest managers complying with FSC Controlled Wood Standards in Lao PDR.

The forest and CoC standards used in Lao PDR are summarized in Table 3.23.

Trends and Influence

Industrial roundwood production in 1990 was 477,000 m³; in 2000, 682,000 m³; and in 2005, 292,000 m³ (FAO, 2010a). The installed capacity of the forest industry exceeds raw material supply so the pressure for illegal logging and unsustainable harvest is high, because forest resources are increasingly being designated as protected areas and deforestation from commercial agriculture, hydroelectricity production, new economic zones and shifting cultivation continue. The government's aim is to increase industrial roundwood production from forest plantations in the future, but

TABLE 3.22 Forest Managers Complying with FSC Controlled Wood Standards in Lao PDR, March 2012

FSC Controlled Wood				
Certification Body	Area (ha)	No	Type of forest	Ownership
SmartWood Rainforest Alliance	239,529	2	Natural	State
Total FSC Controlled Wood	239,529	2		

Source: Authors' compilation from <http://www.fsc-info.org>; March 2012.

TABLE 3.23 Forest and CoC Certification Standards Implemented in Lao PDR, March 2012

<i>Scheme</i>	<i>Standard Forest Management</i>	<i>Owner</i>
7. FSC	SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Lao PDR. FM-32 (2008)	SmartWood Rainforest Alliance
8. FSC	FSC STD 01-003 SLIMF. Eligibility Criteria	In Teak plantations
<i>Chain of Custody</i>		
9. FSC	CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004)	FSC
10. FSC controlled wood	FSC STD 30-010 V-20 EN	

Source: Authors' compilation, March 2012.

policies remain unclear, investment low, planted areas small and productivity poor. In the past 10 years, forest products imports have increased, with 60% sourced from ASEAN countries (mainly Thailand),³³ which currently do not have legality and sustainability mechanisms and standards in place. Insufficient information was available on the domestic market for forest products, but certification and verification do not seem critical requirements for domestic trade.

In 2000, forest products exports from Lao PDR, in order of value, were Japan, 16%; China, 15%; the European Union, 3%; Australia, 1%; the United States and ASEAN countries were not listed individually. In 2009 a major increase occurred in exports to ASEAN countries, to 56% (Thailand and Vietnam), similar to exports to China, at 14%, and exports to the European Union and Australia basically ceased.³⁴ The reduction of forest products trade with Japan, the European Union and Australia may reflect their greater demand for proof of legality and sustainability, which Lao PDR currently cannot demonstrate. The major increase in exports to ASEAN countries and maintenance of exports to China may reflect their greater lenience in requirements for proof of legality and sustainability.

33. FAOStat Forest Products Statistics.

34. FAOStat, Forest Products Statistics.

Lao PDR has a low level of forest and CoC certifications, almost entirely on natural forests issued to state or village groups (supported by the SUFORD project). Nationally the impact may not be large, but as a model, it has been important by demonstrating to the government and other communities how they can work together toward sustainability and legality of forest management and forest products trade. At this stage, no major impact has been seen on commercial activities.

Over the past decade, Lao PDR is considered to have deteriorated in control of corruption and government effectiveness and remained static on rule of law (FAO, 2010b).

Potential for Certification, Verification and NTLAs/VPA

Some resistance has been met from state forest industries to certification, and communities tend to be daunted by the high costs and perceived low benefits of certification. Alternative strategies under consideration include the WWF-GFTN and The Nature Conservancy (TNC) Responsible Asia Forest and Trade (RAFT) initiatives, which offer market access for legal and certified wood. In 2009, the project GFTN-Lao PDR was launched.

GFTN-Lao PDR is the Lao chapter of GFTN, WWF's initiative to eliminate illegal logging and improve the management of valuable and threatened forests. GFTN-Lao PDR is the first GFTN office operating under a collaborative partnership program with The Forest Trust (TFT, formerly Tropical Forest Trust). The strategic approach of this partnership is to develop a favorable environment for certification of natural and planted forests toward demonstration of sustainability and legality.

However, timber legality issues will demand higher priority in the near future, because Vietnam, which is a major trading partner of Lao PDR, has expressed an interest in negotiating a VPA with the European Union. Lao PDR has been involved with the FLEGT program since 2009 and is in transition with the establishment of a FLEGT steering committee and the leader of the Department of Forest Inspection as focal point to oversee two working groups on (i) timber legality and (ii) the National Timber Legality Assurance System

(NTLAS). The next major step is to decide whether or when to enter into formal negotiations for a VPA with the European Union.³⁵

The potential to expand certification in natural forests in the near future is slight because of the limited resources in forest administration and challenges in establishing the production forest areas in line with the prevailing legislation. The area of forest plantations is still small, and despite the high interest in them, it is foreseen that their area will expand only gradually. It is estimated that within the next five years, two production forests (100,000 to 150,000 has) and 10,000 hectares of forest plantations will be certified.

The government target is to increase interest in CoC certification among timber-processing companies. Private investors are increasingly certifying their plantation forests.

3.6 Forest Certification Potential in Southeast Asian Case Study Countries

Despite being a market-driven tool, forest certification was initially promoted in Southeast Asia by donors, governments, the private sector and NGOs desirous of demonstrating legality and sustainability. In general, state and private investors are willing to invest in certification only if achievable benefits are possible. For instance, CoC certificates are pursued more readily by private sector companies to meet market requirements for proof of legality and sustainability with regard to the origin of wood products.

In the initial stages a mix of state and private sector involvement may thus be needed. This is the case in Malaysia, where PEFC certifications are applied and financed by state forestry organizations, whereas FSC

certifications are largely financed by private companies and supported by official development assistance (ODA). FSC certifications in Indonesia, Lao PDR, and Vietnam are also supported by funding agencies, donor funds, government financing or client organizations. Environmental and other NGOs have promoted forest certification through joint projects in the region. These diverse initiatives show that although certification is in principle a market-driven tool, it is encouraged through various key actors from within and outside the countries.

The main driver for certification in the forest industry may be wood products market demand to maintain access to existing markets such as the European Union or United States. Increasingly companies and wood-based associations also wish to demonstrate corporate social and environmental responsibility, legality and sustainability. Additionally, they may require certification to access major funds from development and commercial banks.

Nonetheless, the underlying objective of forest certification is to improve forest management and promote the trade of legally sourced timber from responsibly managed forests. Therefore, voluntary forest management and CoC certification can play a crucial role help setting national TLAS standards. For instance, VPA requirements for forest management are currently mostly covered by the existing voluntary standards. However, they need to be reviewed and updated to meet any additional VPA requirements in forest management and CoC. This potential to access new, and maintain existing, markets has focused the interest among governments, timber traders and the forest industry in Southeast Asia to seek CoC certification.

However, certification requirements can be onerous and expensive so are often implemented in a stepwise approach, which can be adapted to include a legality verification scheme, as well as, ultimately, certification of sustainability. The process to upgrade the operations and documentation to meet the certification requirements can be time-consuming. Even in favorable conditions, where companies are encouraged to take a stepwise approach, it may take three to five years. However, CoC systems along with the commitments and procedures to

35. Ministry of Agriculture and Forestry (MAF), Department of Forest Inspection presentation to ASEAN-EU-FLEGT Asia, Sub-regional Training Workshop on TLAS, Kota Kinabalu, State of Sabah, Malaysia, 25-27 October, 2011.

procure and supply only legal and/or controlled wood are the first steps toward certifiable forest management and timber procurement.

Especially in FSC certification, companies often work with accredited certification bodies in certification and auditing approaches (e.g., Rainforest Alliance SmartStep program, SCS and SGS) while seeking stepwise technical support from technical frameworks such as TFT or GFTN. In Southeast Asia, the interim FSC standard has been adapted by the various certification bodies tailored in consultative processes to suit the unique region, country and certification application context. This means that meeting VPA requirements and TLASs should be a continuous and complementary process.

The potential increase in certified forest in the next three to five years was conservatively estimated taking into consideration potential increases from each country, as detailed in the previous sections. The future increases in certified forest area and related volumes of certified timber products are estimates because of uncertainties, including (i) global demand, (ii) related regulations, (iii) support for certification (including sufficient capacity building for certification bodies in-country and the promotion of certification for small-scale producers) and (iv) industry priorities (including the pace of establishing plantations and trends regarding natural forest concessions). The estimates shown in Figure 3.7 are an upper bound.

It is assumed that in the future nearly all forest plantations will be certified, as long as they are not from converted natural forests. Forest plantations are simpler to justify

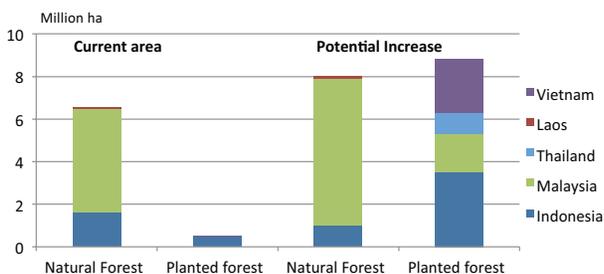
than natural forests because of their simplicity of function, high investment, intensive management, clear production targets and high productivity and yield. Planted forests are also politically preferred in the sub-region as the future source for increased timber production. Additionally, large-scale forest plantations are technically easier to certify than natural forests or group certifications of smallholder forest plantations. If countries reach their national targets for forest plantations and investors are willing to certify their investments, the greatest potential to increase certified forest thus lies in forest plantations. It is assumed that if market demand exists, managers of forest plantations can apply for a group certificate to achieve a larger scale. Smallholders in Thailand and Vietnam have already demonstrated that this can be achieved.

According to the Ministry of Forestry reporting to FRA 2010, forest plantations area in Indonesia was 3.5 million hectares in 2010, of which only 0.5 million hectares are currently certified by LEI and 0.1 million hectares by FSC. New licenses for a further 10 million hectares of new industrial plantations have been approved. Therefore, in the medium term it is assumed that the majority of the existing 3 million hectares of forest plantations and 10% of new forest plantations – or a total of 3.5 million hectares – will be certified by PEFC, FSC or LEI in Indonesia.

The area of forest plantations in Malaysia is increasing modestly and conversion restrictions, particularly for FSC certification, limit their eligibility for forest certification. A feasible estimate for the increase in certified forest plantation area is about 1 million hectares within the following five years in Peninsular Malaysia and States of Sarawak and Sabah.

In Thailand, only planted forests can be certified because of the logging ban in natural forests. Forest industry enterprise FIO in cooperation with SmartWood Rainforest Alliance is planning to certify all its teak plantations, which would double the certified forest area up to 86,500 hectares. Moreover, potential exists to certify groups of small holdings in Thailand in the range 10,000 to 30,000 hectares. In Vietnam the interest for forest certification is also increasing as a result of the demands in export markets. Eight new FMUs are preparing for certification under donor-funded development projects,

FIGURE 3.7 Current and Potential Natural and Planted Forest Area in the Study Countries



Source: Authors' computation.

which will certify 50,000 hectares of forest plantations and 30,000 hectares of smallholder groups. Finally, in Lao PDR the area of forest plantations is still small and expected to expand only gradually.

The potential to expand voluntary certification of natural forests in Indonesia is debatable and depends on whether the practice of converting natural forests for agricultural and forest plantation development will continue and whether a change in disposition by private or state-owned companies has occurred toward acceptance of forest certification. The theoretical limit is around 35.5 million hectares, which is the forest area managed by members of the APHI. Only a fraction of the assigned concession areas has a voluntary certificate, and merely one quarter has passed the mandatory certification. Nonetheless, the potential for voluntary certification remains modest in Indonesia, because the focus will instead be on demonstrating legal compliance in line with the terms of the VPA. Based upon stakeholder discussions, the author assumed that if 1 in 10 current concessions holders apply for a certificate, the potential share of certified concessions in natural forests will increase slowly from the current 6% to 10%.³⁶ This would increase the certified forest area up to 3.6 million hectares.

In Malaysia, approximately half the natural forests will be certified, mainly as a result of unrealized potential in natural forests managed by the states in Malaysia where increase potential exists, in particular in the States of Sabah and Sarawak and three or four states of Peninsular Malaysia. Because the Malaysian government is allocating budget funding to support forest certification, there is potential to certify an additional 6.9 million hectares of natural production forests, thus increasing the area of certified natural forests by 140%. Forest certification would have the greatest significance in the State of Sarawak, which has 6 million hectares of natural production forests, double the corresponding area in the State of Sabah and Peninsular Malaysia.

The scope for certifying natural forests in the rest of Southeast Asia is much lower. In Thailand the logging ban forbids the commercial use of natural forests, thus eliminating the possibility to trade legal and certified timber from these forests. In Lao PDR, potential exists to enlarge

the certified area of natural forests to 160,000 hectares, but the formal establishment of FMUs with appropriate management plans lags behind and harvesting is illegal in their absence. Forest certification in Lao PDR will hence proceed only if it is supported with international financing or investment by the private sector. Moreover, certificates for SFM cannot be issued on conversion sites that currently produce a large share of timber. Finally, the logging permits issued to the management of natural forests in Vietnam are also very limited, estimated at 129,000 hectares.

The fact that the potential of certifying planted forest is considerably higher in Southeast Asia than for natural forest will imply that additional efforts have to be made to protect natural forests. The latter play a key role in biodiversity conservation, the provision of ecosystem services and the support of livelihoods of local communities and indigenous peoples. Therefore, complementary policy measures have to be put in place to safeguard these crucial environmental outcomes.

3.7 Comparative Analysis of Certification and Verification in the Southeast Asia Region

3.7.1 Legality Verification Standards in Use

Voluntary legality verification assures consumer countries that producers have complied with the relevant national legislation and international legally binding instruments and is, thus, complementary to law enforcement. Traditionally, the role of national law enforcement has been confined to national processes. However, the demands on imported wood from both international markets and end users have created a need to expand legality monitoring systems beyond the national borders. National voluntary legality verification aims to bridge this gap, based on the relevant national and international forestry legislation and regulation. Furthermore, they can strengthen law enforcement, because verification systems are usually additional to the normal operational forest control and are often undertaken by independent agencies. Therefore, voluntary legislative verification schemes

36. Calculated average for a concession area is 85,000 hectares.

TABLE 3.24 Voluntary Legality Verification Systems in Southeast Asia

System	Description	Implemented in Southeast Asia
Legal origin	<ul style="list-style-type: none"> Timber Legality and Traceability Verification (TLTV) promoted by the Timber Trade Action Plan (TTAP) through TFT 	Malaysia
Legal origin → legal compliance	<ul style="list-style-type: none"> TLTV run by SGS* since 2005³⁷ Stepwise approach to VLC: VLO certificate for 2 years → VLC certificate with no time limit 	Vietnam
Legal origin → legal compliance → FSC certification	<ul style="list-style-type: none"> VLO and VLC run by the SmartWood program of the Rainforest Alliance* since 2007 Stepwise approach to FSC certification: VLO-certificate valid for 3 years → VLC for 3 years → application for FSC forest certification Decisions made case by case 	Indonesia, Malaysia and Vietnam
Legality verification system → FSC certification	<ul style="list-style-type: none"> Legality verification system run by Certisource since 2007 Legality verification offered for 2 years when commitment for FSC certification is required 	Indonesia

*Accredited FSC certification body.

Source: Proforest (2011a).

37. Because of advances in forest certification standards to support legal verification and the development of third party verification schemes, SGS is phasing out the provision of timber legality and traceability verification services to new clients. The service will continue with existing clients until their Timber Legality and Traceability Verification (TVLV) certificate expires.

can be seen as complementary to law enforcement and can lend legitimacy and credibility to the forest management system, thus reassuring consumer countries.

A range of organizations provide voluntary legality verification systems, but not all of them offer services in Southeast Asia. Table 3.24 highlights voluntary legality verification systems used in Southeast Asia. The Rainforest Alliance, SGS and SCS are all active in Southeast Asia. However, it is important to note that there is no accreditation for legality verification systems per se (Proforest, 2011a).

Voluntary legality verification schemes are often seen as a first step toward forest certification and are typically designed accordingly, with time-bound requirements. Verification service providers and standards developers often emphasize that legal compliance is the first step toward forest certification. Some schemes have introduced tightening requirements over time to (i) form a logical management improvement path and (ii) facilitate and structure the operator's efforts toward full certification. For instance, the SmartWood program of the Rainforest Alliance first requires the producer to obtain a VLO certificate and then to apply for a VLC certificate after three years. Full FSC certification has to be obtained after another three years. SGS and Certisource, which operated in Vietnam and Indonesia, respectively, have similar requirements.

3.7.2 Assessment of Certification and Verification Standards

Forest Management Certification

In general, three categories of forest management certification standards exist: (i) national FSC- or PEFC-endorsed standards that comply with international performance requirements, (ii) interim FSC standards that are country-specific standards developed by FSC-accredited certification bodies based on their global generic standards that FSC auditors review and approve (FSC is moving toward eliminating interim standards in time) and (iii) national certification standards that are not endorsed by international certification frameworks, such as the standards for natural forest, forest plantation and community forest management of LEI in Indonesia. Of the countries included in this report, Malaysia is the only country with a national PEFC-endorsed forest certification for natural forest and forest plantations. All FSC certifications carried out in the region are made against the generic FSC standard and developed by certification bodies. Indonesia's LEI forest certification scheme is the only example in the region of a national standard that does not have an international endorsement, although FSC and LEI have a memorandum of understanding pursuing closer collaboration. Table 3.25 summarizes forest management standards used in Southeast Asia.

TABLE 3.25 List of Forest Management Certification Standards in Southeast Asia

Country	Forest Management Standard	Owner
<i>PEFC-Endorsed</i>		
Malaysia*	Natural Forests: <ul style="list-style-type: none"> ■ PEFC-MTCS MC&I 2002 Forest Plantations: <ul style="list-style-type: none"> ■ MTCS MC&I forest plantations 	<ul style="list-style-type: none"> ■ MTCC ■ MTCC
<i>FSC-interim</i>		
Malaysia*	Natural Forests: <ul style="list-style-type: none"> ■ FCP Interim Standard For Forest Management Certification in Malaysia under the FSC Version 4-1 (2010) ■ Forest Management Generic Standard State of Sabah, Malaysia (2010) 	<ul style="list-style-type: none"> ■ SCS ■ SGS Qualifor
Indonesia	Natural Forests: <ul style="list-style-type: none"> ■ SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Indonesia (FM32-Indonesia) (2008) ■ Draft Interim standard for Natural Forests and Plantation Forest Management Certification in Indonesia V1.0 (2009) 	<ul style="list-style-type: none"> ■ SmartWood Rainforest Alliance ■ SCS
Thailand	Natural Forests: <ul style="list-style-type: none"> ■ Forest Management Standard for Thailand AD33-02 (2010) ■ Interim Standard for Assessing Forest Management in Thailand (FM-32-Thailand) 	<ul style="list-style-type: none"> ■ SGS Qualifor ■ SmartWood Rainforest Alliance
Lao PDR	Natural Forests: <ul style="list-style-type: none"> ■ Interim Standard for Assessing Forest Management in Laos FM-32 (2008) 	<ul style="list-style-type: none"> ■ SmartWood Rainforest Alliance
Vietnam	Forest Plantations: <ul style="list-style-type: none"> ■ SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Vietnam (Ver. June, 2010) ■ Forest Management Standard for Vietnam ■ Generic Forest Management Standard adapted for Socialist Republic of Vietnam VER 1.0 	<ul style="list-style-type: none"> ■ SmartWood Rainforest Alliance ■ SGS Qualifor ■ GFA Consulting group FSC accredited certification body
<i>National Certification Standards</i>		
Indonesia	Natural Forests: <ul style="list-style-type: none"> ■ LEI Standard 5000-1 System for Sustainable Natural Production Forests Management 	<ul style="list-style-type: none"> ■ LEI
	Community-Based Forests: <ul style="list-style-type: none"> ■ Sustainable Community-Based Forest Management 	<ul style="list-style-type: none"> ■ LEI
	Forest Plantations: <ul style="list-style-type: none"> ■ LEI Standard 5000-2 Sustainable Forest Plantation Management System 	<ul style="list-style-type: none"> ■ LEI

Source: Authors' compilation from <http://www.lei.or.id>; <http://www.scs-certified.com>; <http://www.forestry.sgs.com/forestry-certification.htm>; <http://www.mtcc.com.my>; <http://rainforest-alliance.org/forestry/certification/management>

From 2014 the FSC will have international generic indicators for the new principles and criteria that all certification bodies will use. FSC national standards will be in place in line with the international generic indicators and with the backing of broad stakeholder processes in 2014 Malaysia, Indonesia, Vietnam and China (potentially as part of a Greater Mekong Regional Standard).

Voluntary Chain of Custody Certification

CoC certificates not only complement but also supplement forest management certificates, because they

consider standards and criteria across the entire value chain. CoC certificates (i) control the flow of wood through the entire value chain and (ii) exclude any controversial or otherwise unacceptable wood from the chain. The scope of CoC certificates is thus much wider than for forest management certificates, as a claim on legal origin or legal compliance can be issued only if no wood originating from unacceptable sources is mixed in with the legally sourced wood within a product or a consignment. Table 3.26 summarizes the CoC certification standards in Southeast Asia.

TABLE 3.26 List of CoC Certification Standards in Southeast Asia

Country	Chain of Custody Standard	Owner
Malaysia Indonesia	PEFC Council CoC of Forest Based Products – Requirements (2005); will be transferred by 26 November 2011 to PEFC International Standard (2002:2010) – CoC of Forest-Based Products Requirements	PEFC
Indonesia	LEI CoC certification system	LEI
Malaysia Indonesia Lao PDR Vietnam Thailand	FSC CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004) Multisite CoC certification (FSC STD 40-003 V1-0) FSC standard for company evaluation of FSC controlled wood (FSC STD 40-005) FSC standard for forest management enterprises supplying non-FSC certified controlled wood (FSC STD 300-10) FSC standard on sourcing reclaimed material (FSC STD 40-007)	FSC

Source: Authors' compilation from <http://www.pefc.org/index.php/standards/chain-of-custody>; <http://www.lei.or.id>; and <http://www.fsc.org>.

The FSC introduced the concept of controlled wood for non-certified fiber originating from recognized sources. The Controlled Wood Standard requires a risk assessment and does not allow illegally harvested wood, violation of traditional and civil rights, harvesting in HCVPs, conversion of natural forests and harvesting of genetically modified trees.³⁸

Traditionally, CoC standards included requirements for known origin of sourcing and adequate control and recording. However, this was no longer considered adequate, because the workers' health and safety, the protection of endangered species and the compliance of subcontractors had been neglected. Consequently, both PEFC and FSC are constantly revising their CoC standards and post these revisions on their respective websites; requirements are as detailed in Table 3.27. For instance, PEFC-certified products cannot originate from manufacturing or other business activity that violates the fundamental rights of workers' health and safety³⁹ or endangers CITES species. In addition, FSC has included the concept of controlled wood for non-certified fiber originating from recognized sources. This standard does not set specific management system requirements like a forest management certificate, but requires evidence of timber legality and sustainability.

38. FSC controlled wood: <http://www.fsc.org/controlled-wood.40.htm>

39. Based on requirements of ILO Declaration on Fundamental Principles and Rights at Work (1998), a PEFC CoC-certified organization must demonstrate (i) workers are not prevented from associating freely, choosing their representatives, and bargaining collectively with their employer; (ii) no forced labour is used; (iii) no workers are used who are under the minimum legal age, the age of 15, or the compulsory school attendance age, whichever is higher; (iv) workers are not denied equal employment opportunities and treatment; and (v) working conditions do not endanger safety or health.

PEFC and FSC CoC standards also require a risk assessment of suppliers with a particular focus on "high-risk" sourcing, as defined in Table 3.28. The objective of these assessments is to minimize the risk for supplying wood from "high-risk" sources, that is, from regions or countries where the likelihood of illegal operations is high. These illegal operations include (i) violations of traditional or civil rights or international sanctions, (ii) use of genetically modified wood, and (iii) sourcing from natural forest conversion sites. For instance, PEFC requires a second or third party verification program for "high-risk" sources, including identification of the whole supply chain, onsite inspection, and corrective and preventive measures. Similarly, FSC-certified companies must provide evidence that wood from "high-risk" sources complies with the requirements for FSC controlled wood. Their risk assessment analysis includes (i) the perceived level of corruption; (ii) the transparency of public information on illegal harvesting; and (iii) the quality of key data, documents and reports. These resulting rankings facilitate supplier selection and provide assurance of legal compliance. These are summarized in Table 3.28.

3.7.3 Assessment of Credible Certification and Verification Schemes

Forest and Forest Industries Managers

Many foresters and forest industries managers in Southeast Asia have been reluctant to embrace certification because of concerns of restrictions in forest operations, particularly on harvesting, complexity and costs for being certified (both for forest management and CoC), reductions in annual allowable cuts,

TABLE 3.27 Complementing Requirements in CoC Standards

Issue	Standard		
	PEFC CoC Standard	FSC CoC Standard	FSC Controlled Wood
Management system requirements			(Yes)*
■ Policy	Yes	Yes	
■ Documented procedures	Yes	Yes	
■ Definition of responsibilities	Yes	Yes	
■ Competence resources (human and technical)	Yes	Yes	
■ Recordkeeping	Yes	Yes	
■ Inspection, auditing	Yes	Yes	
■ Verification of subcontractor’s compliance	Yes	Yes	
■ Complaints procedures		Yes	
Risk assessment	Yes		Yes
License control for CITES species	Yes		Yes
Workers’ health and safety	Yes	Yes	
Compliance of subcontractors	Yes	Yes	Yes

* The FSC Controlled Wood Standard does not set specific management system requirements, but requires evidence of timber legality and sustainability.

Source: PEFC ST 2002:2010 CoC of Forest Based Products – Requirements (2010/2011); FSC STD 40-004 V2-1 EN FSC Standard for CoC Certification (October 2011); FSC STD 40-004 V2-0 FSC Standard for CoC Certification (2008); FSC STD 40-005 2-1 Company Evaluation of FSC Controlled Wood (2006).

conversion of natural forests to plantations and lack of price premium for certified forest products. Companies that have had forests and forest products certified have overwhelmingly stated that building the brand, meeting increased market demand for certified wood products and giving a competitive advantage over competitors as key drivers. These are summarized in Table 3.29.

The measures promoting use of credible certification and verification schemes may be multifaceted. In some instances the measures are stimulated by international regulations, donors (multilateral and bilateral), funding institutions, key importing countries, major buyers,

NGOs, trade associations and national governments. However, if forest and wood industries managers and forest concessionaires are to adopt these tools, they must perceive and achieve benefits. Uptake has been slow, but momentum is now gathering to protect market share, access significant European and North American markets and demonstrate corporate commitment to sustainability and legality.

Major Buyers and Key Importing Countries

The EUTR prohibits illegally harvested timber from being placed on the EU market for the first time and requires traders to exercise “due diligence” and keep

TABLE 3.28 Criteria for “High-Risk” Sourcing in PEFC and FSC Schemes

PEFC	FSC
<ul style="list-style-type: none"> ■ License control for CITES species ■ Wood harvested in countries that are covered by the United Nations or applicable European Union or national government sanctions relating to export and import of forest-based products 	<ul style="list-style-type: none"> ■ Illegally harvested wood ■ Wood harvested in violation of traditional or civil rights ■ Wood harvested from forest in which high conservation values are threatened by management activities
<ul style="list-style-type: none"> ■ Presence of genetically modified organisms 	<ul style="list-style-type: none"> ■ Wood harvested from forests in which genetically modified trees are planted
<ul style="list-style-type: none"> ■ Wood harvest from (primary) forests that are being converted to other vegetation type, including forest plantations 	<ul style="list-style-type: none"> ■ Wood harvested from forests or other wooded ecosystems that are being converted to plantations or non-forest uses.

Source: Authors’ compilation.

TABLE 3.29 Factors Affecting Low Uptake of Certification in Southeast Asia

Concern	Reason	Evidence
Reduced impact logging (RIL) translates into reduced income	RIL, which is mandatory for forest certification, is considered more expensive.	RIL requires more labor-intensive or even more expensive (helicopter logging) alternatives. Worker resist RIL, because it requires adopting practices different from those that they are used to and they may consider unnecessary.
High initial costs, so larger companies benefit more	Cost of consultants and implementation of certification varies, but generally requires high fixed costs, so larger concessions benefit from economies of scale.	A GFTN and WWF study (2007) concluded that the average initial one-off implementation cost for FSC or MTCC Forest Management certification cost in Malaysia of up to US\$28/ha; cost varies on the size of the forest area.
Annual allowable cut reductions	Companies when certified may need to set aside additional areas as HCVF, protected species, buffer zones, water courses and reduced harvest yields	A Malaysian case study found implementation of SFM could result in an average reduction of 33% of existing annual allowable cut levels.
Unclear financial benefits	Price premiums remain inconclusive. When there is a price premium, it may take some years for companies to break even on the certification investment.	A study of 20 Malaysian timber companies revealed that only half respondents certification received a price premium. FAO reported that certification provides market access in which consumers prefer green products, but not necessarily at a price premium.
CoC complex and expensive	Implementation of CoC is easier said than done. Due to globalization, forest products are often exported to countries for value added processing (e.g., to China or Vietnam) and may be re-exported to other countries for further processing. CoC documentation is very complex (and expensive) but could mask mixing of legal and illegal forest products from sustainable and unsustainable sources.	In Indonesia, concessions are legally required to produce annual work plans that include annual visits to logging blocks. Large concessionaires claim this is labor intensive and expensive. According to new Forest Footprint Disclosure, new tracking technologies for timber remain prohibitively expensive.

Source: Cheng and Le Clue (2010).

records. If wood-based products are covered by valid FLEGT or CITES licenses, they are considered to comply with the requirements of EUTR, though this is not the case for certified timber products. In contrast to EU FLEGT licensing, the *Lacey Act* of the United States does not establish standards or require verification by the government or a third party.

Green public procurement policies are emerging in countries around the world and differ markedly in their legality and sustainability requirements. The Olympic Delivery Authority and similar policies in other countries of Europe increasingly specify that wood products must be FSC or PEFC certified.

Green building initiatives like the green building codes in the European Union, North America and Asia in recent years favor the use of wood products in construction. Most of these schemes, such as Green Globes (United States and Canada), CASBEE (Japan)

and BREEAM (United Kingdom), recognize multiple forest certification standards, including FSC- and PEFC-endorsed schemes; however, LEED (United States) and Green Building Council of Australia have FSC preference.

At this stage, certification has not had a major impact on imports among Southeast Asian countries, but wood-based products supply- and demand-driven solutions to ensuring legality and sustainability will eventually affect these markets, too. The green building policies are beginning to take effect. Asia is expected to be the fastest growing market, with the number of firms dedicated to green building expected to double from 36% to 73% by 2015 (Cheng and Le Clue, 2010).

Non-Governmental Organizations (NGOs)

NGOs are the most active and powerful stakeholder groups representing local population and civil society's interests regarding forestry. In contrast to other

stakeholder groups, environmental NGOs set a broad range of requirements for sustainable wood sourcing, which often go beyond the national legislation. They offer schemes of different scope, which are often part of a broader, phased approach toward improved forest management. For example, WWF considers FSC the most credible certification system to ensure environmentally responsible, socially beneficial and economically viable management of forests.⁴⁰

In addition to the broad scope, the close relations between NGOs and FSC can be seen in both the support and constructive criticism given. FSC certification is promoted by campaigns and marketing strategies that have included financial assistance for certification processes. This NGO support strengthens the position of FSC in the markets, in particular in the management of natural forests, because companies view FSC certification as an effective risk mitigation measure. However, despite being the preferred certification, FSC has faced criticism from NGOs that has led to suspensions or additional audits for some forest management companies. A good example is the suspension of APRIL's FSC controlled wood certification in 2010.⁴¹ Most of this criticism is aimed at companies certified against interim FSC standards. In general, NGOs appreciate these locally adjusted national standards, which may help certification gain traction in progressive approaches. However, criticism is often leveled at the power of certification bodies to make decisions on certification as part of their business.

Nonetheless, the international markets also recognized national certification if the underlying scheme is strong, as was the case for the PEFC-endorsed MTCS scheme. For instance, in Malaysia buyers did not prefer any specific certification scheme. The large export markets to other Asian and Far East countries accepted PEFC-MTCS certified timber, since they had more neutral views about the different schemes. PEFC-endorsed certification is recognized especially in EU countries however, it has not been as accepted

as the FSC scheme, because it has not yet gained the extensive support of international environmental organizations.

Timber Trading Organizations

Timber trading associations play an important role in defining general standards for certain market areas and enhancing further development of selected procedures and requirements. To analyze the preferences and procedures required by the associations both in the European Union and United States, two large-scale associations were analyzed – the Timber Trade Federation (TTF) from the United Kingdom, selected to represent the markets in the European Union, and the National Wood Flooring Association (NWFA) to represent the US markets.

Timber Trade Federation (TTF)

The TTFs procurement policies are based on recommendations made by the UK government-contracted CPET. Among the EU countries, TTF procurement policies and those of the UK government are considered to be among the most comprehensive. Both policies are based on recommendation made by CPET, which is operated by an independent consulting company, Proforest, and was set up by the Department for Environment, Food and Rural Affairs. CPET's recommendation on the credibility of different schemes is often referred in other countries' policies.

CPET divides the legality verification schemes into two categories, A and B. Category A consists of recognized certification schemes considered adequate to prove the origin. At the moment, CPET recognizes only FSC and PEFC schemes. However, FLEGT licenses will be considered to have equal cogency with the approved certification schemes, once they start to be used. Category B consists of other approved sources of evidence demonstrating that the timber supplied is at a minimum from legal and sustainable sources. The majority of these sources are to be considered on a case-by-case basis. The category includes a variety of international third party verification schemes. Most of these schemes do not include commitments to CoC systems, which reduce their acceptability as a proof of legality. However, if an approved CoC is in place within the chain, they can be used as a proof of legality.

40. WWF preference for FSC certification: http://wwf.panda.org/what_we_do/footprint/forestry/certification/

41. <http://ran.org/content/indonesian-paper-giant-april%E2%80%99s-certification-status-suspended>

TTF member companies are obliged to commit to TTF's code of responsible purchasing of timber and timber products. The code includes requirements toward promotion of sustainable wood production and forest certification, refusal of illegally produced wood and commitment to continuously raise the proportion of timber and timber products originating from legal and sustainably managed forests. The member companies are required to be transparent and allow appointed auditors to assess and verify the company's progress and compliance against the policy. However, the code of conduct does not set any clear definitions or time lines for the progress required.

As part of TTF's code of conduct, member companies are required to implement a due diligence process to prove the origin of traded timber and reduce the risk for illegal wood entering the supply chain. The companies are allowed to have their own due diligence system or to use TTF's Responsible Purchasing Policy as their due diligence tool. This policy is mainly targeted at uncertified wood and considered complementary to certification. On cogency of different certification schemes, the code of conduct refers to CPET's recommendations. The procedure includes an independent auditor to confirm compliance with the due diligence commitments. After successful auditing, the company receives a certificate issued by TTF as proof of compliance to the TTF code of practice.

National Wood Flooring Association (NWFA)

Legislation and public opinion are clearly reflected in the wood procurement policies and preferences in the United States, for example, in the Responsible Procurement Plan (RPP) of the NWFA. In contrast to companies and associations operating in the European Union, guidelines and documents are more developed and detailed in the United States. A good example is the NWFA's RPP in close cooperation with SCS, an FSC-accredited certification body. Similar to the development programs in the European Union, the RPP is a stepwise approach for hardwood manufacturers and distributors to increase the quality of their management.

NWFA and SCS have established a well-documented procedure for producers entering into the RPP. First, the company submits its application under SCS guidance.

Second, its procurement policy and document procedures are assessed and adjusted to conform to the RPP Standard. Third, an onsite audit is carried out, in which the auditor reviews the policies, procedures and records and tours the facilities where wood products are handled. The audit includes interviews with staff to assess training levels and on-the-ground application of written procedures. After the site visit, the auditor prepares a detailed report. The report is reviewed by SCS, which gives a certification recommendation to the NWFA RPP Board. After receiving a certificate, the company will be listed on the NWFA and SCS websites and undergo annual surveillance assessments.

Each NWFA member company must also fulfill time-bound requirements for moving through the RPP tiers to the most demanding tier, as detailed in Table 3.30. The RPP scheme is built on three FSC-based certification and verification schemes: (i) VLO verification, (ii) FSC controlled wood certification and (iii) FSC forest management and CoC certification. The program does not recognize PEFC certification as an approved verification of wood origin. However, NWFA recognizes the difficulties of small forestry companies in achieving FSC certification. As a consequence, it has developed a program for assisting small landowners to overcome barriers to FSC forest management certification through group certification.

End Users

The increased public awareness of environmental issues in both the United States and European Union can be seen in end-user company wood procurement policies. In general, the demand in the EU and US markets requires major operators to show their responsibility in securing the legality of wood origin as well as the sustainability of production. Therefore, most major companies have developed their own wood procurement policies, usually built on stepwise improvements and strict minimum requirements for their timber suppliers. The preferences for verification schemes are in line with the societies' preferences and awareness. However, the difficulties in meeting these requirements are widely known, especially regarding tropical countries and countries with weak governance and poor law enforcement capabilities. Despite this, the acceptability and preferences toward the various schemes are clearly visible in their procurement policies.

TABLE 3.30 Steps in National Wood Flooring Association, Responsible Procurement Program

Step	Requirements	Timeline
Tier 1: FSC VLO verification	<ul style="list-style-type: none"> ■ Create a company policy in line with NWFA RPP ■ Engage with NWFA approved legality verifier (high-risk countries) ■ Participate in the NWFA CoC system as administered by SCS ■ Benchmark all existing sources into verified and unknown origins as proportion of total sales ■ Once verified, authorized to use a NWFA transitional verified legal import label on marketing. The transitional label is intended to be used only as an approval of development toward FSC certificated products. 	0–3 years
Tier 2: FSC Controlled Wood Certification	<ul style="list-style-type: none"> ■ Meet FSC Controlled Wood Standard for all products after 2 years in tier 2 or 5 years in the program ■ Achieve a FSC CoC certificate ■ All products from high-risk countries verified against VLO program by a NWFA approved auditor ■ Establish a plan for FSC targets and actively sell FSC certified products 	3 + years
Tier 3: FSC Forest Management and CoC Certification	<ul style="list-style-type: none"> ■ Meet all tier 1 and 2 requirements for 3 or more consecutive years ■ Achieve a minimum level of 50% of FSC forest management certified products ■ All non-FSC forest management products produced under FSC Controlled Wood Standard 	No strict timeline

Source: Authors’ compilation.

The main international wood consumer companies refer to governments’ procurement policies and public opinion. As a default, the main market operators within the European Union prefer and refer to the international certification schemes, which will allow them to adapt to the requirements set in the VPA agreements. In general, the corporate social responsibility (CSR) policies of major companies address the sustainability of the production, going beyond legality verification. However, like the timber trade associations, the leading companies base the minimum required level of verification on the legislation in force.

To demonstrate trends in Western markets, IKEA and DLH are studied. IKEA, a Swedish-owned company, consumes about 7 million m³ of wood products for its furniture manufacture annually. DLH, a Danish company, trades about 1.5 million m³ of sustainable timber and wood products on international markets annually.

IKEA

IKEA, one of the world’s largest low-cost furniture retailers, with 300 stores in 35 countries and annual revenues in excess of US\$32 billion, sources most of its wood products from Poland, Russia, China, Romania and Sweden. IKEA builds its procurement policy on the FSC basic wood origin standards that restrict wood originating from (i) illegal harvesting operations,

(ii) forestry operations causing social conflicts, (iii) uncertified intact natural forests or other areas classified as HCVF, (iv) areas being converted from tropical and sub-tropical vegetation zones for plantations, and (v) officially recognized and geographically identified commercial genetically modified tree plantations.

IKEA divides the wood origins into low and high risk and generally requires FSC certification for high-risk sources. IKEA has developed a four-step development program for its suppliers to promote SFM. For low-risk areas, an FSC certificate is required for the final and most demanding step. However, for areas considered to be high risk, an FSC-based certification and verification are required as a first step. For some product categories, PEFC certification is accepted on low-risk areas. However, IKEA clearly prefers FSC over other certification and verification schemes and does not accept any other national or international verification schemes as a default. However, the general framework of requirements remains unclear, with case-wise exceptions, reflecting the developing and changing field of conformity with legality and sustainability standards. The company has a dedicated, internal audit team for suppliers that have not yet obtained certification. IKEA is a member of the GFTN and works with the Rainforest Alliance. FSC certified wood accounted for approximately 25% of IKEA’s supply in 2011, which it plans to increase to 35% in 2012.

DLH International

DLH has developed a clear and well-documented wood procurement policy that requires third party verification for high-risk sources. The policy is based on a supplier development scheme similar to that of IKEA. For suppliers operating in high-risk areas, DLH has created its own Good Supplier Program (GSP) risk assessment system that is a prerequisite that their suppliers must meet. DLH prefers FSC certification and verification schemes but also recognizes other schemes, such as PEFC, Canadian Standards Association (CSA), Sustainable Forest Initiative (SFI), MTCS, TLTV and Origine et Légalité du Bois (OLB). The DLH objective was to cover 100% of its traded tropical wood with GSP and know the origin of 95% of all traded timber by the end of 2011. It failed to meet these targets, narrowly achieving 99% and 92%, respectively.

3.7.4 Certification and Verification: Proof of Compliance with National Laws and Regulations

By providing a systematic approach to managing both natural and planted forest resources according to established legality and sustainability criteria, standards and indicators, verification and certification provide useful benchmarks to investors and users on the adoption of best practices and the legality of forest product sources. Verification and certification provide assurance that the enterprise has committed to, and applied, the legality and sustainability standards.

Compatibility of Legality Verification and Voluntary Certification

It is important to keep in mind that evidence on legal compliance provided by the different schemes varies with the scope of implementation and verification procedures used. Voluntary and mandatory legality verification and certification schemes share some similarities (e.g., in third party verification procedures and similar methods to determine compliance). However, differences can be large, especially in regard to the scope of implementation. VLCs, VLOs and voluntary forest certification are all limited in their scope to forestry operations, whereas TLASs, voluntary CoC certificates or FLEGT licenses usually verify legal compliance along the entire value chain. In addition, these

differences in scope have significant implications for the verification procedures, because each stage is often the responsibility of a different entity. This affects the overall credibility of the scheme.

The subsequent two sections assess these differences in a systematic way by comparing the scope of each scheme with the ASEAN Criteria for Legality of Timber and by analyzing the differences in the verification procedures used.

Legal Requirements of the Different Schemes

The ASEAN Criteria for Legality of Timber provide a good reference for legal timber. Several related standards address tenure and harvesting rights, approved management practices and payment of statutory fees, yet no universally agreed definition of timber legality exists. As a consequence, the ASEAN working group on forests adopted the ASEAN Criteria and Indicators for Legality of Timber in 2008 as a regional reference framework for legality of timber in ASEAN Member States. Six criteria and 14 indicators specify the qualifications for legal timber (Hinrichs, 2009). These include (i) the legal right to operate and harvest timber at the designated forest site, (ii) approved authorization for the harvesting operations based on an approved cut, (iii) compliance with CITES and relevant environmental laws and regulations, (iv) compliance with social laws and regulations, (v) the payment of statutory charges, and (vi) the implementation of a traceability system that allows for tracking of all logs from the forest gate to the relevant harvesting sites.

The ASEAN Criteria are thus used as a reference base when comparing the performance requirements for legal and certified timber. In order to make a verified conclusion on the role of voluntary certification (e.g., in proving legal compliance for FLEGT licenses), it is important to assess in detail how legality is defined in the certification standard, in other scheme requirements and in the legality standard under a specific FLEGT VPA. Conformity to the forest management standards for voluntary certification generally ensures legal compliance in forest management planning and forestry operations. In performance requirements, forest certification standards and national legality verification schemes are largely compatible. However,

certification standards may contain a narrower perception of relevant legislation than the legality standard, though it may also be the other way around. Annex 3 describes the compatibility of (i) the Indonesian and Malaysian national timber legality standards (SVLK and TLAS), (ii) the voluntary legality standards (VLOs and VLCs), (iii) the Malaysian PEFC-endorsed MTCS, (iv) the Indonesian LEI standard, and (v) interim FSC standard with ASEAN criteria for timber legality. Table 3.31 presents a summary of the conclusions.

All standards include requirements for established tenure and use rights, but not necessarily for compliance with environmental requirements (Table 3.31). The different standards are very similar in their requirements for tenure and use rights. For instance, each standard requires a legal license to operate, but apart from the SmartWood Rainforest Alliance VLO and VLC standards, they do not specifically require monitoring the legality of the licensing process. Moreover, all standards rely on approved management plans, when looking for evidence of authorized harvesting. Greater differences exist with regard to the environmental requirements. A case in point is the VLO standard, which does not address environmental issues. In contrast, forest certification standards require adherence to environmental legislation and good environmental performance.

Each standard requires a different level of compliance with social legislation, which covers the rights of three groups: local communities, indigenous people and workers. The standards emphasize these three groups to a varying degree. For example, the national timber legality standards in Indonesia and Malaysia would require strengthening of these rights. Reasons for this may be the lack of legislation protecting social rights, or instead, a prevailing perception that these regulations are not relevant to forest management operations. Among the assessed certification standards, interim FSC standards have the strongest social requirements that may exceed the national legislation. The Malaysian PEFC standard also requires compliance with laws and lists the relevant legislation. Likewise, the LEI standard has general requirements on the protection of community and worker’s rights, but puts less emphasis on the special rights of indigenous people. These are also addressed to a limited extent in the Indonesian legislation.

Similarly, each standard requires the payment of different taxes and statutory fees, yet all request evidence of reliable traceability. The payment of taxes and statutory fees is a core element in legal compliance and establishes the basis for benefit sharing in forestry. The two national legality standards as well as VLOs and VLCs require payment of fees related to the concession area and harvesting, but because they do not cover post-harvesting issues, they do not address taxes and fees on transportation or processing. In this respect, these

TABLE 3.31 Summary on the Compatibility of Legality Verification and Certification Standards with ASEAN Criteria for Legal Timber

Standard	ASEAN Legality Criteria					
	1. Tenure	2. Use right	3. Env laws	4. Soc laws	5. Fees	6. CoC
National Legality Standards						
Indonesia legality SVLK	Yes	Yes	Yes	Partly	Partly	Yes
Malaysia legality TLAS	Yes	Yes	Yes	Partly	Partly	Yes
Voluntary Legality Standards						
SmartWood Rainforest Alliance VLO Malaysia	Yes	Yes	–	–	Partly	Yes
SmartWood Rainforest Alliance VLC Malaysia	Yes	Yes	Partly	Partly	Partly	Yes
Voluntary Forest Certification Standards						
Malaysia PEFC MC&I	Yes	Yes	Yes	Yes	Yes	Yes
Indonesia LEI 5001	Yes	Yes	Yes	Partly	–	Yes
FSC Interim SGS Qualifor Malaysia	Yes	Yes	Yes	Yes	Yes	Yes

Source: Authors’ compilation, March 2012.

schemes cannot provide full evidence of legal compliance of a forest product at the point of export, as is, for instance, required for an FLEGT license. Among the certification standards, LEI does not address the issue, although it does have a general requirement for payment of all fees. The FSC standard focuses more exclusively on harvesting-related fees. Despite these differences, all assessed standards require reliable traceability up to the forest gate. Moreover, each forest certification scheme includes specific CoC standards that cover the additional stages of transport, processing and sales.

The review indicates that the forest certification standards address the legality requirements quite well, but the differences in scope are problematic. Voluntary forest certification and voluntary legality verification schemes only address forest management activities and CoC up to the forest gate (i.e., the point at which the forest management operations relinquishes legal control of harvested products to another party). Therefore, they have very limited provisions for other aspects of timber procurement and processing, which significantly limits their potential to provide evidence of legality in the timber product trade. In contrast, the scope of CoC certifications is much wider, because FSC and PEFC cover specific product lines across the whole wood-processing value chain. However, they do not provide evidence for overall legal compliance, as is often the case in national TLASs. The latter require legal compliance for the entire value chain, drawing on traditional forest legislation and social and environmental legislation. This is usually the case for legality standards, which are developed in a stakeholder process under FLEGT VPA negotiations.

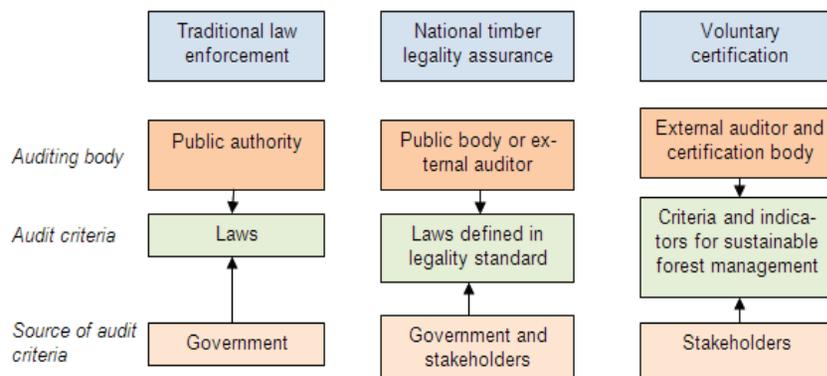
Differences in Verification Procedures

Verification systems used in assessing legal compliance or conformity to certification requirements differ considerably to those used by traditional law enforcement and national TLAS, as illustrated in Figure 3.8. Traditional law enforcement is the responsibility of public authorities, whereas this is not the case for voluntary certification. In fact, independent certification bodies, which are often private companies, make the audits and issue the certificates. Nevertheless, it is possible that authorities outsource law enforcement to private bodies. For instance, forest authorities in Indonesia have outsourced the VLC in some timber trade-related activities to private verification bodies that operate under the accreditation of government.

In contrast to traditional law enforcement or national TLAS, voluntary certification schemes also set the requirements for the certification/verification body's competence. Voluntary certification schemes often refer to FSC, PEFC and/or International Organization for Standardization (ISO) accreditation requirements for the competence of the certification or verification body. For instance, certification bodies doing FSC certification have accreditation from the Accreditation Services International GmbH (ASI) Accreditation Program. Those doing PEFC or ISO certification must have accreditation from official national accreditation bodies that are members of the International Accreditation Forum. No such requirements exist for traditional law enforcement or national TLAS unless they are endorsed by FSC or PEFC.

The focus of verification is also different in legality verification and certification, which can make a difference in

FIGURE 3.8 Types of Verification Systems in Forest Management



Source: Authors' compilation.

countries with a weak regulatory framework. Voluntary forest certification standards typically include requirements dictating specific performance targets for forestry operations. In addition, the standards require that certificate holders have an adequate management system in place that can ensure systematic compliance throughout the organization and over time. In contrast, legislation usually sets the requirements for legality verification that tend to focus on specific operations in the forest and supply chain. Legality standards are also limited to the regulatory framework, whereas voluntary standards usually have certain requirements that go beyond the regulations. In countries where legislation is well-defined and the enforcement is on a high level, voluntary standards may not add very much. However, they make a considerable difference in countries with a weak regulatory framework, as long as third party verification is done by impartial, internationally recognized and accredited verification bodies.

Verification has not met its potential fully, because protracted negotiations have not always been able to define unambiguous legal standards and indicators given that the legal and regulatory frameworks governing the forest sector in the Southeast Asian countries have been complex, unclear and subject to dispute. The legal and regulatory frameworks span forest management, forest industries wood processing and export licensing. In addition, they have links to food security, poverty alleviation, sustainable livelihoods, natural resources management and climate change. In the past, there has been a tendency to take the narrow forestry focus rather than the more integrated, intersectoral approach.

Verification, Certification and Forest Governance

Voluntary certification schemes have received considerable public sector support in the form of direct and indirect subsidies through public procurement policies. In some instances, governments have actively promoted the development of national certification schemes (MTCS in Malaysia and LEI in Indonesia). This has blurred the distinction between private sector and government-led approaches. In fact, the relationship between voluntary approaches and forest sector governance is complex. Government failures relating to property rights, market conditions, investment climate, stakeholder involvement, law enforcement, cronyism and corruption can undermine the potential benefits of voluntary certification schemes.

Certification benefits from better forest governance and can strengthen compliance at the FMU level. However, it cannot address broader institutional and governance failure. Better law enforcement cannot be expected to be achieved through voluntary certification (European Tropical Forest Research Network [ETFRN], 2012).

Because of unacceptable levels of deforestation, forest degradation and related illegal logging and unsustainable forest management, a stronger focus has been placed on improving forest governance in recent years. The case study countries already find it difficult to enforce existing laws and regulations. The impact of recent international and national regulatory approaches will thus depend heavily on the capacity and political willingness of governments to enforce them and includes:

- Mandatory public procurement policies for wood and wood products that recognize verification and certification (e.g., European and North American countries, Japan)
- CITES to regulate international trade in endangered tree species
- Prohibitions on export or import of particular species, sizes or illegal logs
- Legally binding trade agreements specifying wood legality between exporters and importers (EU FLEGT VPA and EUTR, Australian *Illegal Logging Prohibition Bill*, US *Lacey Act*)
- Mandatory due diligence measures (timber trade organizations, green building schemes, signatories to the Equator Principles, development banks)

The European Union (EUTR) and United States (*Lacey Act*) promote such regulatory approaches aimed to create the governance structures that reinforce capacity for law enforcement and oblige companies to respect the law, prohibit illegal logging and minimize the risk for involvement in associated illegal forest products trade. Figure 3.9 outlines a representation of the relationships between voluntary and regulatory approaches to legal and sustainable forest products. Public procurement policies recognize both legality and sustainability.

The regulatory approaches have focused on legality that is based upon the country's own legal framework standard for legal harvesting and trade. The sustainability

FIGURE 3.9 Voluntary and Regulatory Approaches to Legality and Sustainability

Sustainability	
Voluntary	Regulatory
Forest certification by FSC, PEFC and others	CITIES Public procurement policies
VLO VLC	Public procurement policies National export and import prohibition EU FLEGT VPAs EUTR US <i>Lacey Act</i> Australian <i>Illegal Logging Prohibition Bill</i>
Legality	

Source: ETFRN News 53. April 2012.

standard is not used because the debate on an internationally agreed upon definition of SFM is unresolved, and country-wide sustainability is not achieved without addressing underlying governance issues. Additionally, sustainability standards are often perceived by developing countries to be imposed by developed nations, and legality standards reinforce national sovereignty over forest resources and forest products trade.

The degree to which legality and sustainability policies, standards, practices and procedures overlap depends upon the degree to which each country's legal framework incorporates sustainability criteria. It would be advantageous if mandatory legal frameworks specified both legality and sustainability standards, so the focus could be on enforcement. Within the European Union, little evidence exists that the market will permanently accept legality as sufficient proof of sustainability. In addition to legality standards, public procurement policies, large retailers, timber trade organizations, green building schemes and financial institution signatories to the Equator Principles, require certification for environmental, social and governance (ESG) and CSR to meet expectations of shareholders and customers. Proof of both legality and sustainability are hence required.

Both voluntary and regulatory approaches depend upon the influence of markets to promote better forest management. They use clearly defined standards to assess compliance, multi-stakeholder dialogue to ensure transparency

and independent third party monitoring to ensure credibility. However, the two approaches have their differences:

- Regulatory approaches cover the entire forest sector in a country, whereas voluntary initiatives focus on certified enterprise or forest management unit or possibly a product line (it is much more difficult to implement and enforce a sector-wide performance than a localized one).
- Companies use voluntary standards to improve their market conditions and meet CSR or ESG policies, whereas governments may use regulations to create fair conditions and improve practices within the sector as a whole, across the country.
- Voluntary initiatives depend upon the goodwill of the actors and are binding on those within the scheme, whereas regulatory measures are compulsory and the laws apply to all actors.

The complementarities among governance, law enforcement, certification and legality verification schemes can be realized only if promoted aggressively, with attempts made to better define and systematically harmonize the various standards. Key stakeholders need to ensure that the complementarities between voluntary certification and legality verification schemes are built upon. Efforts should focus on (i) increasing areas under certification and legality verification and (ii) supporting countries in Southeast Asia to recognize voluntary certification as a source of legal evidence and build national TLASs.

Synergies among FLEGT Action Plan, EUTR and Voluntary Schemes

FLEGT VPAs and voluntary certification processes differ in standards, scope, approach and procedures, but they are potentially mutually supportive.⁴² VPAs can benefit from verification traceability mechanisms and auditing processes at the FMU level. Voluntary schemes can be a testing ground for case-based and practical solutions for understanding application of national laws and regulations, multi-stakeholder processes that can feed into VPA processes and use of tracking and tracing procedures that can feed into traceability systems under VPAs. Voluntary approaches can also pioneer best practices approaches in countries that are not ready for nation-wide regulatory approaches. In these circumstances, countries can prepare for new export market challenges and opportunities (e.g., EUTR and US *Lacey Act*).

In turn, voluntary certification may benefit from VPAs, particularly in greater clarity on legality definitions, standards, indicators and verification procedures; multi-stakeholder processes in the sector; and enhanced transparency and public disclosure. The improved governance and law enforcement should reduce the risk for stakeholder conflicts and help streamline the process toward achieving sustainability certification. In these ways, good forest governance may be viewed as a prerequisite for certification. The two approaches are mutually reinforcing. Voluntary certification deepens management commitments to social, environmental and economic sustainability at the enterprise level, and VPAs strengthen legality requirements and good governance to the forest sector as a whole (ETFRN, 2012).

It is important to avoid duplication of efforts (and costs to enterprises) between FLEGT VPAs and voluntary schemes and to avoid encouraging companies to opt for the lower legality verification rather than higher sustainability certification. The EUTR has allowed for use of voluntary schemes and to create practical synergies between certification and FLEGT. Voluntary schemes can be linked to the TLAS developed under the VPA. In fact, after rigorous evaluation, if the voluntary scheme has

equivalence to FLEGT legality controls, the parties may agree to accept the voluntary scheme as meeting all or part of their requirements for issuing a FLEGT license.

If such a combination of legality and sustainability controls were to develop, the FLEGT VPA will improve transparency and strengthen forest governance and could become another driver for the acceptance of voluntary schemes in those countries. FSC has revised their Global Principles and Criteria and prepared a new Q&A from FSC International to explain how FSC is being used with EUTR.⁴³ Similarly, PEFC is reviewing how to improve synergies between voluntary schemes and FLEGT VPAs. FSC is likely to have issues with two of their specifications related to genetically modified trees and conversion from natural forests that are not likely to be covered under FLEGT.

The EUTR prohibits placing illegal timber and timber products on the EU market. Companies within the European Union are to exercise due diligence to minimize the risk for trade in illegally harvested forest products. The regulation recognizes forest products with an FLEGT license and CITES certificate as meeting its requirements. Voluntary forest certification and legality verification are not considered equivalent proof of legality but may be used to reduce risk and go some way to demonstrating due diligence. If certified forest products were to be regarded as low risk under the EUTR, this would provide an additional impetus to global certification efforts.

Other International Drivers

There is a strong call for sustainability and legality in forests and forestry from the UN Conventions (UNFCCC, United Nations Convention to Combat Desertification [UNCCD], Convention on Biological Diversity [CBD], World Heritage), international treaties (CITES, Convention on Wetlands of International Importance [RAMSAR]), international processes (UNFF, International Tropical Timber Agreement [ITTA], Montreal Process), political summits (G8, APEC and ASEAN), donors (multilateral and bilateral), NGOs (social and environmental), reputable funding institutions, forest and forest industries investors, wholesalers,

42. The role of certification and enforcement of the EUTR can be viewed on: http://www.euflegt.efi.int/files/attachments/euflegt/faqs_on_due_diligence_certification_and_enforcement_of_the_eutr.pdf

43. Q&A for FSC and EUTR: <http://www.fsc.org/timber-regulation.46.htm>

retailers, buyers and governments, particularly in industrialized countries of Europe, North America, Oceania and Japan. However, in the Southeast Asian case study countries, the lack of political will, generally inconsistent and conflicting forest governance, weak law enforcement, difficult socioeconomic conditions and poor technical capacity and capability have allowed illegal harvesting and unsustainable natural resources management to continue at unacceptable rates.

Critical Mass in Verification and Certification in Southeast Asia

Voluntary certification is at early stages of acceptance and application in the Southeast Asian case study countries, where significant potential exists to expand use of this tool. Only 11% of the PFA is certified (8% of total forest area) and less than 6% of forest plantations. However, these averages mask significant differences across countries, with Malaysia and, to a much lesser extent, Indonesia leading the certification effort. In contrast, Lao PDR, Vietnam and Thailand are lagging considerably. However, the countries in the region are aiming to increase timber production from forest plantations and consequently promote certification of these areas. It is estimated that the potential to increase certification in natural and plantation forests in the case study countries is large, particularly in Indonesia and Malaysia.

3.8 Lessons Learned

3.8.1 Base Attributes of Verification and Certification

Recognized attributes of verification and certification include:

- Recognition of SFM as the objective, with stated criteria and verifiable indicators
- Verification and certification standards adapted to local country contexts
- Stepwise approaches toward SFM
- Transparent and participatory approaches among key stakeholder groups to improve understanding, relationships and ownership

- Mechanisms that strive to be credible, effective, efficient and equitable
- Compliance with government regulations
- Security of access to markets and potential for price premiums
- Support to partnership arrangements
- Reliable, independent, third party audit and accreditation by certification bodies

3.8.2 Benefits of Verification and Certification

Certification and verification were originally introduced as market-based incentives toward reducing illegal logging and unsustainable forest management practices. However, their impacts have introduced other benefits, including:

- *Diversification*: Promotion to use of lesser known species, use of forest and forest industries residues, new NWFPs and ecosystem services to markets by branding them as environmentally preferable goods and services
- *Commercialization*: Capture of new goods and ecosystem services to improve financial returns on investment in forest management
- *Risk reduction and mitigation*: Assistance to companies and banks to reduce investment risk and facilitate risk mitigation through transparent, third party, independent assessment of social, environmental, economic and governance factors
- *Access to finance*: Assessment of clients by international commercial banks to qualify for access to finance for forestry and forest industries investments
- *Access to donor support*: A measure of commitment to legality and sustainability that can attract bilateral and multilateral financial support
- *Participatory approaches*: Democratization of forest management planning
- *Transparency*: All processes are public, including access to evaluations and audit reports
- *Stakeholder confidence*: Confidence building between forest managers and key stakeholder groups
- *Standards and measurable indicators*: Measuring outcomes of projects/program through clearly defined social, environmental, economic and other indicators
- *Green building policies and practices*: Tools to assess legal and sustainable supplies of wood products

- *National regulatory enforcement*: Support government enforcement of regulatory requirements through third party, independent assessment
- *Complementary and Mutually Supportive of International Regulatory Enforcement*: Support to EU FLEGT Action Plan, including preparation and monitoring of TLAS and VPAs, EUTR, *Lacey Act* (United States), *Illegal Logging Prohibition Bill* (Australia), and other international regulations relating to forestry and forest products trade
- *Support to Forestry Programs*: Supports to major forestry programs, such as FLEGT Action Plan, REDD-plus, food security, poverty alleviation, sustainable livelihoods

Several of these items relate to good forest governance and law enforcement, which dovetail inseparably with legality verification and sustainability certification.

3.8.3 Constraints to Verification and Certification

Benefits from certification and verification are not always available to all enterprises. Those that benefit the most tend to have large holdings or long-term concessionary rights, procure raw material from state-owned natural forests or plantations, or have economies of scale in forest management and certification assessment. Enterprises that have experienced difficulties in securing and benefiting from certification and verification include:

- Small holdings, because of their small size, difficult access and high unit costs, unless they form groups, to achieve economies of scale
- Community forests with weak management systems and orientation to essential livelihoods activities, which need to be factored into market decisions and high costs
- Small- and medium-scale enterprises, particularly in developing countries, because certification has higher costs (in relative terms) and their information, control systems and market experience tend to be less developed and poorly documented
- Forest products generally restricted to wood, fiber and fuel with NWFPs and provision of ecosystem services proving a challenge, particularly in forests managed for protective or conservation purposes

In the case study countries the serious concerns and misunderstandings on the benefits of certification in Southeast Asia are real. In a comprehensive study in Malaysia, the average cost for certification was US\$28/hectare and involved an average reduction in the annual allowable cut of 33% and a reduction in the PFA to allow for protected areas and buffer zones. However, these costs were not balanced by increased premiums on prices or market access. Companies in Southeast Asia that can continue to sell wood on substantial domestic markets, ASEAN country markets and China did not see a compelling business case for forest certification, despite the regulatory mechanisms with the FLEGT, EUTR and US *Lacey Act*. The incentives that most companies look for in certification are an agreed upon certification standard, strong and stable demand for certified products, guaranteed price premium and financial incentives to become certified (GFTN, 2007).

Some constraints highlighted for the lack of uptake of certification in Southeast Asia include:

- Lack of requirement for certified wood in ASEAN importing countries and China
- Shortage of local capacity to assist with development and implementation of systems
- Limited capacity in certification bodies to process certification requests in a swift and efficient way and to monitor performance
- Increased costs and reduced income and concerns over a biased playing field (developed vs. developing countries; rich vs. poor; large vs. medium- and small-scale enterprises; individual enterprises vs. smallholder groups or communities and plantation forests vs. natural forests)
- Worker resistance because of additional work load and new skills requirements
- The perception that building the forest management and auditing capacities in-country to international standards for certification are difficult and costly
- Unclear financial benefits and business case
- Complex and expensive CoC
- Reputational risk associated with failure (not attaining certification)

SECTION 4

CERTIFICATION AS QUALIFICATIONS FOR FINANCIAL CREDIT INSTITUTIONS

4.1 Introduction

This section focuses on introducing the forestry sector financing context, identifying and introducing banks that finance the forest sector in the case study countries, including international development banks, international commercial banks and local banks. Some banks operate in all five countries, whereas others operate only locally. An important caveat is that commercial banks are sensitive about disclosing forest sector portfolios (including types and scales of investment, availability of funding) as a classified and confidential part of their business strategy. In addition, banks that do not commit to sustainability issues are generally less open, which biases the sample. However, considering the constraints, the sample of banks used in this report gives some indication of the principles and guideline of international and local banks in Southeast Asian case study countries. Annex 4 “Banking Sector: Know Your Client Criteria and Guidelines,” supplements this section with more detail on development banks as well as international and local commercial banks.

4.2 Know Your Client

Financial institutions provide operational loans, credit guarantees and other forms of investment for companies that log or process wood. “Weak due diligence by

financial institutions (local, national and international [including multilateral banks]) facilitates money laundering and profitability of illegal logging. Moreover, the provision of financing to companies with dubious assets or operations, including fraudulent timber concessions, helps to keep illegal logging in business” (Transparency International, 2011). The effects of weak due diligence were clearly illustrated by the past financial crises (1987, 1997, 2008) and their fallout, particularly in Southeast Asia. The failure of previous “due diligence” arrangements revealed the gaps that allowed excessive risks to be taken, to the detriment of investors. Such breakdowns permitted the proceeds of corruption from illegal logging and other illicit activities to flow and be laundered through the financial system. Some financial institutions and banks even regarded forestry clients as prime clients because they brought significant business and profits.

In support of the Financial Action Task Force Against Money Laundering (G-7 Summit, Paris, 1989), the Basel Committee on Banking Supervision, an international forum of the world’s central banks, issued guidelines for preventing banks being accessories to crime. One of these was the “Know Your Client” (KYC) rules that required banking supervisors to ensure that their clients adopted responsible policies, practices and procedures. The KYC rules required financial institutions and banks to report any suspected activities to appropriate authorities. Expansion and more systematic exchange of financial intelligence have occurred, facilitated by better

communication through new technologies within and among financial institutions around the world. This has not only improved the expertise and capacity of personnel but also increasingly exposed those engaged in and benefiting from forestry crimes, particularly at the top of the company hierarchy. In extreme cases, accounts of financial backers of illegal logging or forestry crimes can be frozen, if their laundered money is within the international financial system.

KYC rules require financial institutions to undertake due diligence to check the legality, sustainability, health, safety, human rights and financial risks of their client's investments and activities. This helps to identify concerns before proceeding with an investment and can highlight past problems to be dealt with and future risks to be mitigated. Proactive measures for financial institutions to more effectively undertake the KYC rules include:

- Adopt corporate responsibility standards (International Finance Corporation [IFC] Performance Standards or Environment Health and Safety [EHS] Guidelines, Equator Principles, or other standards)
- Use third party, independent verification or certification
- Extend current legislation, agreements or memoranda of understanding into the forestry sector
- Engage civil society for advocacy and monitoring in a transparent manner

4.3 Types of Financial Flows to the Forestry Sector

The forestry sector is funded by various financial resources, sources and mechanisms, including foreign bilateral and multilateral ODA and both foreign and domestic private sector investments from forest-based companies and commercial banks, as synthesized in Table 4.1.

Bilateral sources of financing are primarily official loans and donations, foreign direct government loans and access to credits for exports. Multidonor sources of financing include loans from global development banks (e.g., World Bank Group, including International Finance Corporation [IFC]); loans, technical assistance and grants from regional development banks (e.g., Asian Development Bank [ADB], African Development Bank [AfDB], Inter-American Development Bank [IADB], European Bank for Reconstruction and Development [EBRD], EuropeAid), projects and programs from UN agencies (UN Development Program [UNDP], International Labor Organization [ILO], FAO, International Fund for Agriculture Development [IFAD], World Food Programme [WFP], UNEP), and others (Global Environmental Facility [GEF]).

Commercial private sector financing by foreign or domestic investors can be (i) direct investments,

Table 4.1 Funding and Financing Institutions to the Forestry Sector

Source of Funding	Beneficiary/Recipient		
	Public Sector	Private Sector	
		Commercial	Non-commercial
Domestic	<ul style="list-style-type: none"> ■ Government departments ■ Government agencies (e.g., forestry corporations) ■ Research Institutes (forestry institutes and universities) 	<ul style="list-style-type: none"> ■ Forest companies ■ Sectoral investors ■ General direct investors ■ Large-scale landowners 	<ul style="list-style-type: none"> ■ Subsistence farmers ■ Rural communities (including indigenous communities) ■ Community-based organizations and networks ■ NGOs (usually implicit in kind)
Foreign	<ul style="list-style-type: none"> ■ Bilateral donors ■ Multilateral donors (development banks and UN agencies) ■ Research institutions (general and sectoral) 	<ul style="list-style-type: none"> ■ International forestry companies ■ Sectoral investments ■ Specialist direct investors ■ Institutional equity investors (banks, pension funds, insurance companies, timber investment management organizations, etc.) 	<ul style="list-style-type: none"> ■ Foundations ■ Specialist concessionaires funds ■ Philanthropists benefactors ■ International NGOs

Source: UNFF (2006).

with effective direct control/ownership through equity/shares in the business or (ii) indirect investments such as debt (e.g., commercial bank loans) or equity (e.g., preferential stock, venture capital, etc.). Governance and specifically the prevailing policies for investment and level of risk are critical for both direct and indirect private investments. Although the private sector is expected to play the lead role in global economic and production activities, higher investment risks are associated with the social, environmental and economic factors in long rotations necessary for SFM (natural and plantation forests). In addition, uneven distribution of costs and revenues and unresolved issues exist related to the benefits of providing non-market, ecosystem services from forests. Investments in developing countries are also associated with higher levels of risk per se.

4.3.1 Bilateral and Multilateral Financing

The bilateral and multilateral funding to the forestry sector between 2000 and 2002 was US\$1.3 billion annually and US\$1.9 billion annually between 2005 and 2007. For the period, the combined bilateral and multilateral financing flows increased by 48%, mainly as a result of increased financing from multilateral sources, which accounted for three quarters of the total absolute increase. Bilateral ODA also increased, albeit at a slower rate (15%), largely because of contributions by Japan, which increased by 61%.

Since 2000, two thirds of the cumulative forestry ODA globally has been allocated to Asia, with a peak in 2003, when it reached almost 80% of the total. Of the global bilateral ODA to the forestry sector, 95% was provided by nine donors (the European Community, France, Finland, Germany, Japan, Netherlands, Switzerland, the United Kingdom and the United States). There has been a trend for bilateral donors to reduce their allocation to project and program funding and increase contributions to budgetary support not allocated by individual sectors. Additionally there is a trend to integrate forests as a component of wider climate change, food security, poverty alleviation, rural development, landscape restoration, integrated watershed management and energy programs (PROFOR, 2008).

A summary of bilateral and multilateral financing flows to the forestry sector in 2000 to 2007 is given in Table 4.2.

Multilateral financing to forests is estimated at US\$0.8 billion annually for 2005 to 2007. The World Bank Group increased from 51% to 73% for 2000 to 2007, of which the IFC accounted for 55% in the form of equity and credit to private sector enterprises. GEF's share declined from 31% in 2000 to 2002 to 14% in 2005 to 2007. The AfDB accounted for 9% of the total multilateral flows to the forestry sector for 2005 to 2007 while the ADB and the IADB were marginal sources only. ITTO's contribution was 5% in 2001 but dropped to 2% in 2005 to 2007 (PROFOR, 2008).

4.3.2 Private Sector Financing

The amount of direct investment in the forestry sector (forests, industries and trade) globally was estimated at US\$60 billion/year, of which the predominant ratio was domestic (UNFF, 2006). Private investment in the forestry sector in developing countries and countries in transition was estimated to be at least US\$15 billion/year, or up to nine times more than the prevailing ODA flows (World Bank, 2008). Large-scale investments such as pulp and paper plants, forest industries plants and forest resources that provide the raw materials from natural or planted forests are often made by international investors and joint ventures, including local partners and development banks willing to cover the risks.

Increasing pressure and mechanisms have been applied to ensure that the foreign direct investments are made in a socially and environmentally responsible manner and that all activities are undertaken in accordance with legality and sustainability standards. Additionally, a growing share of forest industry corporations are exporting to environmentally sensitive markets engaged in CSR and have achieved SFM certification or are committed to stepwise approaches toward demonstrating sustainability of their wood supplies. In order to avoid financing illegal and unsustainable activities in forest investments, international commercial banks are increasingly signatories to the Equator Principles and the

Table 4.2 Bilateral and Multilateral Financing Flows to the Forestry Sector, 2000–2007

Fund Source	2000–2002		2005–2007		Change 2000–2007
	US\$ millions/year	Share %	US\$ millions/year	Share %	%
Bilateral	2006 exchange rates and prices				
European Union	101.2	10.6	115.7	10.5	14.3
Finland	20.3	2.1	12.7	1.2	237.4
France	21.3	2.2	19.3	1.7	29.2
Germany	130.9	13.6	126.0	11.4	23.8
Japan	329.0	34.3	530.5	48.1	61.3
Netherlands	111.7	11.6	88.5	8.0	220.8
Switzerland	30.2	3.1	30.6	2.8	1.4
United Kingdom	39.2	4.1	28.7	2.6	226.8
United States	95.9	10.0	97.6	8.8	1.8
Other	79.5	8.3	53.8	4.9	232.4
Sub-total	959.2	100	1,103.4	100	15.0
Multilateral	2006 exchange rates and prices				
AfDB	35.8	10.7	72.7	9.0	103.2
ADB	6.9	2.0	12.4	1.5	79.9
GEF	104.1	31.1	109.4	13.6	5.1
IADB	2.1	0.6	9.1	1.1	331.3
ITTO	16.6	5.0	16.3	2.0	21.8
IFC	78.0	23.3	324.0	40.2	315.4
World Bank	91.5	27.3	262.7	32.6	187.1
Sub-total	335.0	100	806.7	100	140.8
Total	1,294.3		1,910.1		47.6
Bilateral Share %	74.1		57.8		

Source: PROFOR (2008).

UN Principles of Responsible Investment (PRIs) and have adopted legality and sustainability safeguards in their project finance.

The global trends show that although foreign direct investments remain important in developing countries because they bring foreign exchange earnings and technology transfer, 80% to 95% of private investment, in 1995 to 2004, including in the forestry sector, was domestic financing (ITTO, 2006b; UNFF, 2006; and PROFOR, 2008). In the 1980s, foreign direct investment was 85% in developed countries and only 15% in developing countries. During the 1990s a significant increase was seen in foreign direct investment into

developing countries, where the social and environmental standards were less stringent and potential financial returns higher. Target markets were East Asia (China, Hong Kong and Singapore), Latin America (Brazil, Mexico and Argentina) and North Africa. Domestic direct investment remains extremely important in the forestry sector; however, information is either non-existent or not available. Local banks and other domestic investors in Southeast Asia, generally, are not signatories to the Equator Principles or PRIs and do not require or monitor compliance with international social, environmental, health or safety standards, nor proof of legality or sustainability through verification or certification schemes.

4.4 Global Principles, Standards and Guidelines in Forestry Sector Investment

The framework of social, environmental and economic sustainability and legality standards for financial institutions to commit to responsible decisions on their investments and their clients' business activities are detailed in the Sustainability Framework of the IFC, the Equator Principles and the PRIs.

4.4.1 International Finance Corporation (IFC) Sustainability Framework

The IFC is a member of the World Bank Group and provides loans, equity, structured finance, risk management products and advisory services to the private sector in developing countries. The IFC prepared a suite of Safeguard Policies (1990–1998) and Environment, Health and Safety Procedures from 1998. A more comprehensive and integrated IFC Sustainability Framework¹ was originally adopted in 2006, recently updated from 1 January 2012 to incorporate lessons from IFC's implementation experience and feedback from stakeholders and clients around the world. The new Sustainability Framework reflects the evolution in good practice for environmental and social sustainability, risk mitigation and transparency. It helps protect people and the environment, promotes accountability, and supports clients in managing risks and doing business in a sustainable way.

The key Sustainability Framework components are:

- *Policy on Environmental and Social Sustainability*² that defines IFC responsibilities in supporting project performance

- *Performance Standards*³ on Environmental and Social Sustainability (2006, updated 2012) that defines client roles and responsibilities for IFC support
- *Environmental, Health and Safety Guidelines* (EHS),⁴ which is a technical reference document that provides general and industry-specific examples of good international industry practices for IFC staff and clients, used particularly during project appraisal. Reference to the general EHS Guidelines by IFC clients is required under IFC Performance Standard 3 (Pollution Prevention and Abatement). EHS guidelines specific to forestry are elaborated in separate four business areas: board and particle-based products, sawmilling and wood-based products, forest harvesting operations, and pulp and paper mills
- *Environmental and Social Review Procedures Manual*,⁵ which defines the client compliance requirements with respect to the Policy and Performance Standards on Environmental Sustainability, Access to Information Policy and Environmental Health and Safety
- *Guidance Notes*, which supplement the Performance Standards to guide clients and IFC staff on how to meet the standards
- *Exclusion List*,⁶ which defines the types of projects that IFC will not finance

The Sustainability Framework components are reported in more detail in Annex 4.

In addition, the IFC has an Access to Information Policy that reflects their commitment to transparency and good governance on its operations and outlines their institutional disclosure obligations regarding its investment and advisory services.

1. IFC new Sustainability Framework: www.ifc.org/sustainability

2. IFC Policy on Environmental and Social Sustainability: http://www1.ifc.org/wps/wcm/connect/7540778049a792dcb87efaa8c6a8312a/SP_English_2012.pdf?MOD=AJPERES

3. IFC Performance Standards for Environmental and Social Sustainability: http://www1.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Documents.pdf?MOD=AJPERES

4. IFC Environmental Health and Safety Guidelines: http://www1.ifc.org/wps/wcm/connect/190d25804886582fb47ef66a6515bb18/ESRP_Manual.pdf?MOD=AJPERES&CACHEID=190d25804886582fb47ef66a6515bb18

5. IFC Environmental and Social Review Procedures Manual: http://www1.ifc.org/wps/wcm/connect/190d25804886582fb47ef66a6515bb18/ESRP_Manual.pdf?MOD=AJPERES&CACHEID=190d25804886582fb47ef66a6515bb18

6. IFC Exclusion List: http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/IFC+Exclusion+List/

4.4.2 The Equator Principles

The Equator Principles are a voluntary set of standards for the financial institutions for determining, assessing and managing social and environmental risk in project financing. The Equator Principles were derived from the IFC's Performance Standards on Social and Environmental Sustainability, and on the World Bank Group's Environmental, Health and Safety general guidelines.⁷ The Equator Principles provide a common baseline and framework of sustainable banking principles for use by adopting institutions to prepare their own internal social and environmental policies, procedures and standards. There are currently 76 Equator Principles Financial Institutions (EPFIs) that are signatories to, or adopters of, the Equator Principles.⁸ These are mainly international commercial banks. The Equator Principles are broadly in line with the Safeguard Policy Statement of the Asian Development Bank, the policies of the European Investment Bank and the Export Credit Agencies of the OECD.

The Equator Principles have increased awareness of legality and social, environmental and economic sustainability in business management. In the forestry sector, EPFIs are committed to:

- Exclude investment in commercial logging operations or purchase of logging equipment for use in primary tropical forests
- Finance only preservation and light, non-extractive use of HCVMs
- Finance forest plantations only on non-forested areas or degraded forest lands (conversion from natural forests prohibited)

However recognized limitations include:

- Threshold project financing is US\$10 million
- Forest financing is not typically on a project basis, as most forestry companies use their balance sheet to finance expansion
- There is no specific reference to verification or certification (forest or CoC) as tools for legality and sustainability

7. See more: <http://www.ifc.org/ifcext/sustainability.nsf/Content/EnvironmentalGuidelines> (Sourced: 24 February 2011)

8. Equator Principles website: <http://www.equator-principles.com/index.php/members-reporting>

- One Asian banking group is an EPFI and local Asian banks lend without significant social or environmental due diligence
- As a voluntary standard, the EP monitoring and compliance by EPFIs are not enforced
- Lack of transparency and open to interpretation by signatory banks
- Signatories may be unwilling to disclose lending activities to the public due to client confidentiality

There is potential for the Equator Principles and EPFIs to be more proactive to legality and sustainability using existing verification and certification tools available. Additionally, there is potential for EPFIs and governments to encourage domestic commercial banks to become signatories to the Equator Principles or at least integrate social and environmental, health and safety issues into their risk management standards for investment.

4.4.3 UN Principles for Responsible Investment (PRIs)

Established in 2005, the PRIs were derived by some of the world's largest institutional investors. There are currently 1,054 signatories globally, of which more than 60% are investment managers. The six principles are:

- Incorporate ESG issues into investment analysis and decision making processes
- Be active owners and incorporate ESG issues into ownership policies and practices
- Seek appropriate disclosure on ESG issues by the entities in which they are invested
- Promote acceptance and implementation of the Principles within the investment industry
- Work together to enhance effectiveness in implementing the Principles
- Report on activities and progress toward implementing the Principles

PRIs are voluntary, and membership is reviewed annually. If signatories do not report on progress toward achieving the PRIs, they are removed from the responsible investors list. PRI Network Supporters are non-profit, peer organizations that actively support the PRI and raise awareness of responsible investments within their investment community in different sectors and regions.

In Asia there are only 21 Local Fund Manager signatories (Japan, 7; Hong Kong, 5; Republic of Korea, 4; Singapore, 3; and Malaysia and India, 1 each), two Asset Owner signatories (both in the Republic of Korea), and 14 Professional Service Partners (the Republic of Korea, 6; Japan, 2; Hong Kong, 2; and Malaysia, Singapore and India, 1 each). Southeast Asia is almost invisible, with only nominal representation from Malaysia. This demonstrates a lack of awareness of, or commitment to, the Principles by local commercial banks, investment organizations, local fund managers and professional service providers.

The potential is huge to strengthen domestic financial institutions' awareness of, and commitment to the PRIs.

4.4.4 United Nations Environment Program (UNEP) Finance Initiative

The UNEP Finance Initiative⁹ is a global partnership between UNEP and 200 signatories representing the global financial sector, to develop and promote linkages between sustainability and financial performance. Activities include research on internalizing ESG issues; guidelines for implementation tools, training and capacity building; and seminars and conferences and networking among signatories and stakeholders.

Key sustainability commitments include:

- Adopt a precautionary approach to environmental and social issues, to anticipate and prevent potential negative impacts on the environment and society
- Comply with local, national and international laws and regulations on environmental and social issues
- Identify and quantify environmental and social risks as part of risk assessment and management, both in domestic and international operations
- Pursue best practice in environmental management and seek to form business relations with customers, partners, suppliers and subcontractors, who follow similarly high environmental standards
- Update practices periodically to incorporate new developments in sustainability management

9. UNEP Finance Initiative: <http://www.unepfi.org/about/index.html> (Sourced 28 May 2012).

- Review and measure internal progress toward sustainability goals
- Adapt and develop products and services to promote the principles of sustainable development

As signatories to the UNEP Statement of Commitment by Financial Institutions on Sustainable Development, financial institutions recognize the role of the financial services sector in making economies and lifestyles sustainable and commit to the integration of environmental and social considerations into all aspects of their financial services operations.

In Indonesia, PT Bank Negara Indonesia Tbk (BNI) and Bank bjb (West Java state government) are signatories to the UNEP Finance Initiative. No banks in Malaysia, Vietnam, Thailand or Lao PDR are signatories.

4.4.5 Asian Development Bank (ADB) Safeguards Policy Statement (SPS)

The ADB SPS, governing the environmental and social safeguards of their operations, were approved in 2009 (ADB, 2009). The SPS aims to avoid, minimize or mitigate harmful environmental impacts and social costs and help clients strengthen their safeguard systems. The policy has safeguards for environmental, involuntary resettlement and indigenous peoples. The ADB also has a forest policy that focuses on the promotion of SFM and a Rapid Environmental Assessment Checklist that determines the risk category for forestry projects and the need for an environmental impact assessment. The ADB has a prohibition list that includes activities that they will not fund. Included is commercial logging or purchase of logging equipment to use in primary tropical moist forests or old growth forests. Furthermore, their Vision 2020 focuses on arresting deforestation and greenhouse gas emissions through SFM and improved land-use management; enhancement of carbon stocks through reforestation, afforestation, forest and landscape restoration); and conservation of existing carbon stocks.

Over the last decade, the level of loans, technical assistance and grant contributions to the forestry sector in the case study countries dropped from more than US\$208 million in 1980 to 2000 (average US\$20 million annually) to

Table 4.3 ADB Loans, Technical Assistance and Grants in Case Study Countries, 2000–2012.

Country	Project	Funding		Description	Status
		Type	US\$ (Millions)		
Indonesia	Forest Investment Strategy	ADB TA	0.2	Assist government to prepare forest investment strategy	Approved 2012
		Government	5.0		
	Sustainable Forest & Biodiversity Management in Borneo	ADB TA	0.7	Support government toward achieving SFM	Proposed Approval, June 2012
		GEF	2.5		
	Climate Change Fund	1.3			
Vietnam	Forests for Livelihoods in the Central Highlands	ADB Loan and TA	45.3	Natural and plantation forest SFM to improve livelihoods	Approved 2006
		Forest Trust Funds, TA	0.8		
Lao PDR	Tree Plantations for Livelihoods	ADB TA	0.7	Improve livelihoods through tree plantations	Approved 2001
		ADB Loan	7.0		
	Forestry Plantation Sector Development	ADB TA	0.3	Private sector forest plantation development	Approved 2004
Total		ADB	54.2		
		Co-funding	9.6		
		Total	63.8		

Source: ADB Projects Database: <http://www2.ADB.org/Projects/>

US\$54 million in 2000 to 2012 (average US\$4.5 million annually). There were no loans, grants or technical assistance specifically for the forestry sector in Malaysia or Thailand between 2000 and 2012. This decrease may be due to the social and environmentally sensitivity of forestry investments, concerns for governance and corruption in the forestry sector, the prevalence of other sources of finance (bilateral and multilateral donors, commercial banks, etc.) and the integration of forestry within integrated rural development, landscape, livelihoods, climate change and bioenergy programs. The ADB financing in the case study countries is summarized in Table 4.3.

4.5 Selected International Commercial Banks in Southeast Asia

There are no readily available data or information on the forestry investments by international commercial banks in the case study countries, because of the confidentiality and sensitivity of the information. The case study

banks in this report are actively financing companies and operations in the forestry sector in Southeast Asia. More detail on each bank is provided in Annex 4.

4.5.1 Hong Kong Shanghai Banking Corporation (HSBC)

The HSBC, a founding Equator Principles Financial Institution (EPFI) since 2003, has policies covering a wider range of financial services, which are applied regardless of the value of transaction or size of business. The HSBC has developed a series of risk policies for sensitive sectors, including the Forest Land and Forest Products Sector Policy (2008),¹⁰ consistent with the Equator Principles, that provides guidance on their legality and sustainability standards. Clients involved in logging and harvesting activities must respect permits, quotas and concession areas; local laws and corruption;

10. HSBC updated and strengthened its Forest Land and Forest Products Sector Policy in 2008: http://www.hsbc.com/1/PA_esf-ca-app-content/content/assets/csr/080905_forest_land_and_forest_products_sector_policy_summary.pdf and http://www.hsbc.com/1/PA_1_1_S5/content/assets/csr/080905_forest_land_and_forest_products_sector_policy_faq.pdf (Sourced: 21 May 2012).

legal rights of communities; and low impacts in HCVF. Additionally, clients must minimize harm to ecosystems; maintain forest productivity; maintain forest ecosystem health and vitality; safeguard traditional and customary rights of indigenous communities; and balance economic, social and environmental interests.

The HSBC will not finance illegal logging activities or logging in World Heritage Sites or wetlands within the RAMSAR list. Restrictions exist on activities in HCVF; plantations converted from HCVPs; pulp and paper without certification; biofuels unless from sustainable sources; palm oil and soy plantations, unless certified; and a cautious approach to forests managed on peat lands.

The HSBC uses the FSC certification scheme as a benchmark but does not finance plantations converted from HCVP from 2004. In FSC the cutoff year is 1994. HSBC clients are considered fully compliant with the bank's policy, when their activities are 70% certified as sustainable and when there is evidence that the remaining (30%) is legal.

4.5.2 Standard Chartered Bank (SCB)

The SCB, a founding EPFI since 2003, has adopted an environmental and social safeguards approach. For new and existing clients to be eligible for SCB financing, they must conform to the SCB Forestry and Palm Oil Position Statement that details the standards and practices to evaluate and mitigate social and environmental risks.¹¹ SCB also follows the IFC's EHS industry sector guidelines on Forestry and Plantation Crop Production (2007) and complements and reinforces their commitment to the Equator Principles.

The SCB will not finance commercial logging operations or logging equipment to be used in primary tropical moist forests, HCVPs, critical natural habitats, illegal logging, or CITES listed species. However, the SCB encourages its clients to manage forests certified by FSC or equivalent standards, demonstrate a

credible path toward operating managed forests that are certified by the FSC or equivalent standard, and process or trade in products that are FSC certified or equivalent (with CoC equivalent documentation). The SCB will finance forest plantations on previously converted natural forest land, only after five years have passed and if no direct link can be demonstrated to the original deforestation. All new forest plantation developments must have an environmental and social impact assessment acceptable to SCB. In recognition that not all clients can immediately meet these standards, the SCB or independent technical specialists will work with the clients to develop a time-bound action plan toward verification and certification and to monitor the client's progress.

4.5.3 Citibank

Citibank was one of the four global financial institutions that drafted the initial set of Equator Principles and was a founding EPFI in 2003. Citibank has shown leadership on the EPFI Steering Committee and several EPFI working groups and was the principal drafter of the Equator Principles review in 2006. In 2003, Citibank developed their own Environmental and Social Risk Management (ESRM) Policy, which applies a review and risk management framework similar to that of the Equator Principles.¹²

In the Citibank's ESRM Policy risk assessment process standards and impacts on forests were detailed in their Sustainable Forestry Policy Sector Standard¹³ first developed in 2004 under an Anti-Illegal Logging Initiative and refined and expanded in 2006. The Sustainable Forestry Policy Sector Standards are based on the IFC's Performance Standards and EHS Guidelines. Citibank clients directly involved in logging or harvesting natural or plantation forests or primary processing of timber¹⁴ are subject to Citibank's risk management actions according

11. http://www.standardchartered.com/_documents/Forestry_and_Palm_Oil_Position_Statement.pdf (Sourced: 4 April 2011).

12. <http://www.citigroup.com/citi/environment/esrmpolicy.htm> (Sourced: 5 April 2011).

13. <http://www.citigroup.com/citi/environment/data/forestry.pdf> (Sourced: 5 April 2011).

14. Primary processing includes milling of logs for pulp, paper, sawnwood, plywood or veneer.

to the sensitivity and location of their operations. All clients, regardless of risk level, must comply with local and national forestry and environmental laws to prevent illegal logging. Clients operating in “high-risk” countries¹⁵ with a significant threshold of concern over legality must develop a plan to achieve FSC certification within a timeframe to be agreed upon with Citibank (e.g., 3–5 years). Clients are subject to an annual forest products risk assessment to determine the client’s risk status. If customers refuse to develop an action plan toward FSC certification, Citibank would consider terminating the client relationship. Under Citibank’s ESRM Policy, no operations that significantly convert or degrade critical habitats will be financed.

4.5.4 Bank of America (BoA)

BoA, an EPFI since 2004, adopted its own Sustainable Forestry Policy in 2004. Its Forest Lending Policy¹⁶ applies to all extensions of credit and to bond underwriting, where proceeds are project-specific. BoA has three pillars to their global corporate investment bank policy in forestry, including Forest Practices; Forest Certification; and Paper Procurement. BoA expects due diligence and monitoring of all operations.

The Forest Practices have policies on legality, sustainability, critical habitats, reforestation, indigenous communities, uncontrolled fire and international commitments. To maintain sustainability of operations, BoA partners with reputable environmental agencies to evaluate the value of various forest certification programs to reduce risk and encourage best practices to achieve SFM. In critical habitats, such as primary forests or HCVPs, BoA requires independent, third party audit and proof of authorities of government. The bank will finance tree plantations on previously cleared forest land if conducted in compliance with applicable laws and regulations. Exceptions are allowed after five years, if there is no direct link to deforestation.

15. Citibank’s Sustainable Forestry Policy refers to a list of “high-risk” countries that have been documented to have a higher rate of illegal logging than other countries.

16. http://webmedia.bankofamerica.com/environment/pdf/Forest_Lending_Policy.pdf (Sourced: 6 April 2011).

BoA will not finance companies or projects with operations in illegal logging; primary, tropical moist forests; indigenous communities that have not had free prior and informed consultation or consent (FPIC); indigenous lands where claims are not settled; uncontrolled or illegal fire; or violation of local, state, national or international environmental, labor or social laws.

BoA supports third party certification with credible, independent and widely accepted standards (e.g., FSC, SFI and CSA) as demonstrating legality and sustainability.¹⁷

BoA’s Paper and Procurement Policies seek to maintain the ecological health of forests through source reduction and recycling, sustainable forest practices and protection of endangered forests. The bank also encourages third party suppliers of goods and services to employ sound environmental business practices. The Paper Procurement Policies are detailed in Annex 4, Table A4.13.

4.6 Local Financial Credit Institutions in Southeast Asia

11.6.1 Indonesia

Partly due to the 1997 Asian Financial crisis and changing expectations on corporate behavior, financial institutions and banks in Indonesia have been increasingly scrutinized on their influence on the use and governance of forests and actions needed to mitigate adverse environmental, social, health and safety effects. In the Indonesian forestry sector, state-owned and international banks and financial institutions were linked to industrial growth and wealth creation. During the Suharto regime, Indonesian forestry companies became major players in international forest products markets, particularly in plywood and pulp, through subsidized credits and political cronyism. This resulted in inappropriate investment and gross over capacity (three times sustainable wood supply) in forests products industries, which remain drivers of unsustainable forest practices, deforestation and illegal logging.

17. http://webmedia.bankofamerica.com/environment/pdf/Forest_Certification.pdf (Sourced: 6 April 2011).

International financial institutions financing logging and forest industries in Indonesia include Credit Suisse, First Boston, ING Bank N.V., Credit Lyonnais of Singapore, which supported the rapid expansion of particularly the pulp and paper sector. Financial institutions supporting oil palm plantation development that has triggered deforestation in Indonesia included four Dutch banks, ABN AMRO Bank, ING Bank, Rabobank and Mees Pierson (CIFOR, 2005).

The Indonesian Bank Restructuring Agency (IBRA) was created as a super agency in 1998 with sweeping powers to reform and restructure the banking sector, including the forestry sector. IBRA was strongly influenced by the Financial Sector Policy Committee, rather than the Indonesian Working Group on Forest Finance, so forestry sustainability issues were ignored and forest policy undermined in IBRA's policy and restructuring of debt. IBRA saw the forest industries as strategic for economic recovery of Indonesia and viewed unsustainability and legality as low priorities. The companies reformed and restructured by IBRA continued and even increased their forest products exports, mostly under their original owners. As a result, cash flows were not used to reduce debt but suspicious financial transactions continued, including party transactions and trade credits, currency and interest rate swaps, expansion of business in China (and elsewhere) and creative accounting to report financial losses to gain favorable tax rates, debt restructuring and write-off terms. By 2002, IBRA had 234 forestry based accounts with US\$3.22 billion of debt (CIFOR, 2007).

In 2004, nearly half of the assets of the banking system were controlled by state-owned banks. Some examples of local or state-owned banks in Indonesia are Mandiri Bank, PT Bank Negara Indonesia Tbk (BNI) and Bank Rakyat Indonesia (BRI). Most forestry conglomerates are clients of Bank Mandiri, the largest bank in Indonesia. Although one of Bank Mandiri's missions states concern for the environment and communities,¹⁸ the bank has been lenient on illegal logging and unsustainable harvesting of forests, because the forestry conglomerates and the forest industries posed serious

threats to their financial security (CIFOR, 2007). Mandiri Bank has no robust standards or monitoring systems in place to measure legality or sustainability of forestry sector activities or actively encourage verification or forest certification systems.

BNI and Bank bjb (West Java) are signatories to the UNEP Finance Initiative so that they are aware that economic development needs to be compatible with human welfare and a healthy environment and that sustainable development is the collective responsibility of governments, businesses and individuals. However, there was no evidence of a commitment to verification or forest certification as tools for legality or sustainability.

The Indonesian government enacted law 25/2003 on anti-money laundering that included forestry and environmental crimes in the list of crimes to be monitored.¹⁹ In 2009, the Indonesian Central Bank put in place a regulation requiring commercial banks to implement an anti-money laundering program and a circular that required forestry documentation requested by banks to verify forest-based companies' claim on the sources of their revenues. However, monitoring and enforcement of the law and regulations are weak.

4.6.2 Malaysia

The largest public bodies financing the forest sector in Malaysia are the federal and state governments. They allocate annual operational budgets for administering and managing forests, including certification of natural forests in the PRFs in Peninsular Malaysia; and the five-yearly development budgets under the five-year development plans (currently the Tenth Malaysia Plan, 2011–2015²⁰) for (i) development of the forest resources and (ii) implementation of conservation and management projects and (iii) forest protection programs.

The federal government also grants soft loans to companies to fund forest plantation projects, which have

18. Good Corporate Governance Charter: <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MTczMnxDaGlsZEIEPS0xfFR5cGU9Mw==&ct=1> (Sourced: 21 April 4 2011).

19. CIFOR: <http://annualreport2010.cifor.cgiar.org/articles/improving-due-diligence-to-reduce-money-laundering-in-the-forestry-sector.html>

20. Government of Malaysia: http://www.epu.gov.my/html/themes/epu/html/RMKE10/rmke10_english.html.

no social or environmental preconditions. Applications for such a loan are restricted to 5,000 hectares per application. Currently the federal government provides soft loans of ringgit (RM) 5,400 (US\$ 1,713.20) and RM 3,200 (US\$ 1,015.23) for companies to plant a hectare of *Hevea* species (rubber trees) and non-*Hevea* species, respectively.²¹ The criteria for getting a soft loan do not specify social or environmental preconditions or demands on the company. The government is mainly concerned with the company's title to land, its financial performance and stable cash-flow, and past record of loan repayments.²²

The international financial institutions and banks in Malaysia²³ generally comply with international Equator Principles and ESG policies and standards. However, the ESG policies and standards were less apparent for national banks and investment houses.²⁴ It proved to be difficult to find out which local banks financed the forest sector in Malaysia, because this information is generally confidential between the institutions and their clients. There are no specific national private financing bodies in Malaysia with specific policies, strategies or commitments to sustainability principles when financing the forestry sector.

4.6.3 Vietnam

In Vietnam, banks are required to set up a system of asset classification and provisions under Decision 493,²⁵ which does not include environmental or social risks as part of assessing borrowers. However, the State Bank of Vietnam recommended in 2005 that all financial

21. Indufor's local consultant in Malaysia.

22. <http://www.fao.org/forestry/25441-067d0dd8b03293df878d2df3abbd6550b.pdf>.

23. For instance, ABN Amro Bank, Bangkok Bank, Bank of America, Bank of China, Bank of Tokyo-Mitsubishi, Citibank, Deutsche Bank, HSBC, JP Morgan Chase Bank, Bank of Nova Scotia, OCBC Bank, Standard Chartered Bank and United Overseas Bank.

24. For instance, Maybank, CIMB Bank, Public Bank, RHB, AMMB Holdings, Hong Leong Bank, EON Capital, Affin Holdings and Bank Islam.

25. The State Bank of Vietnam has enacted Decision No. 493/2005/QĐ-NHNN dated 22 April 2005 issuing the Regulations on Classification of Debts and Loss Provisioning in Banking Operation of Credit Institutions. *Source:* http://www.ykvn-law.com/publications/Decision%20493.v2_eng.pdf (Sourced: 19 April 2011).

institutions should incorporate environmental and social dimensions into their borrower appraisal system when complying with Decision 493.²⁶ However, little in practice has been applied.

Vietnamese banks financing the forest sector are the Vietnam Bank for Agriculture and Rural Development (Agribank) and Vietnam Bank for Industry and Trade (operating as VietinBank). Local Vietnamese banks do not require documentation of sustainability, legality or certification.

4.6.4 Thailand

More than 10 commercial banks operate in the forestry sector in Thailand, including both local and international commercial banks. The international banks, such as SCB, BoA and Citibank, have operated in the sector for some time. Examples of Thai banks supporting natural resource-related projects are (i) Krung Thai Bank, PCL, in which the Thai Government holds the largest shares; (ii) Siam Commercial Bank, PCL, which supports community enterprises and stresses the importance of environmental conservation; (iii) Kasikorn Bank, PCL, which is similar to Siam Commercial Bank PCL; and (iv) Government Savings Bank, owned by the Government of Thailand.

Since the 1997 Asian financial crisis, the Stock Exchange of Thailand (SET) has sought to regain investor confidence through strengthening listed companies' corporate governance systems and practices. Several provisions of SET's principles and recommendations for good corporate governance relate to environmental and social performance. SET's good corporate governance principles identify stakeholders that should be recognized by the company and "should be treated fairly in accordance with their legal rights as specified in relevant laws." These include the communities with whom the company operates.²⁷

26. IFC: <http://www.ifc.org/ifcext/mekongpsdf.nsf/Content/PR-43> (Sourced: 19 April 2011).

27. Thailand's Commercial Banks' Role in Financing Dams in Lao PDR and the Case for Sustainable Banking http://www.internationalrivers.org/files/attached-files/sustainablethaibanks_ir_dec09.pdf.

Regarding sustainability risk management, Thai commercial banks have made largely aspirational statements with few details. None of the banks have publicly released a detailed environmental and social policy, as recommended by the SET. Only Kasikorn Bank has a publicly available CSR Policy,²⁸ which is, however, far from comprehensive. Kasikorn Bank and Krung Thai Bank are also members of the Thailand Business Council for Sustainable Development, which intends to establish a set of voluntary social responsibility guidelines under the ISO 26000.²⁹ Only Siam Commercial Bank explicitly identifies reputational risk “in dealing with businesses that are subject to social criticism,” but it does not exclude dealing with such businesses. It merely lays out a decision making chain of command to consider such lending. It is clear that at present Thai banks’ commitments to ESG, legality or sustainability are not rooted in their day-to-day business decision making.

4.6.5 Lao PDR

In most cases in Lao PDR, social and environmental preconditions for financing are based on project support, while the screening is based on the procedures of the Department of Forest Inspection (DOFI). This is the case for SUFORD, which assists the Lao PDR government to develop participatory SFM. The screening of forestry clients is based on procedures specific to the evaluation of sustainability, risks and legal compliance by DOFI. DOFI is the Lao PDR government’s primary agent to address the problems of illegal logging, smuggling of timber and wildlife, forestry-related corruption and illegal land encroachment. DOFI is empowered to conduct forestry control operations, investigate allegations of illegal logging, make arrests and pursue prosecutions and collaborate with other agencies, the private sector and civil society in pursuit of forest law enforcement.³⁰

28. CSR: <http://www.kasikornbank.com/EN/SocialActivities/Pages/SocialActivities13.aspx> (Sourced: 15 April 2011).

29. ISO 26000 is an ISO International Standard guiding organizations in their efforts to operate in socially responsible manner.

30. http://www.katoombagroup.org/~forestrtr/documents/files/doc_832.pdf (Sourced: 15 April 2011).

There are also a few active private financing bodies in the forest sector of Lao PDR, but they only evaluate financial indicators. The private financing bodies are Banque Pour Le Commerce Extérieur Lao (BCEL), Phongsavanh Bank, Lao-Viet Bank, Lao Development Bank and Agriculture Promotion Bank (APB). These banks screen their wood industry clients by evaluating the financial indicators only. They have no criteria to evaluate sustainability and legal compliance risks of their prospective forestry clients.

4.7 Evaluation of Client Legality and Sustainability

The policies, practices and procedures vary considerably, particularly between international and local financial institutions and banks. International development finance institutions together with commercial banks most often have advanced principles and policies in place to minimize the risk for financing illegal or unsustainable activities. In contrast, the policies of local banks to evaluate sustainability risks are generally weak, because they typically focus on traditional financial risks. Local banks are thus less equipped to provide comprehensive social, environmental and legality risk-rating for their loans. Table 4.4 summarizes ESG policies of financial institutions in case study countries.

A broad categorization of the level of ESG due diligence by broad type of financial institutions studied is summarized in Table 4.5.

4.7.1 Client Legal Compliance (Legality)

With regard to legal compliance risks, all financial credit institutions and banks make some reference to compliance with applicable international, national, local and, at times, even customary laws and regulations. All banks thus state that they will not finance activities that are in violation of the law. The sample of international commercial banking groups in this report were signatories to the Equator Principles, but additionally had principles, policies and procedures in place that expected clients to comply with local, regional, national

Table 4.4 Examples of ESG Commitments of Financial Institutions in Southeast Asia

Fund Institution	Signatories to:		Forest Policy	Policy Highlights
	PRI	EP		
International				
HSBC	Yes	Yes	Yes	<ul style="list-style-type: none"> ■ Will not finance or support illegal logging or plantations based on conversion of natural forests or operations that disturb HCVPs ■ Will not finance manufacture of pulp and paper if raw material supplier not certified in accordance with HSBC policy on certification ■ Policy based on FSC certification as a benchmark, but monitoring by credible third party technical experts, publicly available information and commissioned analyses
SCB	No	Yes	Yes	<ul style="list-style-type: none"> ■ Will not finance or support commercial logging and purchase of logging equipment for purchase, trade or process of timber from primary tropical moist forest; HCVP and critical natural habitats; companies in violation of local or national laws on illegal logging; and logging of CITES listed species ■ Will finance forest plantations on previously converted natural forests after 5 years, if no direct link with the conversion; and subject to an approved environmental and social impact assessment report ■ Will work with clients on a time-bound action plan toward verification and certification ■ Encourages clients to manage forests that are FSC certified, or equivalent standard, or demonstrates a credible path toward FSC certification, or equivalent standard
CitiBank	No	Yes	Yes	<ul style="list-style-type: none"> ■ All operations must comply with local and national forestry and environmental laws ■ Will not finance clients that significantly convert or degrade a critical habitat ■ For other high-risk geographies/operations, client must agree to a plan to achieve FSC certification within 3–5 years ■ Launched a training program with Rainforest Alliance (2007) to help bankers understand illegal logging issues
BoA	No	Yes	Yes	<ul style="list-style-type: none"> ■ Will not finance projects in illegal logging; primary tropical moist forests; indigenous communities without free, prior informed consent; indigenous lands with disputed claims; uncontrolled or illegal fire; violation of local, state, national or international environmental, labor or social laws ■ Paper and Procurement Policies support SFM, protection of endangered forests and recycling and more efficient wood raw material supplies ■ Require government approvals and independent, third party audit of critical habitats ■ Recognizes FSC, SFI and CSA certification and will consider other credible, independent and widely accepted third party certification standards
National				
Mandiri Bank, Indonesia	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability
Am Bank, Malaysia	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability
CIMB Bank, Malaysia	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability
RHB Bank, Malaysia	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability
Agribank, Vietnam	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability
VietinBank, Vietnam	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability
Kasikorn, Bank, Thailand	No	No	No	No robust ESG or related risk measures or monitoring systems identified to measure legality or sustainability

Source: Authors' compilation.

Table 4.5 Varying Degrees of ESG Due Diligence (Know Your Client) between Financial Institutions

Institution	Financial Services	Levels of ESG Due Diligence
Development banks (e.g., World Bank, IFC, ADB)	Equity, debt, hybrid finance, trade finance and sustainable finance	Typically strong due diligence practices and monitoring policies in place as part of their mandates. Leaders in ESG safeguards and guidelines and provide leadership to influence national banks through their role in funding intermediaries. Encourage credible third party verification and certification for legality and sustainability.
International commercial banks (e.g., HSBC, SCB, Citibank, BoA)	Bank loans, project finance, trade finance, financial advisory	Certain degree of self-regulated policies, practices and procedures for ESG in conformity with the IFC Performance Standards or EHS Guidelines, or Equator Principles, including in the forestry sector. Guidelines or rules of operations and projects that will, and will not, be funded or supported. Require third party verification and certification (FSC preference) for legality and sustainability or an action program toward that end.
National commercial banks in case study countries	Bank loans, project finance, trade finance	Generally no formal recognition of the IFC Performance Standards, EHS Guidelines or Equator Principles. ESG policies, practices, procedures and monitoring are weak or non-existent. No specific requirements for verification or certification for legality, sustainability, health or safety.

Source: Authors' compilation.

and international laws and regulations. Auditing and monitoring by credible, independent, third party verification and certification bodies and standards were common. Local banks studied tended to lack specific policies, practices, procedures and criteria for legality.

International development and commercial banks expect their clients to comply with the legally binding international laws and treaties as listed in Table 4.6.

Table 4.6 Relevant International Treaties Referred to by International Financing Bodies

Category	International Treaty
Labor and working conditions	<ul style="list-style-type: none"> International conventions negotiated through the ILO and the United Nations³¹
Pollution prevention, waste and hazardous materials	<ul style="list-style-type: none"> Convention on Long-range Transboundary Air Pollution Montreal Protocol on Substances that Deplete the Ozone Layer Basel Convention on the Control of Transboundary Movements of Hazardous Wastes Stockholm Convention on Persistent Organic Pollutants
Biodiversity conservation	<ul style="list-style-type: none"> CITES Convention on Biological Diversity Ramsar Convention on Wetlands
Cultural heritage	<ul style="list-style-type: none"> Convention Concerning the Protection of the World Cultural and Natural Heritage

Source: Authors' compilation.

31. Not all signed by the study countries. Even if a country is a signatory to a convention, implementation remains a challenge.

Clients assume obligations, and if they fail to uphold them, can be held liable under international law.

4.7.2 Client Sustainability

Based on the small number of banks and financial institutions analyzed in this report, it is apparent that international commercial banks apply a two-way approach to ensure that they are not exposed to sustainability risks through their forestry sector clients. The first is to specify to clients the sustainability policies, practices, criteria and monitoring procedures to measure compliance with sustainability standards. Secondly, banks state “exclusions” that will not be financed. Financial credit institutions in Southeast Asia screen and mitigate sustainability risks posed by their forestry clients based on four broad categories: environment, labor and working conditions (occupational health and safety), local communities and indigenous people.

Environmental requirements are the first main screening criteria for sustainability risk. Environmental concerns dominate financial credit institutions’ criteria and standards. The case study banks analyzed ban the conversion of primary tropical moist forest or HCVF to plantation use. Banks also require their clients to (i) conduct an environmental impact assessment, (ii) take environmental planning and management systems into account, (iii) avoid and minimize pollution and emissions (to water, air and land),

(iv) protect and conserve biodiversity and ecosystems, (v) promote sustainable management and use of natural resources, and (vi) have no link to deforestation activities.

International financial credit institutions also set requirements for labor and working conditions and criteria related to the engagement of local communities. The main requirements related to labor and working conditions are (i) fair treatment, non-discrimination and equal opportunity of workers; (ii) avoiding child labor and forced labor; and (iii) safe and healthy working conditions. The engagement of local communities involves disclosing information, consulting affected local communities, and engaging them in a project. Financial credit institutions should also (i) avoid or minimize risks to, and impacts on, the health and safety of local communities; (ii) avoid, or at least minimize, involuntary resettlement, and when that is non-avoidable, provide compensation for loss of assets, assistance and benefits for displaced persons; and (iii) establish a grievance mechanism.

Furthermore, requirements related to indigenous people need to be fulfilled. In particular, forestry sector clients should respect the dignity, legal and human rights, aspirations, sacred places, cultures and natural resource-based livelihoods of indigenous peoples. They should also avoid adverse impacts on indigenous peoples and minimize, mitigate or compensate them for adverse impacts in a culturally appropriate manner when negative impacts are unavoidable. Finally, forestry sector clients are obliged to carry out meaningful consultation with affected indigenous peoples and ensure their informed participation in all projects.

From the sample of local financial institutions and banks, if ESG policies or practices are stated, they tend to be generic, without specific indicators or monitoring systems in place.

4.8 Potential Role of Certification Schemes in Know Your Client

To determine the potential role certification standards could play in KYC, three representative examples were selected. First, the C&I of the LEI Standard 5000-1 are

Table 4.7 Sustainability C&I of LEI Standard 5000-1 (I)

Scope	Criteria
Productive sustainability	<ul style="list-style-type: none"> ■ Sustainability of forest resources ■ Sustainability of forest products ■ Sustainability of business
Ecological sustainability	<ul style="list-style-type: none"> ■ Stability of the ecosystem ■ Survival of endangered, endemic, and protected species
Social sustainability	<ul style="list-style-type: none"> ■ Guaranteed community-based forest tenure system ■ Guaranteed resilience and community and employees' economic development ■ Guaranteed continuity of social and cultural integration of community and employees ■ Responsibility to safeguard nutritional status and prevent negative impact on community health ■ Assurance of workers' rights

Source: Authors' compilation.

listed in Table 4.7. Second, the SmartWood Rainforest Alliance Interim FSC Standard for Vietnam (1 June 2010 version) is listed in Table 4.8. Third, the Malaysia C&I for Forest Management Certification (MC&I [2002]) (PEFC) principles were considered. Because they are identical to those of the SmartWood Interim Standard for Vietnam, they are not presented separately. The only difference is that the MC&I do not include a separate chapter on plantations, which is covered by a separate chapter of the Malaysian timber certification scheme.

Table 4.8 SmartWood Rainforest Alliance Interim Standard Principles to Assess Forest Management in Vietnam (II)

Principle	Content
1	Compliance with laws and FSC principles
2	Tenure and use rights and responsibilities
3	Indigenous peoples' rights
4	Community relations and worker's rights
5	Benefits from the forest
6	Environmental impact
7	Management plan
8	Monitoring and assessment
9	Maintenance of HCVFs
10	Plantations

Source: Authors' compilation.

4.8.1 Opportunities

Forest certification can significantly improve financial credit institutions' client screening and evaluation procedures for existing forest and forestry investments and, less so, new investments. The most important benefit that forest certification can bring to financial credit institutions' sustainability risk management is the significant amount of specificity the standards contain concerning SFM and biodiversity conservation. The standards make detailed requirements concerning, for instance, RIL, allowable harvesting levels, safeguarding rare species, maintenance of HCVPs, safeguarding ecological functions of forests, adoption of environmentally friendly pest management and biological control methods, specific content of management plans and monitoring and assessing forest operations. In tropical conditions, certification schemes also apply different standards and criteria to the management of natural and planted forests.

In addition, certain issues that certification standards address are missing from banks' client evaluation requirements, such as a contribution to local and regional economic development. Many of the banks studied in this report require that the communities within or adjacent to a forest management area should be given equal opportunities for employment by a forest operator. All three certification standards chosen for this analysis, however, go further. In addition to offering employment to local people, they also require that forest management should diversify local economy and contribute to regional economic development and the growth of domestic capital. This is an important risk management measure, because it decreases the dependence of the local community on a single forest product or forest operator. Through supporting the growth of local small and medium-size enterprises and local entrepreneurship in general, with time, a forest company can become one among many potential employers in the region. This will leave local people with several employment options and reduce a company's pressure for offering a job to all unemployed people.

Financial credit institutions also do not compensate for the use of traditional knowledge. They focus on the need to compensate (i) loss of land or assets (in case of

resettlement of local people), (ii) employment (where compensation refers to salary) and (iii) "offsetting" of negative environmental and social impacts. However, they do not refer to compensation in the case of use and implementation of a community's traditional knowledge regarding the use of forest species or management systems in forest operations. In contrast, all three certification standards clearly state that indigenous people should be compensated for the application of their traditional knowledge. Recognizing the value of traditional knowledge is a form of granting indigenous (or local) people intellectual property rights. Because there are no copyrights, trademarks or patents available for traditional knowledge, a monetary compensation is the second best way to take responsibility for the use of traditional knowledge and skills. There are cases in which local communities have assembled to defend their "knowledge rights" against companies. Therefore, making compensation for the use of indigenous knowledge is a good way to reduce sustainability risks.

By insisting upon third party, independent certification, funding institutions can reap the benefits of supporting clients that can demonstrate compliance with legality and sustainability criteria, without having to undertake the monitoring themselves. These tasks are entrusted to specialist third party, independent certification bodies with the technical expertise, experience and independence, paid for by the client.

4.8.2 Constraints

The standards to be achieved for forest certification for some forest entities in the case study countries may be considered too high to be achieved within the short to medium term. The compliance with certification criteria may be considered by some clients as too rigid, both technically and time wise. Specification of FSC certification is the most rigid, with SFI and PEFC less so and giving alternatives in accordance with an approved scheme the least. Time-wise, to borrow from the HSBC, BoA or SCB requires compliance with certification, and Citibank required proof of certification under an approved certification scheme within three to five years. National or local banks generally do not have any requirements for certification.

Although international commercial banks conform to the Equator Principles, IFC Performance Standards and EHS Guidelines and have in-house forest policies and CSR programs, commercial loans are generally granted without explicit and formal processes for assessing social and environmental sustainability. Banks tend to take for granted that effective monitoring and reporting of compliance are conducted by regulatory authorities. Credit teams and managers do not generally assess commercial and reputational risk and opportunities associated with SFM or forest certification. Banks do not understand the risks associated with forestry, nor do they offer incentives to their clients to achieve forest certification (GFTN, 2007).

New projects, in which clients will commence a new forest concession or new afforestation project, will not be able to demonstrate certification, no matter how much they may agree with certification principles, policies, standards and practices. However, long-term investors in the forestry sector have a track record that they can disclose, for better or worse. In a variation on this, a forestry client may have existing funding, which did not require certification, but now the funding institution's policies and criteria have changed. The funding institutions will need to demonstrate resilience in application and apply the policies and criteria from the point of refinancing. The client needs to be aware of this and ensure that the process for certification is commenced.

One issue that is missing from both certification standards and banks' requirement relates to working against corruption. Corporate corruption, that is, corporate criminality and the abuse of power by corporate officials (including, in some developing countries, police obstructing justice), is illegal. Corruption or bribery are governance risks rather than social or environmental risks per se; however, not addressing them poses significant sustainability risks for companies and their financiers.

Involuntary resettlement is one of the issues that forest certification standards do not address, but banks do. The international development financing bodies emphasize the importance of having a clear strategy to avoid or at least minimize involuntary resettlement of local people by exploring project alternatives and, in case involuntary

resettlement is unavoidable, provide compensation, assistance and benefits for displaced persons. Forest certification does not impose requirements to avoid involuntary resettlement nor to improve or restore the livelihoods and standards of living of displaced persons.

However, it is important to note that forest certification standards are usually imposed at a different time to financiers' requirements. That is, a bank may finance the forest industry long after the initial forest management and timber procurement phases. Therefore, it is sufficient for forest certifications to set requirements for established and approved tenure rights and for transparent consultations with local communities (e.g., FPIC). However, for a bank's risk management it is important to have a strategy for involuntary resettlement. Forcibly displaced people are never happy with their situation and create a significant social risk to a company or financier behind the company responsible for displacement.

4.9 Lessons Learned

4.9.1 International Checklist of Safeguards

The IFC, Performance Standards and EHS Guidelines, Equator Principles and ADB Guidelines provide the checklist of internationally credible safeguards that responsible financing institutions and investors are expected to clarify with their clients. These are summarized according to Table 4.9.

4.9.2 Verification and Certification

Voluntary certification fulfills a valuable role for financial credit institutions seeking to evaluate the legality and sustainability risk of their forestry clients. In fact, global financial credit institutions use ESG screening tools (and exclusion lists) to identify, quantify and address risks associated with financing forest sector activities in Southeast Asia. These tools are used for the purpose of foreseeing and mitigating banks risk for financing illegal and unsustainable forestry operations. Many international commercial banks have policies that

Table 4.9 Safeguards for Financing Institutions and Investors to Clarify with Their Clients

Safeguards	Questions to Clarify
General management policies	<ul style="list-style-type: none"> ■ What is the company’s policy on SFM, and does the company have a long-term forest management plan? ■ Does the company have ISO 14001 Environmental Management certification for any of its operations? <ul style="list-style-type: none"> ■ If so, what is the scope of certification? ■ If not, has the company developed a clear policy on environmental management? ■ Does the company have a policy to deal with conflicts with the communities where it operates? ■ Has the company endorsed international collaborative measures to address relevant ESG issues such as human rights or labor rights?
SFM	<ul style="list-style-type: none"> ■ Is the company involved in land-use change or forest conversion? If so, what is the proportion of this as a percentage of forest under management? ■ What was the condition of land before conversion (e.g., primary forest, secondary forest, degraded)? ■ Does the company employ RIL? ■ Before any logging activities, does the company have a process to ensure that areas of HCVF are protected? ■ What measures are in place to control and prevent loss of biodiversity? ■ What is the company’s rate of replanting? Is replanting sufficient to replenish logging activities? ■ Does the company have a policy in place to combat flooding, natural fire and other natural disasters? ■ What pesticides does the company use and does it have a pesticide management plan? ■ How does the company manage the potential impact of logging on nearby watersheds?
Certification	<ul style="list-style-type: none"> ■ Has the company developed a policy on certification? ■ What is the proportion of certified forest under management? ■ Does the company have a clear working timetable and target for forest certification? ■ Is the company working with any NGO, trade network or consultants toward certification? ■ Does the company have a policy for its supply chain to be certified? ■ For integrated players, is there a system to segregate between certified and non-certified wood?
Compliance	<ul style="list-style-type: none"> ■ Have there been any legal claims relating to a breach in environmental legislation, land conflict, worker health and safety associated with the company’s operations? ■ How does the company keep abreast of changing regulatory environment and assess regulatory risk? ■ Does the company have systems in place to ensure that logging quotas and requirements set by the government are strictly adhered to?
Social conflict	<ul style="list-style-type: none"> ■ Does the company have a system in place to ensure legality of land and that boundaries are clearly drawn? ■ What strategies does the company employ to settle social conflict with local communities and indigenous peoples? ■ Has the company been engaging with local communities and NGOs to understand local social and environmental issues ■ Does the company have a policy of requiring FPIC of local communities before commencement of any logging activities? ■ Is there a system in place to ensure that resolutions are fair to both the local and indigenous people? ■ Is there a clear and transparent complaints procedure for local and indigenous people?
Legality	<ul style="list-style-type: none"> ■ Does the company have policies in place to ensure that its concession boundaries are protected against illegal loggers? ■ Is the company participating in international collaborative measures to combat illegal logging, such as the WWF GFTN? ■ What is the proportion of wood that is sourced from third parties? ■ Is there is any system to ensure that such third party wood can be verified?

Source: Authors’ compilation.

require forest certification schemes, with preference for FSC certification or an equivalent credible certification scheme. In this way, these financing institutions reduce legal, social, environmental and financial risks and ensure that their client’s projects commit to legal and sustainable practices. Because most bank staff are not specialists in SFM, international, third party certification fulfills a critical role in monitoring legality and

sustainability of forests and forest products trade. Local banks in Southeast Asia focus on traditional financial risks and, in the main, have little reference to ESG criteria or require third party, independent verification or certification.

As international commercial banks are either insisting upon or encouraging the processes toward verification

and certification, it would seem a reasonable CSR policy to provide incentives to their clients to meet the relatively high, up-front cost of verification and certification. The high up-front costs, increased operational costs, reduced productivity and lack of a premium paid by buyers and customers are considered important disadvantages of particularly certification by forest and forest industries investors and managers. Financial institutions and commercial banks could consider strengthening the following actions to stimulate more forest certification in Southeast Asia and to reduce social, environmental, economic and financial risks:

- Improve market intelligence and communication between producers and buyers on the availability of

certified forest products and the potential markets and price premiums that can be achieved

- Support feasibility studies and financial analyses on certification to better understand the costs and benefits and to build confidence
- Banks, external partners and clients work to clarify forest policies, procedures and practical implementation tools and control mechanisms
- Establish external partnerships (e.g., Rainforest Alliance, GFTN) to provide capacity building and third party, independent and credible services
- Introduce progressive finance facilities structured to support SFM, certification and a sensible risk management strategy (better risk management equates to better business for the financial institutions and banks, as well as their clients).

SECTION 5

RECOMMENDATIONS TO STRENGTHEN CERTIFICATION AND VERIFICATION LINKS WITH FOREST LAW ENFORCEMENT

The complementarities among law enforcement, certification and legality verification schemes can be realized only if promoted aggressively and attempts are made to better define and systematically harmonize the legality and sustainability standards, followed by better enforcement and monitoring systems. The key areas for engagement that cover a broad range of issues involving public as well as private stakeholder are:

- (vi) *Harmonization and integration of standards:* Harmonize legality verification and certification standards, building upon synergies in procedures, methods and standards to systematically include the legal requirements defined in national legality assurance standards and international legality standards for the certifiable activities in the supply chain (including EUTR and FLEGT requirements).
- (vii) *Capacity building in producing countries:* Increase capacity and resources in producing countries to develop credible internal monitoring systems as well as effective and independent certification and verification bodies.
- (viii) *Incentives to the private sector:* Encourage certification by providing incentives for stepwise

approaches coupled with financial and non-financial incentives (e.g., fiscal incentives, reputational gains for certified companies, linking business and SFM managers, government regulations on green building codes and green public procurement).

- (ix) *Incentives to smallholders:* Encourage group certification by providing streamlined procedures and lower certification costs to small-scale producer, groups or communities, access to markets and smallholder training programs and offering financial support to cover part of the certification cost.
- (x) *Access to credit:* Encourage and motivate local banks toward stronger legality and sustainability criteria that can lead to an ordinance with legal implications for those banks that do not apply stronger legality and sustainability criteria in their financing decisions.

The detailed policy recommendations to target organizations to achieve this are summarized in the following section. Given the limited uptake of certification in Southeast Asia so far and the large potential to increase certification in each study country, these policy recommendations broadly apply to all of them.

Development Banks and Other Donors

- Continue to provide technical support to timber-producing and timber-processing countries to harmonize, demonstrate and implement forest and CoC certification and/or legal verification in stepwise approaches to legality and sustainability.
- Encourage countries to recognize and strengthen voluntary certification as evidence on legal compliance and encourage markets to recognize and accept such evidence for legal compliance and SFM.
- Provide long-term assistance in development and comparison of experiences of national timber legality standards and verification systems in cooperation with other VPA signatory countries, civil society and private sector familiar with implementation of voluntary certification in forestry and timber industry.
- Increase capacity and resources in producing countries to develop monitoring systems to improve internal control in private and public forestry organizations and integrate third party certificates as optional evidence on compliance.
- Increase technical assistance and improve cooperation with certification and regional governmental bodies for building capacity of certification bodies in-country.
- Facilitate and enhance cooperation between wood-producing countries, ASEAN importing countries and China, as well as key consumer countries, to harmonize legality verification and certification requirements.
- Continue to support good forest governance in collaboration with the FLEGT Action Plan and other national and international regulatory initiatives and encourage strengthening of cross-sector linkages.

Government Institutions

- Provide incentives to enterprises to encourage stepwise approaches to put in place verification schemes that demonstrate legal conformance while developing national certification criteria and

standards, ultimately reaching the required performance level of SFM (which should be higher than the legal requirements).

- Provide targeted fiscal incentives to encourage SFM in public and private forests, ranging from simplified auditing procedures to reductions in timber royalty rates for certified companies with preferential treatment for small-scale producers.
- Introduce/enhance government regulations on green building codes and green public procurement.
- With certification bodies and other key stakeholders, lead processes to harmonize legality verification and certification standards to systematically include legal requirements defined in national legality assurance standards for the certifiable activities in the supply chain.
- Integrate, as appropriate, reliable, impartial and efficient audit and verification procedures implemented in voluntary certification into the legality verification.
- Recognize certification as an impartial, reliable, controlled and transparent tool contributing toward (but not guaranteeing) legal compliance and sustainability of all forest operations.
- Review how legality is defined in each certification standard compared to the legality standards of FLEGT-VPA and to meet EUTR, *Lacey Act*, *Australian Illegal Logging Prohibition Bill* and other international regulatory requirements.
- Improve cooperation with technical assistance providers and certification bodies to build capacity of certification bodies in-country.
- Improve cooperation with ASEAN importing countries and China, as well as key consumer countries, to harmonize legality verification and certification requirements.
- Encourage and motivate local banks toward stronger legality and sustainability criteria that can lead to an ordinance with legal implications for banks that do not apply stronger legality and sustainability criteria in their financing decisions.

Certification Bodies

- Continue efforts to increase the area under certification or legal verification in stepwise approaches.

- Provide early orientation and guidance on procedures to potential clients and follow up in a swift and efficient manner to their certification requests.
- Offer group certification with streamlined procedures and lower certification costs to small-scale producers and groups of producers, while offering financial support to cover part of the certification cost.
- With government institutions and other key stakeholders, harmonize legality verification and certification standards, building upon synergies in procedures, methods and standards to systematically include the legal requirements defined in national legality assurance standards for the certifiable activities in the supply chain.
- Review how legality is defined in each certification standard in contrast to the legality standards for FLEGT-VPA and to meet EUTR, *Lacey Act*, *Australian Illegal Logging Prohibition Bill* and other international regulatory requirements.
- Improve cooperation with technical assistance providers and regional governmental bodies to build capacity of certification bodies in-country.

Enterprises in the Forestry Sector

- Review the business case for certification and verification for legality and sustainability and share through forestry and forest industries networks.
- Demonstrate leadership in corporate responsibility by responding to market preference by adopting existing processes for legal verification and certification (forest and CoC) as proof of legality and sustainability.
- Participate actively and support efforts by governments and regional governmental bodies to improve transparency and strengthen laws and procedures to control illegal logging and associated trade in illegal forest products
- Industry associations demonstrate their commitment to fight illegal logging and associated trade in illegal forest products by adopting codes of conduct and encouraging their members to subscribe to such codes.

International Commercial Banks in Southeast Asia

- Integrate legality and sustainability criteria in banks' financing evaluation and risk assessment.
- Evaluate projects and clients for legality, sustainability and other risks against agreed upon standards as applied in their unique local contexts and risks.
- Introduce progressive finance facilities structured to support SFM, certification and sensible risk management strategy.
- Enhance networking with key stakeholder groups to use their knowledge of the Southeast Asian forests and forestry context and establish external partnerships to provide capacity building and third party independent and credible services.
- Improve market intelligence and communication between producer and buyers on the availability of certified forest products and the potential markets and price premiums that can be achieved.

Local Banks in Southeast Asia

- Adopt international principles, standards, safeguards and procedures for greater transparency on client evaluation procedures, risk assessment practices and more sustainable business modes.
- Cooperate and make joint efforts when improving client evaluation procedures and risk assessment practices to reduce associated costs and bureaucracy.

Non-governmental Organizations (NGOs)

- Disseminate knowledge of grass-roots level challenges in the forest sector to decision makers, financiers and forest companies.
- Share knowledge on legal and sustainable practices and benefits as benchmarks as well as the penalties and consequences of unsustainable and illegal business practices.

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Important Web Links

Accreditation Services International FSC Program	http://www.accreditation-services.com/programs/fsc
ADB Environmental Safeguards	http://www.ADB.org/site/safeguards/environment
ADB Policy Safeguards Statement	http://www.ADB.org/site/safeguards/policy-statement
ASEAN and REDD-plus	http://www.aseanforest-chm.org/asean-regional-knowledge-network-on-forests-and-climate-change-fcc/
ASEAN Forest Clearing House Mechanism	http://www.aseanforest-chm.org/asean-forest-clearing-house-mechanism-chm/
ASEAN Strategic Plan of Action (2005–2010)	http://www.asean.org/news/item/strategic-plan-of-action-on-asean-cooperation-in-food-agriculture-and-forestry
ASEAN Vision 2020	http://www.aseanhrmech.org/downloads/Asean-Vision-2020.pdf
Australia, <i>Illegal Logging Prohibition Bill</i> , 2011	http://www.daff.gov.au/forestry/international/illegal-logging
Confederation of European Paper Industries	http://www.cepi.org/
CertiSource	http://www.certisource.co.uk/
Chatham House, Illegal Logging	http://www.illegal-logging.info/
Chatham House. Measuring the Response to Illegal Logging: Indicators of Progress	http://www.chathamhouse.org/research/eedp/current-projects/measuring-response-illegal-logging-indicators-progress
China Forest Certification Council	http://www.cfcn.cn/
CIA The World Factbook	https://www.cia.gov/library/publications/the-world-factbook
CIFOR	http://www.cifor.cgiar.org
Collaborative Partnership on Forests	http://www.cpfweb.org/en/
CPET	http://www.cpet.org.uk
EFI European Forest Institute	http://www.euflegt.efi.int
Environmental Paper Network	http://www.environmentalpaper.org/
Equator Principles	http://www.equator-principles.com/
Europa – Press Releases	http://europa.eu/rapid/search.htm
European Commission Timber Regulation	http://ec.europa.eu/environment/forests/timber_regulation.htm
FAOStat Forest Products	http://www.fao.org/forestry/databases/29420/en/
Forest Certification Assessment Guide	http://siteresources.worldbank.org/EXTFORESTS/Resources/FCAG_WB_English.pdf
FERN	http://www.loggingoff.info
FLEGT Home	http://www.euflegt.efi.int/portal/
FLEGT Action Plan European Union	http://ec.europa.eu/environment/forests/illegal_logging.htm
FLEGT Briefing Note Notes	www.euflegt.efi.int/files/.../euflegt/efi_briefing_note
Forest Certification Assessment Guide	http://siteresources.worldbank.org/EXTFORESTS/Resources/FCAG_WB_English.pdf
FSC Certificate Database	http://info.fsc.org/
G8 Action Program on Forests	http://www.illegal-logging.info/item_single.php?it_id=38&it=document
GFTN Global Forest & Trade Network	http://gftn.panda.org/about_gftn/
Global Forest Resources Assessment, 2010	http://www.fao.org/forestry/fra/fra2010/en/

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Global Forestry Registry	http://www.globalforestryregistry.org
Global Forestry Services	http://www.gfsinc.biz/
Global Integrity Report	http://www.globalintegrity.org/report
Global Integrity, 2011: Why We Killed the GII	http://www.globalintegrity.org/node/792
Good Wood Good Business	http://www.tft-forests.org/downloads/GWGB_English.pdf
International Council of Forest and Paper Associations	http://www.icfpa.org
IFC Sustainability	http://www.ifc.org/sustainability
Illegal Logging Info Database	http://www.illegal-logging.info/
ITTO	http://www.itto.int/
Lacey Act USDA	http://www.aphis.usda.gov/plant_health/lacey_act/
LEI	http://www.lei.or.id/
Malaysian Timber Certification Council	http://www.mtcc.com.my/
Mongabay	http://rainforests.mongabay.com
Montreal Process for C&I for SFM in Temperate and Boreal Forests	http://www.unece.org/fileadmin/DAM/timber/meetings/4.1_Montreal_Process.pdf
National Wood Flooring Association	http://woodfloors.org/
Nature, Ecology and People Consult	http://www.nepcon.net/
PEFC Certification Services	http://www.pefc.org/certification-services/overview
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PILL-GreenNetwork	http://redd-indonesia.org
Pinchot Institute for Conservation	http://www.pinchot.org/about_pic/mission
REDD-plus portal	http://redd-plus.com/drupal/
Scientific Certification Systems	http://www.scscertified.com/
SGS Forestry	http://www.sgs.com/en/agriculture-food/Forestry.aspx
Rainforest Alliance	http://www.rainforest-alliance.org/
Rainforest Alliance, Timber Legality Verification	http://www.rainforest-alliance.org/forestry/verification/legal
Sustainable Forest Finance Toolkit	http://www.pwc.co.uk/sustainability-climate-change/issues/forest-finance-home.jhtml
Sustainable Procurement of Wood and Paper-based Products	http://www.sustainableforestprods.org/
The Prince's Rainforest Project	http://www.rainforestsos.org/about-rainforests/whats-happening-to-them/drivers-of-deforestation/
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UK government timber procurement policy	http://www.cpet.org.uk/uk-government-timber-procurement-policy
Verifor, Principles in Forest Verification	http://www.odi.org.uk/node/15991
Wikipedia on sustainable forest management	http://en.wikipedia.org/wiki/Sustainable_forest_management
World Bank: CPIA	http://data.worldbank.org/data-catalog/CPIA
World Bank: World Wide Governance Indicators	http://info.worldbank.org/governance/wgi/sc_country.asp
World Business Council for Sustainable Development: Forestry Solutions	http://www.wbcsd.org/work-program/sector-projects/sustainable-forest-products-industry.aspx
World Resource Institute	http://www.wri.org/
WRI: Governance of Forests Initiative	http://www.wri.org/project/governance-of-forests-initiative
WWF-Indonesia	http://www.wwf.or.id/

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ANNEX 1: FRAMEWORK FOR GOOD FOREST GOVERNANCE

TABLE A1.1: Building Blocks and Principal Components of Good Forest Governance
(good forest governance diagnostics, indicators and toolkit to be derived for each country)

<i>Principle Components</i>	<i>Indicative Sub-components</i>
<i>Building Block 1: Transparency, Accountability and Public Participation</i>	
Transparency in the forest sector Decentralization, devolution and public participation in forest management Accountability of forest officials to stakeholders Accountability within forest agencies	<ul style="list-style-type: none"> ■ Public availability of forest data, plans, laws, budgets and other information relevant to forest use and management ■ Public notice of pending forest agency actions ■ Transparent allocation of wood and NWFP concessions ■ Forest communities have institutional roles in creating public forest management rules and plans ■ Accessibility to forest resources by local communities ■ Support framework for participatory forest management <ul style="list-style-type: none"> ■ Forest agencies responsive to public input ■ Participatory processes structured to promote consensus ■ Feedback to stakeholders about forest resources and their management ■ Presence of autonomous organization for monitoring activities ■ Influence and interest of civil society organizations on forest issues ■ Management in the forest agencies/departments is oriented toward accountability: <ul style="list-style-type: none"> ■ Clear statement of forest management strategy or goals ■ Goals and objectives of forest management disseminated to rank and file officials ■ Forest officials evaluated and held accountable for failures to meet stated goals
<i>Building Block 2: Stability of Forest Institutions and Conflict Management</i>	
General stability of forest institutions Management of conflict over forest resources	<ul style="list-style-type: none"> ■ Risk posed to forest management from changing forest agency budgets, leadership or organization ■ Risk posed to forest management from changing or inconsistent laws and policies and their implementation ■ Risk posed to forest management because of unreliability of tenure rights ■ Perceived fairness of distribution of rights ■ Level of conflicting claims over public forests ■ Prevalence of violence or use of arms by forest users
<i>Building Block 3: Quality of Forest Administration</i>	
Willingness to address forest sector issues Capacity and effectiveness of forest agencies Corruption control within the forest sector Forest monitoring and evaluation (M&E)	<ul style="list-style-type: none"> ■ Commitment to verification of legality, certification and SFM <ul style="list-style-type: none"> ■ Support for adoption of forest best practices code/guide ■ Support for private certification ■ Support for codes of professional conduct for foresters and civil servants ■ Institutional separation of key functions – legislative, administrative, control, law enforcement ■ Signatory to and quality of implementation of international commitments related to forestry ■ Maintenance of workable forest policies <ul style="list-style-type: none"> ■ Collaboration with regional partners to harmonize forest policies and legal frameworks ■ Cross-sectoral policy coordination ■ Ability to revise and respond to change ■ Public confidence in forest agencies ■ Capacity of forest agencies <ul style="list-style-type: none"> ■ Human resources, skills and knowledge ■ Equipment and tools ■ Stability of budgets and quality of budget process

TABLE A1.1: Building Blocks and Principal Components of Good Forest Governance (good forest governance diagnostics, indicators and toolkit to be derived for each country) (continued)

Principle Components	Indicative Sub-components
Building Block 3: Quality of Forest Administration	
	<ul style="list-style-type: none"> ■ Quality of forest resource management <ul style="list-style-type: none"> ■ Quality of information on forests ■ Quality of planning and impact assessment (including cross-sectoral coordination) ■ Activities in the forest are comply with plans ■ Commitment to sustainability ■ Effectiveness of enforcement institutions <ul style="list-style-type: none"> ■ Fairness and responsiveness of forest officers (and police, if involved in forest enforcement) ■ Effectiveness of prosecutors and courts on forestry matters ■ Forest extensions and environmental education efforts ■ Independence of civil services uniformly applied and collected ■ Availability of incentives to practitioners and responsible forest use and management ■ Revenues from forests accounted for ■ Budget transparency ■ Audits of forestry projects ■ Existence of government anticorruption institutions and measures, including channels for reporting corruption and whistle blower protection ■ Effectiveness of anticorruption institutions and measures ■ Clear code of business conduct for forest industries ■ Presence of strong NGO watchdogs ■ Continuous forest inventory of plots established and measured regularly ■ Documentation and record of forest management and forest activities to facilitate monitoring ■ Results of M&E are incorporated into new forest management plans ■ Results of monitoring are readily available to the public ■ Local people are involved in monitoring of forest resources
Building Block 4: Coherence of Forest Legislation and Rule of Law	
<p>Quality of domestic forest legislation</p> <p>Quality of civil law implementation</p> <p>Quality of criminal forest law enforcement</p> <p>Quality of forest adjudication</p> <p>Property rights recognized, honored and enforced</p>	<ul style="list-style-type: none"> ■ Forest legislation effectively and efficiently implemented by forest agencies <ul style="list-style-type: none"> ■ Avoids legislative overreaching ■ Avoids unnecessary and cumbersome requirements ■ Enhances transparency and accountability ■ Informal rules, where present, are consistent with formal rules ■ Forest legislation is consistent with participatory governance <ul style="list-style-type: none"> ■ Gives local actors a stake in good management ■ Developed with public involvement ■ Clearly states how local people can play a meaningful part in planning, management and allocation of forest resources ■ Forest laws verified as actually applied ■ Labor, safety, environmental, human rights and other laws are applied in forest settings ■ Suppression: Credible and graduated sanctions, consistently applied ■ Detection: Capacity to detect illegal activity ■ Prevention: Number of forest-related crimes <ul style="list-style-type: none"> ■ Organized crime ■ General crime

(continued)

TABLE A1.1: Building Blocks and Principal Components of Good Forest Governance
(good forest governance diagnostics, indicators and toolkit to be derived for each country) (continued)

Principle Components	Indicative Sub-components
Building Block 4: Coherence of Forest Legislation and Rule of Law	
	<ul style="list-style-type: none"> ■ Access to courts or arbitrators <ul style="list-style-type: none"> ■ Fair, honest and independent ■ Affordable, rapid ■ Enforceable outcomes ■ Formal and informal rights to forest resources in harmony ■ Security of property rights to forest resources, including carbon ■ Quality of forest surveys, records and cadastre ■ Contracts and agreements honored/enforced ■ Legality of land-lease contract with international investors ■ Support for community, small, medium enterprises
Building Block 5: Economic Efficiency, Equity and Incentives	
<p>Maintenance of ecosystem integrity: Sustainable forest use</p> <p>Incentives for sustainable use and penalties for violations</p> <p>Forest products pricing</p> <p>Commercial forest products trade and forest businesses</p> <p>Equitable allocation of forest benefits</p> <p>Market institutions</p> <p>Forest revenues and expenditures</p>	<ul style="list-style-type: none"> ■ Knowledge of supply and demand for forest products and their alignment ■ Minimum safeguards for sustainability included in forest management plans ■ Forest stakeholders have reasonable share in economic benefits from forest use ■ Payments for protecting environmental services from forests ■ Forest law enforcement targets illegitimate operations ■ Expected returns from illegal logging use lower than expected penalties imposed for illegal use ■ International market prices used as reference prices for traded products ■ Internalization of effects of social and environmental externalities arising from forest resources use ■ Removal of distortionary subsidies within the forest sector ■ Forest resource allocation based on market prices ■ Transparent wood and NWFPs concession allocation processes ■ Competitive forest products auctions ■ Streamlined export taxes and import duties on forest products ■ Equitable pattern of land and forest resource tenure ■ Adequate access and use rights where ownership is with the state (or contested) ■ Equitable share of wood and NWFPs ■ Competitive forest sector ■ Use of appropriate incentives in forest management ■ Efficient system of revenue collection for wood and NWFPs <ul style="list-style-type: none"> ■ Taxes, levies and charges based on ensuring normal profits ■ Efficient system of public expenditures for forestry <ul style="list-style-type: none"> ■ Public expenditure tracking system operational in the sector

ANNEX 2: SOUTHEAST ASIAN COUNTRY STATUS AND TRENDS

A2.1 Indonesia

A2.1.1. Forests and Forest Management

Indonesia has vast forest resources accompanied by a high rate of forest use. As detailed in Table A2.1, forests cover 52% of the land area, but less than 40% of the area

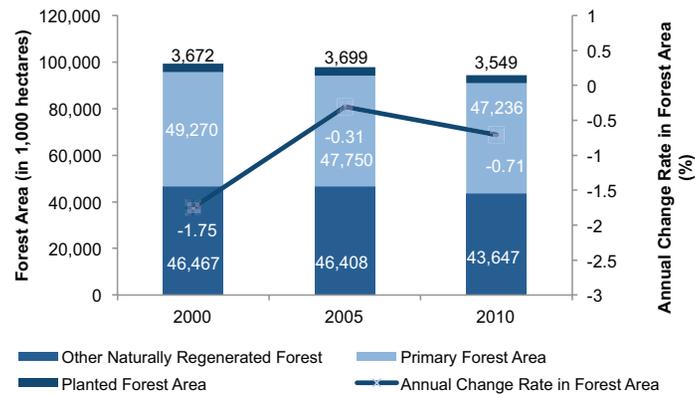
is designated for forestry use. The state owns 91% of forest land and issues concession rights to private companies and organizations for forestry operations.

Currently, the members of the APHI manage an area of 35.5 million hectares and largely define the potential of the area for timber production on forest land. However, the Indonesian government has had a policy of

TABLE A2.1: Indonesia Forests and Forestry Data

Forests and Forestry Data		
Population	Total 227.3 million, density 125/km ² , growth 1.2%/year	
Land area	181.2 million ha	
Total forest area	94.4 million ha (52.0% forest cover)	
Designated Function of Forests		
Productive (wood, fiber, fuel, NWFPs)	50.0 million ha (53%)	
Protective (soil, water, etc.)	22.7 million ha (24%)	
Conservation of biodiversity	15.1 million ha (16%)	
Social services	0.0 million ha (0%)	
Multiple use	0.0 million ha (0%)	
Other	0.0 million ha (0%)	
Unknown/unspecified	6.6 million ha (7%)	
Forest Characteristics		
Primary forest	47.2 million ha (50%)	
Other naturally regenerating forests	43.6 million ha (46%)	
Planted forests	3.5 million ha (4%)	
Forest ownership	Public 91%, private 9%	
Forest Cover Trends		
1990	118.5 million ha	
2000	99.4 million ha (−1.8% decrease 1990–2000)	
2005	97.9 million ha (−0.3% decrease 2000–2005)	
2010	94.4 million ha (−0.7% decrease 2005–2010)	
Wood Removals 1990–2005	Industrial Roundwood (1000 m ³)	Fuelwood (1000 m ³)
1990	25,485	144,680
2000	17,792	101,098
2005	14,428	86,396
People Employed in Public Forest Institutions		
2000	14,809	
2005	15,548	
2008	16,803	
Main international markets for timber/timber products	Japan, the European Union, the United States, China	
Ratification of international conventions/agreements	CBD, UNFCCC, Kyoto Protocol, UNCCD, ITTA, CITES, RAMSAR, World Heritage Convention, NLBI of UNFF	

Sources: CIA – the World Factbook: <https://www.cia.gov/library/publications/the-world-factbook> FAO (2010a).

FIGURE A2.1: Forest Area and Deforestation Rate in Indonesia

Source: FAO (2010a)

decreasing the number of concessions and of focusing on concessionaires that are active in timber production and processing. The number of concessions decreased from 324 to 308 between the years 2007 and 2008 (Ministry of Forestry, 2009a).

The primary forest area in Indonesia is decreasing despite efforts to combat unauthorized harvesting and forest clearance. Figure A2.1 summarizes forest area and deforestation in Indonesia, 2000 to 2010.

The annual deforestation rate was 1.8%, 1990 to 2000; 0.3% 2000 to 2005 and 0.7% 2005 to 2010. This rate implies that 0.685 million to 1 million hectares of forests are cleared every year (FAO, 2010a; Ministry of Forestry, 2009a). The highest deforestation rates are found on the islands of Kalimantan and Sumatra, where the average rate of forest loss was 0.246 and 0.269 million hectares respectively in 2000 to 2005 (Ministry of Forestry, 2009a).

Timber production volumes are highest on Kalimantan, where over 50% of the 308 forest concessions are located, covering 12.86 million hectares (46% of the total concession area).

Plantation licenses are issued for 143 units covering 7.12 million hectares (Ministry of Forestry, 2009a) but only 3.5 million hectares are classified as planted forests (FAO, 2010a). The Ministry of Forestry (2009a) gives a lower figure of 0.33 million hectares.

A2.1.2 Forest Products, Marketing and Trade¹

Logs produced in Indonesia originate from natural forests, industrial plantations, other legal permits and conversion areas. The total timber production in 2006 was 21.8 million m³, 5.6 million m³ of which originated from natural forests; 11.5 million m³ from industrial plantations; 0.3 million m³ from state-owned forestry company Perum Perhutani plantation forests; 3.4 million m³ from conversion area (Indonesian forest conversion areas [IPK]) and 1 million m³ from other legal permits (other legal permits in Indonesia [ISL]).

Although log production from natural production forests sharply decreased during the period 1994 to 2006, when production declined from 17.3 million m³ in 1994 to 5.6 million m³ in 2006, total log production only slightly declined because of an increase of log production from plantations. Kalimantan and Sumatra contributed 78% of Indonesia's total log production. The main provinces for log production are East and Central Kalimantan; to the North, Central (Riau) and South Sumatra and Papua.

Since 1980, the Indonesian wood-processing industry has undergone rapid and major structural change as a result of government policies. A log export ban was

1. FAO, 2009. Indonesia Forestry Outlook Study, Working Paper No APFSOS II/WP/2009/13, for the Asia Pacific Forestry Sector Outlook Study II, FAO, Bangkok, Thailand.

introduced in May 1980 and totally imposed in 1985; the sawnwood export tax was introduced in November 1989; a prohibitive log export tax was introduced in June 1992 as a substitute for a lift on the log export ban; and the log export tax was reduced to 10% before December 2000 and then reduced to zero in 2000.

Production of sawnwood grew from 4.8 million m³ in 1980 to 7.1 million m³ in 1985, peaked at 10.4 million m³ in 1989, then sharply decreased to 1.5 million m³ in 2006. Production of plywood and veneer grew rapidly from 1 million m³ in 1980 to 8.4 million m³ in 1990, reached 9.7 million m³ in 1997 and decreased to 4.8 million m³ in 2006. Total production of pulp grew rapidly from 0.5 million tons in 1989 to 3.1 million tons in 1997 and reached 5.7 million tons in 2006. Forest products such as woodworking timber, block board, particle board and wood chips ranged from 0.1 million m³ to 2.3 million m³, 1983 to 2006.

The industrial roundwood equivalent to supply forest industries rose sharply from 11.7 million m³ in 1980, to 24.1 million m³ in 1985, peaked at 52.7 million m³ in 2003 and then fell rapidly to 39.2 million m³ in 2006. Meanwhile the supplies of industrial roundwood from logged over forests and increased harvesting from forest plantations affected the industry because of the species, size and quality.

The installed capacity utilization rate for the sawnwood industry rose from 86% in 1980 to 97% in 1989 and then fell sharply to 14% in 2006. The installed capacity for the plywood industry increased from 51% in 1980 to 99% in 1997, before falling to 44% in 2006. These trends reflect an increased industrial roundwood deficit for sawnwood and plywood and veneer industries as of 1997 that caused underutilization of investments in these industries. During this period, the installed capacity utilization rate for the pulp industry continued to rise from 65% in 2006 to 88% in 2006.

The share of Indonesia's exports destined for EU countries has declined from 18% to 14% over the past decade. This parallels similar reductions in Indonesia's exports to the United States and Japan. As a whole, the absorption of Indonesia's exports by these three markets have fallen from 55% in 2000, to 40% in 2009. Most of the

decline has been redirected to the ASEAN regional market.²

Up to 1997, total export values were mainly generated from plywood, veneer and sawnwood exports, but after the 1997 economic crisis, their export shares sharply declined and gradually replaced by pulp, paper and paperboard exports.

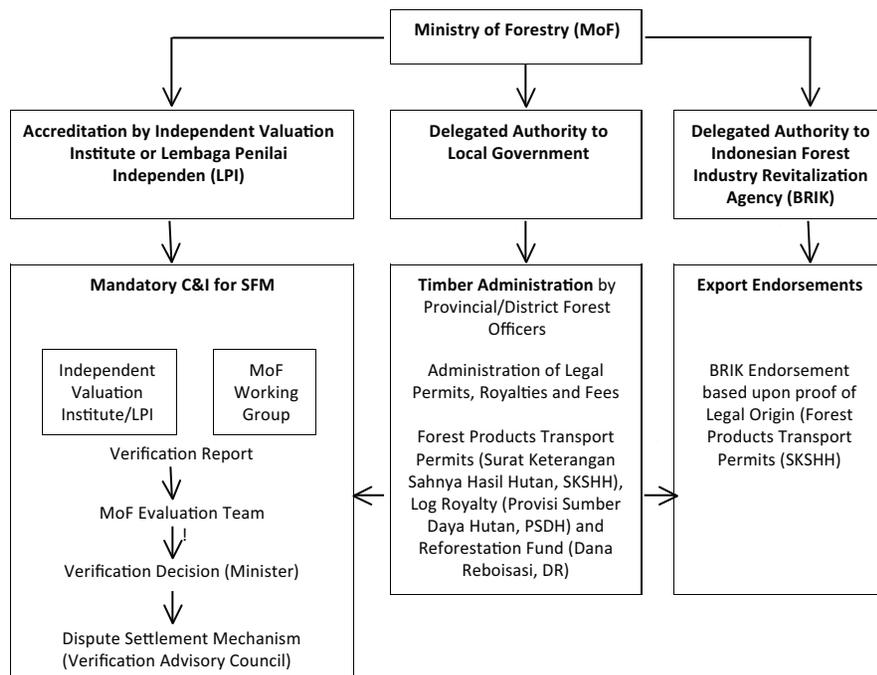
More than 90 NWFPs are traded in Indonesia, locally, nationally and internationally; however, most of their production and sales data is lacking. It was estimated that in 2001 to 2006, total export value of NWFPs was US\$2.62 billion, with varnish, sap and resin accounting for 74% and wood charcoal, 10%. Other important NWFPs included rattan, gums and resins (pine, *Shorea*, *Agathis*), aromatic oils, wood charcoal, honey, silk, fish, sago, cinnamon and fruits.

A2.1.3 Verification

The Ministry of Forestry controls issue of concession licenses and related mandatory certification of concessionaires. The Provincial Forestry Office and the District Office supervise planning and implementation of forestry operations and timber transports. Following a decentralization policy, the government has strengthened its control of forest use by recentralizing the decision making. Provincial and district governments do field checks on forestry and timber transports operations (Figure A2.2).

The BRIK, established in 2002, issues export licenses for timber. Although BRIK is a non-governmental organization, all timber exporters are required to join it. The license is issued based on the information on timber source, volumes and transportation documentation to monitor the legality of timber by reconciling the harvested and processed volumes over the supply chain. However, the credibility of BRIK verification was hampered by a lack of transparency and third party verification (Ogle Consulting, 2008).

2. European Commission, 2010. Indonesia's Trade Access to the European Union: Opportunities and Challenges. A project implemented by TRASNTEC & EQUINOCCIO. A report commissioned by the European Commission.

FIGURE A2.2: Forest Verification Systems in Indonesia

Source: Brown & Bird, 2008

The Ministry of Forestry gives financial support to the first certification according to the mandatory scheme. It may also allow certified organizations to “self-approve” annual forest management plans as part of general recognition of good management. This gives forestry companies a significant cost savings.

A2.1.4 National Legal Verification System or Standar Verifikasi Legalitas Kayu (SVLK)

The EU cooperation on FLEGT supported the Ministry of Forestry in developing a timber traceability and timber legality assurance system (SVLK). The central elements of SVLK are defined by the Ministerial Regulation³ and Director General of Forests Production Development’s Regulations.⁴ SVLK has been developed in a multi-stakeholder process. Civil society organizations may

3. P.38/Menhut-II/2009 stipulating institutional and operational framework for assessment of performance and verification of timber legality, and independent monitoring.

4. P.6/IV-Set/2009 stipulating standards and guidelines for verification of timber legality and performance in sustainability production forest management.

monitor the certification process and present complaints when unjustified certifications are suspected. The Ministry of Forestry issued the SVLK regulation in July 2009 and the related field guidelines in February 2010 (Hakim, 2010).

Legality verification is applied to state and private forest operations, as well as to operations in timber-processing plants. It covers round log production and processed timber products for domestic and export markets. The Ministry of Forestry strongly supports the implementation of SVLK in the field through information raising and a mandatory legality-certification process. The mandatory certification is a tool to get evidence of legal compliance and also to screen out complying concessionaires and allocate concession areas to them (Ministry of Forestry, 2009b). SVLK includes two options for certificates: (i) compliance to SFM (PHL); and (ii) Verification of timber legality (TL).

The Ministry of Forestry has appointed national third party verification bodies to assess compliance with the forest management or legality requirements. A total of 10 verification bodies do forest management audits,

and five bodies carry out legality verifications. The verification bodies must also have accreditation from the National Accreditation committee (KAN) (Hakim, 2010). If a concession receives a certificate on SFM (PHL), this also provides the evidence for legal compliance. On the other hand, if a concessionaire fails to meet the PHL requirements, a legality certification is required. The objective is that all wood industries in the supply chain will have a legality certificate.

The scale of the audit results on PHL certification reads “bad – fair – good – very good.” In the first round, some concessions failed to meet the requirements, but currently most have reached the level “fair” (Brown and Bird, 2008; Ministry of Forestry, 2009a). For legality verification, the outcome is either “compliance” or “non-compliance.” The certificate is valid for three years with annual surveillance audits (Hakim, 2010). The large majority of the concessions in natural forests and planted forests have been rated as fair in their performance (Ministry of Forestry, 2009a). For a timber industry that has a legality certificate and uses certified raw material, self-verification is adequate evidence of legal compliance. Despite the intention to have mandatory certification as a precondition for a concession license, only 25% of natural forest concessions (6.5 million hectares) have passed the mandatory certification (Ministry of Forestry, 2009a).

Compliance with the European Union

The EU-Indonesia FLEGT VPA experts’ meeting held in September 2009 discussed the compatibility of the Indonesian National Timber Legality Assurance System (SVLK) with the EU expectations for TLAS. The meeting concluded that the SVLK addressed the definition of legal timber, control of the supply chain and control and independent monitoring, which covers the EU expectations apart from provisions for FLEGT licensing. However, the experts suggested improvements to the SVLK (Ministry of Forestry, 2009b):

- Strengthening description of control structures and responsibilities in private and state forest management
- Specifications on implementation of regulations on environmental and labor protection at the provincial and district levels in different types of industry in the supply chain

- More specific guidance on control and monitoring procedures
- Consistent VLC regardless of existing certification status
- Development of procedures for FLEGT licensing
- Development of independent procedures for monitoring SVLK implementation and delivery

Over the past two years the SVLK has been improved in multi-stakeholder meetings to ensure better compliance with EU requirements for TLAS, including strengthening the CoC mechanisms, improving complaint and dispute settlement mechanisms and offering group certification schemes. All recommendations were adopted and will make the SVLK more robust and facilitate implementation among smallholders and complex business entities. A task force has been established to prepare an implementation strategy for the SVLK and to identify areas of support to the whole forestry industry. The SVLK, a basis for the FLEGT VPA that Indonesia signed with the European Union in May 2011, has been praised for the transparent multi-stakeholder development, the robust monitoring process and the inclusion of a continuous improvement mechanism.⁵ The VPA negotiation took seven years and is renewable for consecutive periods of five years.

The SVLK draws upon Indonesia’s laws and regulations on forestry, trade, environment, agriculture and land ownership, as well as international treaties signed and ratified by Indonesia. Indonesia’s legality definition is framed around key principles covering essential aspects of forest production and processing, depending on different forest contexts that include:

- State natural and plantation forests where principles cover (i) the legal status, area and right to utilize the forest; (ii) compliance with the legal requirements for harvesting; and (iii) compliance with the environmental and social aspects related to harvesting
- Privately owned forest; the principles cover ownership of the timber as it relates to the land area, the logs and the trading of logs, and this can be cross checked for traceability

5. Tropical Forest Trust news, 11 October 2011: <http://www.tft-forests.org/>

- Principles that regulate logging from non-forest zones that may or may not lead to forest conversion
- General legality standard covering the supply chain management of timber from the forest through processing units to the point of export

For each principle criteria, indicators and verifiers are defined to demonstrate compliance, together with verification guidelines describing the method and the appraisal norm to be used. These are closely linked to the criteria and indicators for SFM, which apply to all log production from concessions and cover production, social and ecological aspects. Conformity assessment bodies will audit operators annually for compliance with provisions of the SVLK and also act as outsourced licensing authorities for shipments.

Indonesia started implementing the Indonesia-EU VPA and will test pilot licensing of products to the European Union in 2012, with full implementation in time for entry to force of the EUTR in March 2013. The SVLK is being recognized by Indonesia's REDD-plus program as potentially contributing as an effective instrument toward good forest governance.⁶ The VPA is the first in Asia and will govern forest products trade estimated to be worth US\$1 billion/year. Once the VPA is operational, Indonesian authorities will permit the export only of timber licensed under the SVLK standards and EU customs authorities will prevent any unlicensed Indonesian forest products from entering the European Union.

A2.1.5 Certification

In addition to the mandatory verification systems under the authority of the Ministry of Forestry, private companies and community-based forestry organizations have applied for voluntary forest management and CoC certificates. The LEI developed a national voluntary forest certification scheme to provide evidence of SFM. The LEI scheme has different standards for the management of natural forests, plantation forests and community forests. So far, the scheme has not been endorsed by any of the major international forest certification frameworks (FSC or PEFC), although harmonization toward FSC requirements is under evaluation and dialogue. The Standard Development Group is in discussions to

develop a FSC National Standard for Indonesia in line with the FSC Principles and Criteria and International Generic Indicators under development. The aim is for completion and implementation in 2014.

Various NGOs and donor organizations have supported voluntary certification in Indonesia with the purpose of promoting FSC certification among the concession holders. In contrast to the concession licenses covering 26.16 million hectares of natural forests in 2008 (Ministry of Forestry, 2009a), the share of certified forests is still very limited. According to Indonesia forest data reported to FRA 2010, only 3% (1.4 million ha) of natural production forests and 18% (0.6 million ha) of forest plantations are certified under the LEI or FSC schemes, as detailed in Table A2.2.

The area of certified forests varies in time with issuance and suspension of certificates. Currently three FMUs have received LEI certificates for management of natural forests and three for the management of planted forests each covering about 0.5 million hectares⁷ in total. Fourteen FMUs have received an FSC forest management certificate covering in total 0.9 million hectares of both natural and planted forests.⁸ The sizes of individual FMUs range from a couple hundred of hectares to 217,000 hectares each.

Of the 2 million hectares of certified forests (4% of production forest area), 1.4 million hectares (70%) are natural forest concessions and 0.6 million hectares (30%) are planted forests. In the breakdown of forest management certification, the private sector has been issued 1.9 million hectares (95%), the state 0.07 million hectares (4%) and private or community groups 0.03 million hectares (1%), which is in opposite proportion to forest ownership in Indonesia (public 91%, private 9%).

Table A2.3 highlights controlled wood use in Indonesia.

Controlled wood standards help forest management enterprises demonstrate compliance with legal harvesting but not implementation of all applicable national and international laws. FSC controlled wood can be supplied to CoC certified operations for mixing with FSC

6. EU FLEGT News, July-August 2011.

7. WWF: <http://www.lei.or.id> accessed 28.4.2011

8. <http://info.fsc.org> accessed 28.4.2011

TABLE A2.2: Certified Forests in Indonesia

Forest Certification				
Scheme	Area (ha)	No	Type of Forest	Ownership
LEI	502,000	?	Natural forests	Private
	540,000	?	Planted forests	Private
	25,000	?	Community forests	Community group
LEI	1,067,000			
FSC				
SmartWood Rainforest Alliance	560,864	4	Natural	Private
	1,038	3	Plantation	Private
Soil Association Woodmark	38,043	2	Plantation	State
	1,005	1	Plantation	Private group
SGS Qualifor	33,047	1	Plantation	State
	90,956	1	Natural	Private
CU Certifications	212,880	2	Natural	Private
FSC Sub-total	937,833	14		
Total	2,004,833 (4%)	14+		

Source: <http://info.fsc.org/> March 2012; Authors' compilation

certified materials in production of FSC mixed wood products. Compliance with controlled wood standards allows forest management enterprises to demonstrate best efforts to avoid the trade in illegally harvested timber and implement responsible sourcing policies. At this stage, the controlled wood standards are 100% private owned and 100% on planted forests (FSC database, March 2012).

Table 3.4 highlights FSC and PEFC CoC use in Indonesia.

The number of CoC certificates has risen sharply to 209, of which FSC are 195 and PEFC 14 by March 2012. Additionally, two FMUs and four pulp and paper companies have passed the LEI CoC certification. The LEI is implementing programs to increase certification, especially in plantation forestry (FSC, 2011 and LEI, 2011). The significant increase in CoC certificates is an indication that companies are responding to market demands for uncontroversial sources of timber.

All the major international certification bodies, which having the accreditation to do third party certification under the FSC or other certification frameworks, are well established in Indonesia. The voluntary forest and CoC certification standards implemented in the country are presented in Table A2.5.

A2.1.6 Forestry Institutions, Policy, Legislation and Law Enforcement

Indonesia is faced with some significant policy challenges in the forest sector (Wells, 2008a). Forest degradation and deforestation has led to depletion of accessible timber resources and international pressure to combat unauthorized logging has encouraged government to take action. The government has identified forestry as one of the three priority sectors of economic development, together with fisheries and agriculture. Current emphasis is on industrial and community based

TABLE A2.3: Forest Managers Complying with FSC Controlled Wood Standards in Indonesia

FSC Controlled Wood				
Certification Body	Area (ha)	No	Type of Forest	Ownership
Soil Association Woodmark	281,038	1	Plantation	Private

Source: <http://info.fsc.org/> March 2012; author's compilation.

TABLE A2.4: FSC and PEFC CoC Summary for Indonesia

Certification Body	FSC	PEFC	Total	
	No	No	No	%
TT	59		59	28
SGS Qualifor	45	10	55	26
SmartWood Rainforest Alliance	54		54	26
LGA InterCert GmbH (IC)	22	1	23	11
SCS	7		7	3
BV Certification – Eurocertifor	2	2	4	2
DNV Certification AB	3		3	2
KPMG Forest Certification Services Inc. (KF)	1		1	0.4
CU Certifications	1		1	0.4
SQS	1		1	0.4
SKH		1	1	0.4
Total	195	14	209	100

Source: <http://info.fsc.org/> March 2012; <http://register.pefc.cz/>. March 2012; author's compilation

plantation forestry aimed to meet the timber supply gap otherwise fed by illegal logging.

According to Wells (2008a) the importance of industrial forestry sector to economic growth and revenue regeneration declined in the 2000s as a result of reduction

in annual allowable cut as the resource base dwindled, improved law enforcement and increased market competition from Malaysia and China. However, this leaves a legacy of substantial overcapacity in the timber processing industry which increases the pressure on illegal logging. Severe poverty is common in forest areas, which

TABLE A2.5: Forest and CoC Certification Standards Implemented in Indonesia

Scheme	Standard	Owner
	Forest Management	
FSC Forest Management	SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Indonesia (FM-32-Indonesia) (2008)	SmartWood Rainforest Alliance
	SCS Draft Interim Standard for Natural Forest and Plantation Forest Management Certification in Indonesia V1-0 (2009)	SCS
LEI	LEI standard 5000-1 System for Sustainable Natural Production Forests Management	LEI
	LEI standard 5000-2 Sustainable Plantation Forest Management system	
Chain of Custody		
FSC CoC	FSC CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004)	FSC
	FSC standard for company evaluation of FSC controlled wood (FSC STD 40-005)	
	FSC standard for forest management enterprises supplying non FSC certified controlled wood (FSC STD 300-10)	
	Sourcing reclaimed material (FSC STD 40-007)	
	Multi site CoC certification (FSC STD 40-003 V1-0)	
PEFC CoC	CoC of Forest Based Products – Requirements (2005)	PEFC Council

Source: Authors' compilation

also contributes to unauthorized forest use. National government has restricted the rights of district governments to issue industrial logging licenses in a recentralization process. Most categories of licenses remain the authority of Ministry of Forestry.

The government banned export of logs from 1 January 2011 and is committed to a two-year moratorium on new permits for forest conversion in primary natural forests and peat land forests (Gingold et al., 2011). The moratorium is one of the preconditions of the US\$ 1 billion REDD-plus agreement with the government and Norway. The agreement foresees systematic monitoring of any breaches and thus may improve the compliance to already existing regulations limiting logging in primary natural forests (Satriastanti, 2010).

Land tenure rights are contested in Indonesia. Only 10% of the National Forest Estate has been fully gazetted in line with stipulated procedures. Proprietary claims of forests remain unclear, which presents significant challenges to license holders planning to invest in the area. Current forest law (41/1999) does not recognize the areas of traditional communities (*Hutan Adat*) as private forest (*Hutan Hak*), but merely as one category of the National Forest Estate. The national law and *adat* law differ from each other in many respects; thus, conflicts often arise between the local *adat* community and companies holding a license, because the government issues permits to companies on land that the community considers theirs. Companies, for their part, feel that they hold a proper land use right under the license granted to them. As a consequence, significant areas of National Forest Estate are disputed by local people.

A2.1.7 Forests and Forestry toward 2020

According to the Indonesian Forestry Outlook Study, 2009,⁹ the objectives for management of Indonesian forest resources toward 2020 are:

- *Production forest*: Primary forest ranging from 8.5 to 8.6 million hectares, secondary forest from 31 to

31.2 million hectares, TPTII/SILIN system from 0.3 to 0.6 million hectares, pulpwood plantations from 2.6 to 3.3 million hectares, community timber plantation from 1.6 to 3.2 million hectares, timber plantation from 1.5 to 1.7 million hectares and non-forested areas 10.7 to 13.2 million hectares

- *Protection forest*: Primary forest, secondary forest, and non-forested areas are, respectively, 13.3 million hectares, 10.5 million hectares and 5.6 million hectares
- *Conservation forest*: Primary forest, secondary forest and non-forest areas are, respectively, 10.1 million hectares, 5.5 million hectares and 3.9 million hectares
- *Convertible production forests*: primary forest, secondary forest, non-forested areas are respectively 5.3 million hectares, 5.3 million hectares and 12.2 million hectares

The annual production and consumption growth of plywood, block board, sawnwood and pulp will increase by 10% to 15%, 28% to 34%, 17% to 23% and 7% to 8%, respectively. Moreover, the plywood, veneer, block board and sawnwood industries face a log deficit until 2013. The installed capacity of the pulp industry could increase.

To curb illegal logging, capacity building and institutional strengthening to carry out law enforcement, amending national laws and regulations to strengthen law enforcement and prosecuting those behind major forest harvesting, processing, transporting and trade crimes are priorities of the government. Promotion of transparency, independence and accountability, greater participation with key stakeholder groups, conflict resolution and compensation are also priorities identified.

A2.1.8 Potential for Certification, Verification and NTLAs/VPAs

The future potential to expand voluntary certification in Indonesia depends on the one hand on the interest of private or state-owned companies to apply for certificates. On the other, it will depend on making certification more accessible to small-scale producers, who face substantial financial and procedural obstacles. The theoretical limit

9. FAO, 2009. Indonesia Forestry Outlook Study. Working Paper No. APFSOS II/WP/2009/13, Asia Pacific Forestry Sector Outlook Study II, prepared by the Centre for Forestry Planning and Statistics, Ministry of Forestry, Indonesia, for FAO, Bangkok, Thailand.

is around 35.5 million hectares, which is the forest area managed by members of the APHI.

The share of certified concessions in natural forests will most likely increase steadily to 10%, assuming that every tenth current concession holder will apply for a certificate.¹⁰ This would increase the certified forest area up to 2.6 million hectares from the current 2.0 million hectares.

For forest plantations, the expansion of certification is more feasible, and the companies producing timber or timber products to environmentally sensitive markets can readily apply for a certificate. A general precondition for the expansion is that the plantation forests must not be established on converted lands. The area of forest plantations (currently 7% of production forest or 3.5% of forest area) is small in contrast to the forestry land, and only 30% of the current forest plantation area is certified. If the current forest plantation owners apply for a certificate, the area would increase from the current 0.6 million hectares to 3.5 million hectares.

Current licenses for industrial forest plantations have been issued for about 10 million hectares, but only one third of these have been planted to date (Ministry of Forestry, 2009a). Potential remains to expand forest certification in new plantings by an additional 3 to 4 million hectares in the future based on the assumption that the majority of the existing 3.5 million hectares of forest plantations and 10% of new forest plantations (not being converted from natural forests), will be certified. Currently, plantation wood is used mainly for pulp production in Indonesia, with limited but gradually increased demand for certified origin. If paper-producing companies and related international markets increase the demand for products of sustainable origin, companies will gain more interest in voluntary certification.

Government requirements on mandatory certification and the future EU FLEGT licensing procedures require a strong commitment from timber-producing and timber-processing organizations in Indonesia to provide evidence on legal compliance. The conformity to the national SVLK certification standard provides

evidence of either sustainable management or legal compliance according to the scope applied in audits. The SVLK certificate is recognized in the European Union as evidence of legal compliance, and the major national procurement policies along with major client organizations in Europe or the United States. The open issue is whether the SVLK certificate is adequate for specific client groups or financing bodies demanding both legal, sustainable timber production and certificates issued by internationally recognized accredited certification bodies. Currently only 25% of forest concessions have passed the SVLK legality or sustainability certification done by national verification bodies. This low figure indicates that the priority will be on promoting SVLK legality verification in the remaining 20 million hectares of active concession areas.

An option the companies have in striving for compliance with legality and sustainability requirements in Indonesia is to enroll in a stepwise forest certification process that is run most often by FSC accredited CBs. Such an approach builds the resources and competences to meet the SVLK legality requirements and to achieve an internationally recognized certificate for SFM. The market incentives for voluntary sustainability certification, often exclusively FSC certification, include better access to markets and premiums for certified timber. Additional incentives could be provided through fiscal incentives, ranging from simplified auditing procedures to reductions in timber royalty rates for companies that have a FSC or LEI SFM certificate (Jarvis and Jacobson, 2006).

It will also be important to lower the barriers of entry for smallholders to avoid the risk for further reducing their access to forestland and of barring them from access to environmentally sensitive markets. The main barrier of entry is cost, followed by onerous requirements for management plans and recordkeeping, overly complex or irrelevant procedures, limited institutional capacity to assist small-scale landowners, competition from cheaper plantation wood, lack of a guaranteed price premium to offset costs, and an imposition of “community” on diverse and disconnected groups (e.g., Forest Trends, 2003, 2004 and 2005). Streamlined certification standards and lower certification costs can help improve access to smallholders or groups of farmers as

10. The calculated average for a concession area is 85,000 ha.

offered, for example, by the FSC's SLIMF certification (FSC, 2009).

Another important caveat to bear in mind is that the capacity of certification bodies in Indonesia is still low. Capacity has been increasing over recent years, but is likely to be insufficient to accommodate the potential expansion in certification. In particular, capacity building efforts should focus on (i) reaching out to potential clients to inform them about procedures, (ii) improving the processing of certification requests and (iii) ensuring effective and independent audits.

A2.2 Malaysia

A2.2.1 Forests and Forest Management

Malaysia enjoys one of the highest percentages of forested land among developing countries, although to date it has faced severe deforestation. In reporting to FRA 2010, the Ministry of Natural Resources and Environment and the Department of Forestry, Malaysia, estimated that the total forest area was 20.5 million hectares (62% of the total land area). Key forest data are presented in Table A2.6.

TABLE A2.6: Malaysia Forests and Forestry Data

<i>Forests and forestry data</i>		
Population	Total 27.0 million, density 82/km ² , growth 1.7%/year	
Land area	32.9 million ha	
Total forest area	20.5 million ha (62% forest cover)	
Designated Function of Forests		
Productive (wood, fiber, fuel, NWFPs)	12.7 million ha (62%)	
Protective (soil, water, etc.)	2.7 million ha (13%)	
Conservation of biodiversity	2.0 million ha (10%)	
Social services	0 million ha (0%)	
Multiple use	3.1 million ha (15%)	
Other	0 million ha (0%)	
Unknown/unspecified	0 million ha (0%)	
Forest Characteristics		
Primary forest	3.8 million ha (19%)	
Other naturally regenerating forests	14.8 million ha (72%)	
Planted forests	1.8 million ha (9%)	
Forest ownership	Public 98%, private 2%	
Forest cover trends		
1990	22.4 million ha	
2000	21.6 million ha (–0.4% decrease 1990–2000)	
2005	20.9 million ha (–0.7% decrease 2000–2005)	
2010	20.5 million ha (–0.4% decrease 2005–2010)	
Wood Removals 1990–2005	Industrial roundwood (1000 m ³)	Fuelwood (1000 m ³)
1990	48,428	4,613
2000	21,946	3,831
2005	26,706	3,557
People Employed in Public Forest Institutions		
2000	11,000	
2005	8,400	
2008	8,600	
Main international markets for timber/timber products	China, Singapore, Japan, Taiwan, EU, Middle East	
Ratification of international conventions/agreements	CBD, UNFCCC, Kyoto Protocol, UNCCD, ITTA, CITES, RAMSAR, World Heritage Convention, NLBI of UNFF	

Sources: CIA – the World Factbook: <https://www.cia.gov/library/publications/the-world-factbook>, FAO (2010a).

Planted forests account for 9% of forest area. The State of Sarawak is the most forested state followed by Peninsular Malaysia, then State of Sabah.

Forested land gazetted as Permanent Forest Estate (PFEs or PRFs)¹¹ under the National Forestry Act 1984, is estimated at 14.3 million hectares; outside the PRFs, 1.8 million hectares are gazetted as National Parks and Wildlife Sanctuaries under various legislations. These 16.12 million hectares combined are forests to be maintained in perpetuity by law. This is a fundamental pillar of Malaysia's commitment to SFM. Within the PRF 3.11 million hectares (22%) are designated as protected forest, while the remaining 11.18 million hectares (78%) constitute production forest, where commercial harvesting of timber on a predetermined rotational cycle is permitted (Malaysian Timber Council, 2007). These data varies from those reported to FAO for FRA 2010.

Deforestation rates in the country have been at record-high levels in past decades. Intensive logging is the main cause of forest degradation. Today, forest area in Malaysia is decreasing by 70,000 to 80,000 hectares/year (0.42%), as detailed in Figure A2.3. The deforestation rates are highest on the Island of Borneo in the States of Sarawak and Sabah.

By law, forest clearance is allowed according to set rules on lands not categorized as PFE/PRF. The deforestation rates thus reflect market demands for bioenergy, agricultural and forest products and reflect demographic and economic development pressure in each state.

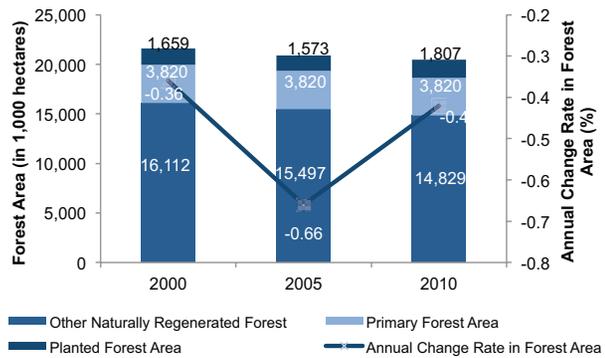
A2.2.2 Forest Products, Marketing and Trade¹²

The installed capacity of the forest industries in Malaysia was estimated at 30.9 million m³ in 2005, of which 19.8 million m³ were in sawmills and 11.2 million m³ in plywood/veneer mills. The industrial roundwood consumption by sawmills in 2005 was 9.4 million m³, or 47% of their installed capacity, and the equivalent for

11. Referred to also as PRF.

12. FAO, 2009. Malaysia Forestry Outlook Study. Working Paper No. APFSOS II/2009/02, Asia Pacific Forestry Sector Outlook Study II, FAO, Bangkok, Thailand.

FIGURE A2.3: Forest Area and Deforestation Rate in Malaysia



Source: FAO (2010a).

the plywood/veneer industry was 10.3 million m³, or 92.6% installed capacity. Most surplus installed capacity existed on Peninsular Malaysia.

The production of industrial roundwood peaked at 50 million m³ in 1990 and decreased to 28 million m³ in 2005. Government policies promoting valued added products resulted in increased production between 1985 and 2005 for wood-based panels and paper and paperboard from 1.4 million m³ to 7.1 million m³ and 0.1 million tons to 1.0 million tons, respectively. During the same period, fuelwood declined from 7.6 million m³ to 3.1 million m³. Export of logs decreased by 71% from 20.1 million m³ in 1985 to 5.8 million m³ in 1995. Wood-based panel exports increased from 0.8 million m³ in 1985 to 6.6 million m³ in 2005, through investment in new technologies, competitive pricing and links with secondary and tertiary processing. In 2005, Malaysia exported 0.3 million tons of paper and paperboard.

The annual production of industrial roundwood in Malaysia is estimated to be 29.2 million m³ for 2011 to 2015 and 32.5 million m³ for 2016 to 2020. The State of Sarawak is projected to increase annual industrial roundwood production of 13.5 million m³ in 2006 to 2010, to 25 million m³ in 2016 to 2020, through their aggressive forest plantation development program. In Peninsular Malaysia and the State of Sabah, which depend heavily on production from PFE/PRFs, a decline in industrial roundwood production is estimated as a result of more stringent

enforcement of annual allowable cuts and social and environmental covenants.

A2.2.3 Verification

In Peninsular Malaysia and in the State of Sabah, the government has a central role in the control of forestry and timber processing. In the State of Sarawak, concessionaires bear a greater responsibility for demonstrating legal compliance. Common principles for all these areas are that use of forest products is allowed only under license, because forest products belong to the state. Although Malaysia has less illegal logging than, for example, Indonesia, this still accounts for 14% to 25% of timber production. Evidence suggests that a large part of that production relates to illegalities conducted by licensed companies within their own licensed harvesting areas (Lawson and MacFaul, 2010).

Considerable differences exist among the states in forest control and monitoring procedures. These differences have an impact on policies, licensing and enforcement procedures (Wells, 2008b; Lounasvuori et al, 2009). In general, the control procedures for PFEs/PRFs are more comprehensive than those designed for alienated or state lands where land conversion is allowed. In the State of Sabah and Peninsular Malaysia, the Federal Forestry Department audits the monitoring procedures of state-level enforcement, but in the State of Sarawak the monitoring is outsourced to the private state-owned company SFC, which controls planning and monitoring procedures through different business units.

Malaysia has introduced quality management systems in line with the ISO 9001 standard to state-level forest administration. Initially, the country proposed that certified quality management covering the administrative procedures of state forestry departments would provide adequate assurance of viable forest management to the international markets. This turned out to be a false assumption that led to the development of mandatory and voluntary verification systems and combinations of both. According to Wells (2008b), composite and multi-agency structures responsible for monitoring make Malaysia an interesting case. Verification is generally

delivered through audits of the forest management system. A range of them include:

- Mandatory SFM audits of license holders by state authority
- Mandatory SFM audit of state authorities by the federal government (Peninsular Malaysia and the State of Sabah)
- Audits by accredited certification bodies against ISO standards (e.g., ISO 9001 on quality management systems) voluntarily adopted by federal and state forest authorities
- Audits by accredited certification bodies against SFM and CoC standards adopted by state forest authorities and individual licensees. The SFM standards may include (e.g., Malaysian Criteria and Indicators for Natural Forests and for plantation forests¹³ or interim FSC standards).

The audit methods in the first two bullets are used by authorities in law enforcement, whereas the third and fourth bullets belong to voluntary verification procedures. In the State of Sabah, voluntary certification is linked to law enforcement procedures; in Peninsular Malaysia and the State of Sarawak they provide additional evidence for compliance that authorities may take into account.

In Malaysia, voluntary and mandatory audits complement each other in the state-level monitoring framework. The Federal Forestry Department performs annual SFM audits of state FMUs using MTCC procedures, and these mandatory and voluntary audits are mutually reinforcing (Wells, 2008b).

Peninsular Malaysia

The states in Peninsular Malaysia have adopted the National Forestry Act (1984), which outlines the regulations for forest management. Legal compliance is monitored by District Forest Offices. The monitoring includes field verification by forest rangers before, during and after harvesting. Regular inspections are made at roadsides and timber log yards at mills. Peninsular Malaysia has adopted a public notification system by

13. MC&I for natural and plantation forests are endorsed by the PEFC.

which citizens may inform the authorities about anyone suspected of illegal logging (Wells, 2008b). Suspects will be investigated by forest officers.

According to Wells (2008b), the Peninsular Malaysian verification system has the following strengths:

- Mandatory and voluntary audits of SFM are mutually supportive because both are conducted against the same standard MC&I.
- Voluntary CoC certification provides critical oversight of mill processing, where mandatory systems otherwise rely on self-reporting and recovery rates by mill operators.
- Audits against ISO 9001:2000 quality management standard in state forestry departments ensure consistency in administrative procedures, their documentation and monitoring.

The following areas of concern over the verification-related activities are:

- Mandatory monitoring relies on the CoC verification suppliers' self-declaration claiming that non-certified raw-material batches do not contain timber from controversial sources. Legality as defined in the FLEGT process should further expand the claim to cover not only the origin of timber but also the legality of harvesting and production conditions thereof.
- The voluntary certification systems have so far applied only to forestry procedures in PFEs. The MC&I (2002) standard for natural forests does not apply to lands where conversion is allowed (alienated or state land). These forests cannot be certified against the standard. State regulations are also more general for these land categories, and compliance to them does not deliver evidence of the level of sustainability. Legal compliance may be easier to achieve. The Malaysian Criteria and Indicators for Forest Management (Forest Plantations), 2008) standard also applies to planted forest under these land categories.
- Independence in auditing and issuance, suspension and withdrawal of certificates has improved since 2008, when MTCC adopted the PEFC requirement stating that certification bodies shall have an accreditation from an internationally approved

accreditation body and against an international accreditation standard.

State of Sabah

In the State of Sabah forestry operations are regulated through the Forest Enactment (1968/1992) and Forest Rules (1969). In 1997, the State of Sabah introduced long, 100-year SFM License agreements (SFMLA) for an individual FMU. The long licensing period with increased investment and management responsibilities shifts the focus of SFM compliance to the licensees, rather than the state forest management authorities, as is the case in Peninsular Malaysia (Wells, 2008b).

The Forestry Department in the State of Sabah has strengthened enforcement procedures by establishing an Enforcement and Investigation Division in 2002 that cooperates with the Anti-Illegal Logging Unit of the Chief Minister's Office, as well as with the police and army (Wells, 2008b). The new arrangements in enforcement have proved to be effective and led to a significant increase in convictions for illegal logging.

The Forestry Department of the State of Sabah carries out mandatory audits against a performance standard. The audits aim to verify compliance with the normative level of forest management and upgrade it to the level required in FSC certification, which is the ultimate policy target of the state forestry department. The director of the forestry department issues a compliance certificate to a licensee based on the report of the state forestry audit team. Mandatory audits focus on the licensees with a long-term interest and investment in the concession area. This approach gives the forestry department greater power to sanction forest managers, and the long licensing period raises the desire of the licensee to avoid sanctions that hamper the profitable management of forests.

In case of non-compliance, corrective action requests are issued. For long-term, severe non-compliance, a request to suspend the license may be brought to the State Executive Committee. Withdrawal of long-term licenses based on non-conforming forest management is extremely rare. It is not very common for state-run audits to be complemented by mandatory audits by independent third parties, although in some cases the forest industry has requested this (Brown and Bird, 2008).

In the State of Sabah, the forestry department aims to improve forest management to the level required by FSC and puts an emphasis on long-term development in management practices and capacities.

The following areas of concern over the verification-related activities are identified (Wells, 2008b):

- Tracking of timber to the stump and related CoC systems are not fully documented in the supply chain, which weakens the link between administration and harvest control.
- Transparency of audit procedures and compliance decisions could be improved. The role of independent auditors in the verification system is limited.

The Forestry Department has a certified ISO 9001 quality management system that guides its operations. The system is limited to procedures in royalty collection and to preparation of forest management plans, which are important elements of legality verification. The certificate provides the assurance that the Forestry Department in the State of Sabah will duly perform its tasks according to prescribed procedures. Wells (2008b) concludes that because of the narrow scope of the quality management system in the Forestry Department, the quality and forest management system audits do not reinforce each other.

State of Sarawak

In the State of Sarawak, the legal basis in forestry operations is stated in Forest Ordinance 1954/1999. Forest policy setting, regulation, monitoring and enforcement are under the overall authority of the State of Sarawak Minister for Planning and Resource Management (MPRM). As mentioned earlier, the Forest Department has outsourced monitoring to the private state-owned company SFC to increase efficiency. SFC has separate business units, of which the Sustainable Forestry and Compliance Business Unit (SF&C) is responsible for harvest planning and monitoring and the Security and Asset Protection Business Unit (SAPU) is responsible for enforcement. The forest department focuses on policy, regulations and licensing.

The State of Sarawak is entitled to export 40% of the harvesting quota, and 60% must be allocated to domestic processing within the State of Sarawak. The STIDC is a statutory body responsible for promoting the timber

industry in the state. It has outsourced the monitoring responsibility of the volumes of domestic timber to the government-owned company Harwood Timber Sdn. Bhd. Harwood also stores timber imported from Indonesia before it is allowed to enter the Malaysian markets. Harwood reports to MPRM and to STIDC and SFC on the log movements in the state, as well as on the timber licensee's compliance with established quotas. Mills also report to STIDC, which assesses throughput against SFC and Harwood production figures, as well as against STIDC export permits for logs and sawn timber (Wells, 2008b). Enforcement is implemented through spot checks during transport, in mills and on individual consignments. The forest department has the power to prosecute, but STIDC can order mills to stop their activities if, without a registration, they have committed an offence (Brown et al, 2008).

A2.2.4 Malaysian Timber Legality Assurance System

Malaysia and the European Union commenced formal negotiations from September 2006 on the development of a VPA under the EU FLEGT Action Plan. In this context, Malaysia has developed a TLAS to provide an assurance that all logs, sawn timber, veneer and plywood licensed for export to the European Union under the VPA are produced legally as defined in the TLAS and that all timber products of unknown or illegal origin are excluded.

In October 2008, an independent technical evaluation of the TLAS was performed to test legality of timber and timber products licensed for export to the EU under the VPA and identified weaknesses in implementation procedures and capacity-building needs for implementation (Lounasvuori et al, 2009). The evaluation concluded that the TLAS control and implementation procedures were generally of a good standard, but the social and environmental issues were inadequately addressed or absent. Issues for further development included:

- Native and customary rights addressed the right to collect forest produce but gave no guidance on issues of land occupation rights.
- Workers' safety and health were addressed, but no clear indication was given as to how compliance

is determined and no requirement provided that links compliance with export licensing.

- Environmental legislation was included and required companies to make environmental impact assessments or take actions that mitigated environmental degradation, but the circumstances practices to be followed were not clearly defined.

In addition, NGOs considered that the TLAS inadequately address the rights of indigenous peoples and land tenure rights, especially when the forest licensing procedures and forestry legislation failed to take the indigenous peoples into account. Reflecting the state-level legislation, TLAS set different requirements for different states and did not make a consistent link between the legislation implemented in the forestry and timber industry and the export licenses, which decreases the value of an export license in providing proof of legality.

The TLAS has since undergone further revisions and improvement through joint expert meetings, working groups and public consultations, the latest of which took place in July 2012.

A2.2.5 Control of Timber Imports to Malaysia

In general, imported round logs need to have an import license issued by the MTIB and a customs declaration. In the State of Sarawak, the license is issued by STIDC. The origin of timber needs to be recognized in “good faith,” but Malaysian embassies in the export countries that issue the certificate of origin do not have comprehensive information to assess, for example, the legal compliance of the timber. No certificate of origin is required for small-dimension sawn timber and other processed products to demonstrate that the imported product is legally sourced in the country of export (Lounasvuori et al, 2009).

Malaysia has free trade zones (e.g., in the State of Sarawak bordering Kalimantan, Indonesia). Small-dimension timber may enter the country through these areas with a transit removal pass, and information concerning origin is not requested. The STIDC licensing body for timber imports in the State of Sarawak has restricted the imports of sawn timber to five designated points of entry, which improves the controlling possibilities (Wells, 2008b). Free

trade zones provide a pathway for timber with incomplete information on origin. Malaysian regulations on imports do not promptly take into consideration the changes in regulations of exporting countries (e.g., Indonesian ban on export logs), creating a situation in which the demand may encourage unauthorized exports.

The TLAS, as described in 2008, verifies the existence of timber import licenses for logs and custom declaration forms for sawnwood, plywood and veneer. It does not describe how the different authorities, MTIB/STIDC, customs and the state forestry departments inspect the imported logs and processed timber products (Lounasvuori et al., 2009) to gain reliable evidence on legality.

A2.2.6 Certification

Malaysia has been active in developing voluntary certification. The Malaysian Timber Certification Council, made up of the key stakeholder groups, was formed in 1998 to develop and operate the MTCS. The scheme has standards and procedures for certification of natural forests and plantations and procedures for CoC verification. The certification scheme for natural forests was endorsed by the PEFC in May 2009, and the MTCC has

BOX A2.1

Summary of Forest Control in Malaysia

- The forest control system enjoys strong governmental support, which is important to revenue collection and international reputation. Success of the public informant system on observed suspected illegal loggings indicates a general support for legal compliance.
- During past years the control and penalty systems have improved (e.g., in the states of Peninsular Malaysia).
- EU VPA will consolidate the regulations in the different stages of supply chain (licensing, planning, harvesting, transport, administration, etc.) under one definition of legality.
- The TLAS objective to ensure that all operators that are issued a license to operate (forest, mill, export, import) complies with legislation as defined in the TLAS.
- The TLAS needs to be further developed to (i) take into consideration the concerns of civil society (e.g., for indigenous people’s rights and land tenure issues) and (ii) improve the linkage of legal compliance in harvesting and processing to the export licenses.

BOX A2.2**Drivers for Voluntary Forest Certification**

Timber-based companies in Malaysia expect that certification will at least maintain their market shares and keep them competitive, especially in the environmentally sensitive markets of Europe and North America, as well as increase their access to these markets. For the larger companies in Malaysia that have operations in other countries, it will also be part of their CSR and demonstrate improved corporate governance and transparency in their timber trade. For the state governments in Malaysia, it is envisaged that the information generated through certification will assist them in communicating the status of SFM more effectively to the public; in enhancing policies and strategies for SFM so as to meet the requirements of certification; in focusing research efforts where knowledge is still lacking and deficient, especially the changes in biological diversity and water quality of streams of the production forests after forest harvesting and their long-term effects on the integrity of the forest ecosystem; and in identifying those areas in special need of international assistance and cooperation.

The state governments in Malaysia also expect that through effective certification, illegal logging will further be controlled and reduced, because illegal forest activities undermine respect for the rule of law and of government and are frequently associated with corruption, which often threatens the livelihoods and the social and economic security of local communities and forest-dependent people.

In addition, because virtually all the forest lands in Malaysia are owned by the state governments, it is imperative for these governments to be involved in certification, as they are in a better position to balance the views of the different parties involved and ensure greater accountability to the public and greater transparency in the certification schemes used. Their active involvement also could provide an additional channel for interested parties to present their interests to certification bodies and the relevant authorities involved in certification processes in Malaysia, as they are held accountable for the livelihood and well-being of their people.

Through certification, the indigenous people and local communities who are dependent on the forest for their livelihoods expect that their traditional use rights or legal or customary tenure of forest lands will be respected. This includes their rights to manage their own land unless they delegate such rights with free and informed consent to other interested parties.

applied for the endorsement for the certification standard for sustainable management of plantation forests.

The PEFC endorsement process brought changes to the MTCS scheme, and the MTCC gave a transition period for the already certified FMUs to adopt the scheme revisions. At that time, the MTCS had areas certified according to the internationally endorsed MTCS-PEFC procedures as well as areas certified by the earlier MTCS procedures.

The MTCS-PEFC standard for natural forests is applicable only to PRFs. The standard for plantation forests, still under the PEFC endorsement process, is applicable to PRFs but also to forests on “state land,” which is a land category gazetted for land development where forest conversion for other uses is also allowed.

Before the PEFC endorsement in 2009, the auditing and certification process was controlled by the MTCC, which was partly financed by the export levies

endowed by the Ministry of Plantation Industries and Commodities. The condition for the PEFC endorsement was to revise the authorities and tasks in auditing and issuance of a certificate to meet the international standards set for independent third party certification. By February 2011, all MTCC certified FMUs gained compliance with the PEFC endorsed MTCS scheme through independent and internationally recognized audit procedures.¹⁴

Initially, the division of powers between the forest authorities and independent certification bodies was not well defined in the voluntary certification systems. Current independent audit procedures should deliver impartial statements on compliance. Through incorporating both audit approaches in state-level monitoring, the forest departments can reduce mandatory ad hoc audits without risking the reliability of monitoring. Compliance to PEFC or FSC requirements also

14. <http://www.pefc.org>

provides assurance that the certification procedures are impartial and meet the international standards. Before the PEFC endorsement, the MTCS certification process was strongly controlled by the MTCC, which partly represented the interest of the industry. Therefore, the audits did not meet the independent, third party verification requirements.

The forest management and CoC certificates in Malaysia are summarized in Table A2.7.

The total area of certified forests is 5.1 million hectares, of which 4.6 million hectares of natural forests are under internationally endorsed MTCS-PEFC certification and 0.5 million hectares are under international FSC certification. Natural forests account for 5 million hectares (99%) of forests certified. The share of certified forest plantations is 46,443 hectares (<1%). Currently the eight MTCS-PEFC certificates and

three out of the seven FSC certificates are issued to state forest enterprises in Peninsular Malaysia. The State of Sabah has one MTCS-PEFC certificate and one FSC certificate for natural forests and one FSC certificate for plantations. Two FMUs in Peninsular Malaysia, a total area of 0.12 million hectares, have both MTCS-PEFC and FSC forest management certificate.

At March 2012, 40% of production forests of the Malaysian PFEs had been certified by an internationally approved certification scheme. The certification rate is only 3% in plantation forests. Thus, potential exists to increase forest certification, especially in the States of Sabah and Sarawak, but also in the four uncertified states in Peninsular Malaysia. The Malaysian government is allocating budget funding for the certification of PRFs in Peninsular Malaysia, where each certificate covers all PRFs in the state.

TABLE A2.7: Forest and CoC Certification in Malaysia

Certification Body	Forest Management Certificates		Type of Forest	Ownership	CoC Certificates	
	Area (ha)	No			No	%
FSC						
SCS	400,169	3	3 natural	State	29	9
	46,433	3	3 plantation	Private		
SGS Qualifor	55,139	1	Natural	State	104	31
SmartWood Rainforest Alliance					11	3
SACoC					7	2
SQS					5	1
DNV					5	1
IC-CoC					1	–
TT-CoC					1	–
Sub-total FSC	501,751	7			163	49
MTCS-PEFC						
SGS Qualifor	2,711,657	4	Natural	State	112	33
SIRM QAS	1,877,164	4	Natural	State	52	16
Moody International					7	2
Japan Gas Appliances Inspection Association (JGAI/A)					1	–
SCS					1	–
Sub-total MTCS-PEFC	4,588,821	8			173	51
Total	5,090,572 (40%)	15			336	100

Source: <http://www.fsc-info.org>; February 2012 data; and <http://register.pefc.cz/search1.asp>; February 2011.

TABLE A2.8: Forest Managers Complying with FSC Controlled Wood Standards in Malaysia

<i>FSC Controlled Wood</i>				
<i>Certification Body</i>	<i>Area (ha)</i>	<i>No</i>	<i>Type of forest</i>	<i>Ownership</i>
SmartWood Rainforest Alliance	107,053	1	Natural	Private
SCS	5,616	1	Plantation	Private
Total FSC Controlled Wood	112,669	2		

Source: <http://info.fsc.org/> March 2012; author’s compilation.

The interest in FSC controlled wood shows an elementary level of entry toward achieving legality of harvesting, an interim step toward Forest Certification. As detailed in Table A2.8, natural forests account for 107,053 hectares (95%) and forest plantations 5,616 hectares (5%) of controlled wood standards. Private companies account for 100% of controlled wood standards.

The forest management standards used in forest certification are listed in Table A2.9.

The FSC approved Standards Development Group of Forest Sustainability Malaysia commenced development of the FSC National Forest Management Standards for Malaysia in 2011. The process is due to complete a FSC Standard in line with the new FSC Principles and Criteria and International Generic

Indicators in 2013, with the aim of implementation in 2014.

The government is also promoting the establishment of forest plantations. It encourages the private sector, with tax exemptions and other financial arrangements, to establish plantations on alienated lands, such as on abandoned agricultural land and “state land.” Restrictions on certifying plantations established on lands cleared from natural vegetation limits the expansion of certified forest plantations. However, the potential exists to have plantations on degraded lands or former agricultural lands that will be eligible for certification.

The Malaysian timber industry exports timber products to a broad range of countries in Europe and Asia, and the interest in CoC certification has been high.

TABLE A2.9: Forest Certification Standards Implemented in Malaysia

<i>Scheme</i>	<i>Standard</i>	<i>Owner</i>
	<i>Forest Management</i>	
FSC	FCP Interim Standard For Forest Management Certification in Malaysia Under FSC Version 4-1 (2010)	SCS
	SGS Qualifor. Forest Management Generic Standard. State of Sabah, Malaysia (2010)	SGS
PEFC –MTCS	Malaysian Criteria and Indicators for Forest Management Certification (MC&I [2002])	MTCC
MTCS ¹⁵	MC&I for Forest Management Certification (Forest Plantations)	MTCC
<i>Chain of Custody</i>		
FSC CoC	FSC CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004)	FSC
	Standard for company evaluation of FSC controlled wood (FSC STD 40-005)	
	FSC standard for forest management enterprises supplying non-FSC certified controlled wood (FSC STD 300-10)	
	Sourcing reclaimed material (FSC STD 40-007)	
	Multisite site CoC certification (FSC STD 40-003 V1-0)	
PEFC	CoC of Forest Based Products – Requirements (2005)	PEFC

Source: Authors’ compilation.

15. MTCC has had PEFC endorsement for forest plantation standards since 2011.

TABLE A2.10: Voluntary Legality Verification systems implemented in Malaysia.

<i>Scheme</i>	<i>Standard</i>	<i>Owner</i>
SmartWood Rainforest Alliance	SmartWood Rainforest Alliance Standard for VLO in the State of Sabah, Malaysia: SW document code VER-06 (2010) SmartWood Rainforest Alliance Standard for VLC in the State of Sabah, Malaysia	SmartWood Rainforest Alliance
GFS	Global Forestry Services Inc. Legal Verification Services. The generic requirements to define legal compliance with national regulations include the requirements for legal origin including the following elements (2009): (i) Forest Concession & Use Rights, (ii) Traceability & Identification of Material, (iii) Legal Requirements of Operation and (iv) Harvest Planning	GFS

Source: Authors' compilation.

Currently 173 timber companies have the PEFC CoC certificate¹⁶ and 163 have the corresponding FSC CoC certificate¹⁷ (FSC Certificate Database). The high number of CoC certificates is an indication of the interest to maintain market share in forest products and in procuring certified raw materials.

In addition to the forest and CoC certification, Malaysian forestry companies have applied for VLO and legal compliance against the standards detailed in Table A2.10.

A2.2.7 Forestry Institutions, Policy, Legislation and Law Enforcement

In contrast to Indonesia, Malaysia is a federal state in which the 13 states in Peninsular Malaysia and the States of Sabah and Sarawak have different jurisdictions. In Peninsular Malaysia, the forestry legislation between the eight timber-producing states¹⁸ is fairly uniform, but in the States of Sabah and Sarawak, the forestry sector is governed under different regulations and procedures. The National Forestry Council (NFC) coordinates forest policy and outlines the five-year cutting volumes for states and regions. It has a guiding role only that leaves the legal authority to states and regions.

16. <http://www.pefc.org>, December 2011.

17. Global FSC Certificates: Type and Distribution, March 2012: <http://www.fsc-info.org>, Global FSC Certificates: Type and Distribution, March 2012.

18. The eight timber-producing states in Peninsular Malaysia are Pahang, Selangor, Terengganu, Johor, Kedah, Perak, Negeri Sembilan and Kelantan.

Malaysia's timber industry is the country's fourth-largest export earner. Because of the robust competition in neighboring markets, it is interested in increasing its market share in the premium-priced, but sensitive European markets. The timber-processing industry relies on timber imports (e.g., from Indonesia, Papua New Guinea and Myanmar). Malaysia has an over capacity in timber processing facilities, and the dependence of imports will increase with the declining domestic timber production (Wells, 2008b). The government wishes to liberalize imports (Lounasvuori et al, 2009) and avoids unnecessary regulations that would hamper this. The government policy is to support value added production that would have better access to the premium markets in Asia and Europe.

Since the early 1990s, the country, especially the states in Peninsular Malaysia, has taken actions to tackle illegal logging. Recently civil society (e.g., Traffic Southeast Asia, Environmental Investigation Agreement) has raised concerns about the legality of imported timber. The government has developed various verification procedures to assess and demonstrate legality of timber, and in 2006, Malaysia started formal negotiations with the European Union on VPA within the framework of FLEGT. The timber products covered by the VPA negotiations are round logs, sawn timber, veneer and plywood, but not the targeted secondary product moldings, flooring and furniture (Lounasvuori et al, 2009).

Malaysia is also investing in the expansion of forest plantations outside the PFE on lands designated for

conversion to other land uses. The government provides tax exemptions and soft loans to plantation projects. This policy aims to increase the domestic timber supply, but it may also raise the deforestation rates, especially on lands outside PFEs. The current estimates for planted forests range from 0.6 to 1.8 million hectares (3% to 9% of the total forest area) (Ministry of Forestry, 2010; FAO, 2010a).

The Ministry of Forestry supports national certification and seeks out international recognition for its national approaches. The objective is to have large-scale certification that would provide compliance to the market demands for legality. The government has supported the development of certification and verification systems through forestry organizations that would be in line with its national interests.

Malaysia's initiative on legality certification began in 2004 when the Ministry of Plantation Industries and Commodities was engaged in informal discussions with the European Union for a FLEGT VPA between them. Formal negotiations began in September, 2006. Since then, Malaysia, with support from Germany, has established a Protem Secretariat to coordinate negotiations and implementation, an EU-Malaysia Technical Working Group to address technical issues, a National Steering Committee to coordinate national activities, and three Malaysian Working Groups to address (i) Legal Drafting and General Provisions; (ii) TLAS; and (iii) Market Benefits and Capacity Building; in close consultation with key stakeholders.

Due to state and regional differences, a TLAS was being considered to cover Peninsular Malaysia and the States of Sabah and Sarawak; including PRF, state land and alienated land; include the full CoC from forest, harvesting, forest industries processing and forest products trade; and take all key stakeholder groups into account, including social, cultural and environmental.

A2.2.8 Forests and Forestry toward 2020

The forest cover reported to FRA 2010 is 62.3 million hectares, with a -0.4% loss of forest cover during 2005 to 2010. The target set by the government is that each

state maintains 47% of land area as forest reserves with the long-term goal of 50%.

Under the Third Industrial Master Plan 2006–2020, relevant priorities for forests and forestry include:

- Promote efficient and effective management of forest resources and forest plantations, including more intensive use of agricultural wastes, bamboo, rattan and kenaf
- Develop regional production and supply chains where domestic manufacturers will be encouraged to outsource raw materials and other semi-finished components through outward investments in resource-rich countries
- Expand market access through intensified marketing and promotion of a green image of the industry through SFM
- Develop and promote the growth potential in utilizing lesser promoted species, NWFPs and wood waste materials and producing higher value added wood products
- Expand production of own design and brand furniture through joint ventures between local furniture manufacturers with established manufacturers and international design houses in developed markets
- Enhance R&D and technology development, especially in diversifying the use of panel products, improving production technology to minimize wood waste and in using new resources, such as oil palm fiber and kenaf for production of composites and biocomposites
- Increase supply of highly skilled workforce to enable the industry to move up the value chain
- Strengthen the institutional support and improve the delivery system related to the industry

A2.2.9 Potential for Certification, Verification and NTLAs/VPAs

Potential exists to certify an additional 6.9 million hectares of natural production forests within the PRF and thus increase the area of certified natural forests by 140%. This figure is based on the uncertified share of PFEs classified as production forests. The natural

forests of Peninsular Malaysia are largely already certified or will be certified in the near future with government financing.

The certification rate is very low in the States of Sabah and Sarawak. Several concessionaires in these states have started the FSC certification process, but to date, only a few have been issued a certificate. Forest certification would have the greatest significance in the State of Sarawak, where harvesting rights are given to private concessionaires and the regulatory framework is the most liberal in Malaysia. The State of Sarawak, with its still abundant forest resources, has become the focal state for timber production, with 6 million hectares of natural forests gazetted for forestry use.

In terms of VLO, an area of 11.80 million hectares of forest land remains that could be potentially verified for legality of timber, because these areas would include 2.30 million hectares of state land forests that are earmarked for non-permanent forestry uses.

Malaysia is challenged by outstanding issues related to applying a legally binding agreement nation-wide (particularly in the State of Sarawak) and engaging in stakeholder consultation in transparent processes.¹⁹ The European Union requirements for review of the TLAS, the approval of the new EUTR and Indonesia signing a VPA with the European Union has created concerns in Malaysia that the timber industry will lose exports to these countries unless issues are resolved. Even the logging industry in the State of Sarawak, which was adamant about not signing a VPA with the European Union, is changing its stance. A VPA cannot be concluded with the European Union until, particularly, the State of Sarawak addresses native customary rights and forestry sector transparency issues. The Malaysian government has been challenged to adopt a more inclusive participatory, multi-stakeholder process and to seriously address governance in the State of Sarawak. Negotiations to conclude a VPA with the European Union has some way to go.

19. EU Forest Watch FLEGT-VPA Special Issue, November 2011: <http://www.fern.org>

A2.3 Vietnam

A2.3.1 Forests and Forest Management

In Vietnam, the forest resources are limited, although the country has a strong timber-processing industry. Demand is strong for high-quality timber originating from natural forests. The area of forest plantations has increased, but the plantations have not yet reached high yield levels and plantation wood cannot substitute for the demand for tropical hardwoods that are imported to a large extent from Lao PDR and other neighboring countries and to a minor extent from over 40 other countries. Table A2.11 details highlights reported by Vietnam for FRA 2010.

Harvesting of natural forests is limited to annual quotas of 0.2 to 0.3 million m³/year from an annual allowable harvesting quota 3.7 million m³/year issued by the MARD, which assigns allocations to provinces. The national timber production strategy relies on plantation wood, and the country has promoted forest plantation establishment, especially on small-holdings. In Vietnam, all forest land is owned by the government, which issues land use rights for production use to state forest enterprises, private companies, Peoples' Committees, communities and individual households. Use rights can be obtained through land allocation or land lease contracts, normally guaranteed for 50 years.

Plantation forests provide the core stock of industrial wood, and, being small, their production is consumed by the wood chip industry. According to Land Law (2003), planted production forests may be established only on bare land; if established elsewhere, they should be treated as protection forests. The government strives to increase plantation development; the strategy is to increase the domestic wood supply by promoting both large-scale concentrated plantations and small-scale private plantations among individual farmer households.

According to Lawson and MacFound (2010), the control of domestic plantation production is complex and appears to be limited in contrast to natural forest sourcing. Forest

TABLE A2.11: Vietnam Forests and Forestry Data

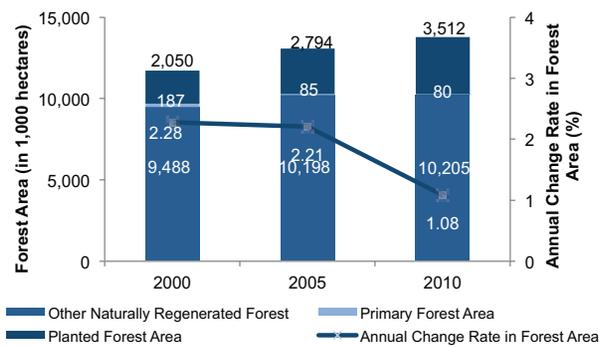
<i>Forests and Forestry Data</i>		
Population	Total 87.1 million, density 281/km ² , growth 1.1%/year	
Land area	31.0 million ha	
Total forest area	13.8 million ha (44% forest cover)	
Designated Function of Forests		
Productive (wood, fiber, fuel, NWFPs)	6.5 million ha (47%)	
Protective (soil, water, etc.)	5.1 million ha (37%)	
Conservation of biodiversity	2.2 million ha (16%)	
Social services	0 million ha (0%)	
Multiple use	0 million ha (0%)	
Other	0 million ha (0%)	
Unknown/unspecified	0 million ha (0%)	
Forest Characteristics		
Primary forest	0.1 million ha (1%)	
Other naturally regenerating forests	10.2 million ha (74%)	
Planted forests	3.5 million ha (25%)	
Forest ownership	Public 72%, private 24%, other 4%	
Forest Cover Trends		
1990	9.4 million ha	
2000	11.7 million ha (2.3% increase 1990–2000)	
2005	13.1 million ha (2.2% increase 2000–2005)	
2010	13.8 million ha (1.1% increase 2005–2010)	
Wood Removals 1990–2005	Industrial roundwood (1,000 m ³)	Fuelwood (1,000 m ³)
1990	3,446	26,534
2000	2,376	26,685
2005	2,703	26,240
People Employed in Public Forest Institutions		
2000	Na	
2005	Na	
2008	Na	
Main international markets for timber/timber products	European Union, United States, Japan	
Ratification of international conventions/agreements	CBD, UNFCCC, Kyoto Protocol, UNCCD, CITES, RAMSAR, World Heritage Convention, NLBI of UNFF	

Sources: CIA – the World Factbook: <https://www.cia.gov/library/publications/the-world-factbook>, FAO (2010a).

companies need to receive a certificate from the community providing evidence of their right to the land. They must also receive an “Inland transportation license” that the local authority issues, which is sufficient for removal from the site of harvesting. However, different provinces have different regulations (e.g., some are more focused on environmental protection).

Plantation wood is mainly used for woodchips and paper pulp and manufacture of reconstituted boards and furniture for export (Proforest, 2009).

According to the Vietnam Forestry Development Strategy 2006–2020 (2007), the forest area and quality have been continuously decreasing over the years. The forest cover declined from 43% to 27% during the past 60 years. However, since 1990 the forest area has returned to 44% as a result of afforestation and restoration (except in the Central Highlands and the South-East region). Although the forest area is increasing, the quality and biodiversity of the natural forests in many locations have been continuously degraded. Figure A2.4 summarizes forest area and reforestation rates in Vietnam 2000 to 2010.

FIGURE A2.4: Forest Area and Reforestation Rates in Vietnam

Source: FAO (2010a).

A2.3.2 Forest Products, Marketing and Trade

The Vietnamese export-based wood furniture manufacturing industry has expanded rapidly in recent years, becoming one of the largest furniture exporters in the world. Currently more than 2,000 wood-processing and 450 wood export companies operate in the country. For 80% of its raw material needs, the industry depends on imports from other countries (Forest Trends and Department for International Development, 2010).

The forest industries sector in Vietnam depends heavily on log and wood imports from a range of countries for reprocessing in country, that cause difficulties in proving compliance with legality and sustainability principles, criteria, indicators and verifiers to international markets. This makes Vietnam a high-risk exporter of forest products to European and North American markets that require proof of legality and sustainability through the FLEGT and the *Lacey Act*. Vietnam realizes the importance of monitoring and control of forest product origins.

A2.3.3 Verification

Legislation and procedures are in place for controlling national timber production and targets for incorporating the national regulations in a legality assurance system that would address regulations related to tenure

rights, harvesting, processing, import and export, statutory fees and environmental and social regulations. The planned structure is in line with the EU expectations of the legality definition.

Vietnam has developed procedures to control the legality of imported timber. Custom authorities require log lists, invoices and landing bills, and they check the log codes (or hammer marks). However, the trade regulations do not ensure an efficient legality control of imported timber. The current enforcement mechanisms are accessible to authorities, but private sector timber processors or traders do not have the mandate to inquire into the legal compliance of the timber. The existing mechanisms include the following regulations and guidelines in use:

- Guidelines for verification of legality of timber origin (Government Regulation No. 44, 2006). This document, produced by the government, also includes a definition of legality that can in principle set a baseline for VPA negotiations with the European Union.
- Verification of harvested timber (Government Decision No. 40, 2005).
- Verification of transported timber (Government Decision No. 59, 2005).

These documents, along with the regulated procedures to conform to the set harvesting quotas, the supervision of harvesting planning, implementation and post-harvest activities, as well as the marking of trees and logs, set a framework for law enforcement.

However, law enforcement controls do not systematically cover the different stages of the supply chain, although a range of documentation requirements that currently exist, such as transport documents and invoices, that could potentially form the basis for such a system. Existing control elements are also governed by different authorities, depending on the stage of the supply chain (Proforest, 2009). However, the existing elements provide a good basis for further strengthening legal assurance verification (e.g., under the FLEGT process).

Imports of illegal timber have trebled between the years 2000 and 2007, now estimated at 17% of total timber

imports. In past years, the share of illegal imports has declined, but the volumes have continued to increase because of rapid overall growth in timber processing. Illegal imports from Indonesia have decreased but are offset by increased imports from Lao PDR, Cambodia and Myanmar. Timber is also imported from Malaysia and the Republic of Congo. Most of this imported wood is destined for re-export after processing (Lawson and MacFaul, 2010).

The import of timber products from actual and potential VPA partner countries is significant, which has implications on the import controls when the VPA agreements are signed in the countries exporting to Vietnam (e.g., the Republic of Congo, Cameroon, Indonesia and, ultimately, Malaysia). When Vietnam proceeds with the VPA negotiations with the European Union, it will also make commitments to control the imports of illegal timber.

The ability to assure markets that the source of imported timber is legal will be a crucial issue for the Vietnamese timber industry, especially for the furniture industry exporting to the United States and European Union. The Vietnamese government, represented by MARD, has recently recognized the importance of developing mechanisms to verify the legal source of timber imports, thus allowing Vietnamese producers to meet the new market requirements. Concern exists among the producers that additional verification will increase the timber prices and production costs, which could especially hamper the numerous small timber processing companies in the competing international markets.

According to Proforest (2009), Vietnamese exporters are likely to face the following two parallel sets of demands:

- All exporters to the United States and European Union potentially will be requested to provide evidence of timber legality to ensure that importers comply with legislation. Those supplying the government in Japan are likely to receive similar requests.
- Some exporters, but not all, will be requested to provide evidence of timber sustainability (generally through certification). This will apply in particular to exporters whose customers supply governments in the European Union or whose customers are private sector companies with corporate social and environmental responsibility purchasing policies.

The majority of timber products exported to the United States, the European Union and Japan consist of furniture, and some retailers who buy furniture have already introduced responsible purchasing policies. Such retailers include B&Q, IKEA, Walmart, Home Depot, Castorama, Carrefour and ScanCom. Many of them have adopted a stepwise approach to gradually eliminate timber of suspect legality and sustainability and to increase the proportion of certified timber. The minimum entry level is usually that timber is from a known legal source, but certification may be required (e.g., for products made with tropical hardwoods, which are perceived to have high risk). The number of CoC certificates in Vietnam is high, with 272 FSC CoC certificates (FSC Certificate Database), which indicates the high level of interest in meeting the market demands for sustainable origin of timber.

The MARD of Vietnam and the EU Commission have made a Joint Statement on starting formal negotiations for a FLEGT VPA and hope to conclude the negotiations by the end of 2012. Vietnam has not yet developed a timber legality standard that would set the basis for VLC (e.g., for FLEGT licenses). The country is part of the ASEAN working group on forests that has defined the guiding legality standard for member countries.

A2.3.4 Certification

Voluntary forest certification is in its early stages of development in Vietnam. There are five plantation areas certified in the country covering 41,409 hectares, as detailed in Table A2.12. The certificate holders represent state forest organizations, one large corporation and community forestry, thus providing examples of the different types of managers of forest plantations in the country. All of them have received an FSC forest management certificate. The plantations are certified against the Interim FSC standards developed by certification bodies (i.e., SGS, SmartWood Rainforest Alliance, GFA Certification and CU Certification have issued the certificates. A national FSC working group is developing a national forest management standard, but its work is still at an early stage.

Vietnam is a recent participant in forest certification and the level certified remains extremely low, with

TABLE A2.12: Forest and CoC Certification in Vietnam

Certification Body	FSC Forest Management Certificates		Type of Forest	Manager	FSC CoC Certificates	
	ha	No			No	%
SGS Qualifor	9,777	1	Plantation	Private (foreign)	187	69
SmartWood Rainforest Alliance	10,175	1	Plantation	State	46	17
GFA Certification	9,761	2	Plantation	Private (group)	2	1
CU Certifications	11,696	1	Plantation	Private (group)	19	7
BV Certification	–	–	–	–	8	3
LGA InterCert GmbH	–	–	–	–	4	1
TSUD	–	–	–	–	6	2
Total	41,409 (0.6%)	5	–	–	272	100

Source: <http://www.fsc-info.org>; February 2012 data.

41,409 hectares (0.6% of designated production forests) FSC certified, of which 100% is in forest plantations (1% of designated planted forests are certified), issued to private sector groups 52%, private sector (foreign) 24% and the state 24%.

Forest certification covers only 0.6% of production forests (natural and planted) and 1.2% of planted forests. All five certified areas are forest plantations. According to area certified, the proportion of certificate holders is state 25%, private (foreign) 24% and private (group) 51%.

The forestry strategy foresees that 30% of produced timber in 2020 will be certified, which is a challenging target when compared to the current volumes of certified timber (102,000 m³²⁰; 2.7% of annual removal).

The number of FSC CoC certificates issued has almost doubled during the past four years, to 272 in February 2012, of which SGS issued 69%, SmartWood Rainforest Alliance 17% and Control Union, 7%. Seven different international forest certification bodies undertake CoC certification assessments in Vietnam, and 21 certificates provide the companies with the right to deliver controlled wood. At December 2011, 3 PEFC CoC certificates were issued in Vietnam.

20. Source: Data from Quy Nhon Plantation Forest Company of Vietnam Ltd.

As highlighted in Table A2.13, the interest in FSC controlled wood shows an elementary level of entry toward achieving legality of harvesting, an interim step toward forest certification.

Interest toward forest management certification in Vietnam is high, which reflects the market demands in export countries for certified timber products. Eight forest enterprises managing natural forests are preparing for FSC forest management certification under an internationally financed project. These projects, supported by the GTZ, WWF or government, account for 129,000 hectares of natural forests, ranging from 9,000 to 27,000 hectares each. In planted forests, five forest companies plan to apply for a certificate. The forest area covers 50,000 hectares, ranging from 5,000 to 20,000 hectares. In addition, groups of small plantation holders are preparing for group certification with the assistance of international project funding. The total area of smallholder groups is 30,000 hectares (MARD, 2007). When the certification of these planned

TABLE A2.13: Forest Managers Complying with FSC Controlled Wood Standards in Vietnam

FSC Controlled Wood				
Certification Body	Area (ha)	No	Type of Forest	Ownership
GFA Consulting Group GmbH	16,318	1	Plantation	Private
Total FSC Controlled Wood	16,318	1		

Source: <http://info.fsc.org/>; March 2012; author's compilation

TABLE A2.14: Forest and CoC Certification Standards Implemented in Vietnam

Scheme	Standard	Owner
	Forest Management	
FSC	SW interim standard for Assessing Forest Management in Vietnam (Ver. June 1 2010)	SW Rainforest Alliance
FSC	GFA Generic FM Standard, adapted for Socialist Republic of Vietnam, Version 1.0	GFA Consulting group
FSC	SGS Qualifor Forest management standard for Vietnam (2010)	SGS
Chain of Custody		
	FSC Standard for CoC Certification (FSC STD 40-004 V2-0)	
	Standard for Company Evaluation of FSC Controlled Wood (FSC STD 40-005 V2-0)	
	Standard for Multi-site Certification of CoC Operations (FSC STD 40-003 V1-0)	

Source: Authors' compilation.

areas is completed, the production of certified timber may reach 0.7 million m³/year.

The forest and CoC certification standards implemented in Vietnam are detailed in Table A2.14.

A2.3.5 Forestry Institutions, Policy, Legislation and Law Enforcement

The government strategy is to further increase timber processing for export, aiming at increasing the value by almost threefold, up to US\$ 7 billion by the year 2020. The rapid growth in timber processing capacity and exports has substantially increased the timber demand in the current decade. Domestic production cannot meet the demand because of the early stage of plantation forest development and strict quotas in harvesting natural forests. Vietnam has been able to keep deforestation under control during the boom in the timber processing industry in the 2000s. The legislation is quite comprehensive and up to date, and it provides an adequate framework for forest management. However, enforcement, monitoring and evaluation are less consistent. Annually, about 50,000 cases of forest crimes are reported to MARD. These relate greatly to small-scale forestry carried out by farmers for self-consumption rather than commercial use (Proforest, 2009).

The Vietnamese government has established national plantation targets, which are set out in the Vietnam Forestry Development Strategy 2006–2020 (2007):

- Stabilize wood production from natural forests, plantation forests and scattered planted trees with

timber production targets of 9.7 million m³/year by 2010 and 20 to 24 million m³/year by 2020 (including 10 million m³ large timber) to meet the raw material demand for forest products, the pulp processing industry and export.

- Provide small timber for pulp processing: 3.4 million m³/year by 2010, and 8.3 million m³/year by 2020.
- About 70% of the current PFAs are poor-quality natural forests and newly restored forests, where no harvesting of forest products can be permitted in the next 5 to 10 years. They should be zoned and restored to improve their quality and create supply sources for large timber, NWFPs and environmental services in the future.

The objective for the forestry sector in Vietnam is to expand domestic wood production significantly to meet the wood consumption of the national forest industry and to reduce the need for timber imports. The target is to reduce the share of imported wood from the current 80% of the timber supply to the level of 20% by 2020. The domestic timber production will be intensified with a challenging plantation forest policy as described in the Vietnam Forestry Development Strategy 2006–2020. Despite the defined strategy to increase domestic timber production by sixfold by 2020, it is evident that the timber industry in Vietnam will be strongly dependent on imported timber in the future as well.

Vietnam has responded to the need to prove legality and sustainability of timber from Vietnam by:

- Strengthening legal documentation and law enforcement

- Speeding up forest and CoC certification processes
- Awareness raising and capacity building
- Facilitating preparation of a Vietnam TLAS
- Initiating a FLEGT VPA negotiation process with the European Union

FLEGT VPA processes commenced to date include:

- Definition of legality on timber and timber products, including natural and plantation sources, both domestic and imported
- Control of supply chain
- Verification of timber legality
- FLEGT licensing
- Independent third party monitoring

A FLEGT/VPA Steering Committee led by MARD guides a negotiation delegation led by VNForest, working within a multi-stakeholder mechanism. Working Groups have been established on (i) Timber Legality Definition led by the Department of Forest Utilization and (ii) TLAS led by the Forest Protection Department. During 2011 several video conferences provided opportunity to open discussions and the process with the European Union, during which draft reports were presented on studies on (i) Legality Definition, (ii) Stakeholder Analysis and (iii) Timber Flows. Priorities through 2012 are to continue the multi-stakeholder dialogue about the processes and complete these reports, advance preparation of the TLAS and continue negotiation of the VPA with the European Union. However, concerns exist that without clearer evidence of stakeholder involvement, the VPA negotiation may be a drafting process rather than an inclusive consultative development.

A2.3.6 Forests and Forestry toward 2020

Forest products exports have increased 10-fold in the last six years with Europe, the United States and Japan, the main destinations. The wood furniture industry is striving to attain annual exports of US\$8 billion, in contrast to US\$1 billion in 2004. The objective is heavily dependent on legal and sustainable supply of imported wood and pricing.

The following relevant forecasts were detailed in the Vietnam Outlook Study toward 2020²¹:

- Domestic saw log supply to increase annually by 7% to 8% from 2.2 million m³ in 2002, to 7 million m³ in 2020
- Wood fiber demand to increase from 40,000 m³ in 2003 to 165,000 m³ in 2020, with an annual increase of 7% to 10%, with particular demand for medium-density fiberboard (MDF) products
- Particle board demand will increase annually by 8% to 10% from 80,000 m³ to 312,000 by 2020
- Plywood demand to increase annually by 7% to 9%, growing from 11,000 tons in 2003 to 37,000 tons in 2020
- Newspaper and printing paper to increase annually by 8% to 10% from 55,000 tons in 2003 to 190,000 tons in 2020
- Annual increase in demand for writing and printing paper to increase by 9% to 13% from 680,000 tons in 2003
- Demand for hardcover paper and other paper to increase by 60,000 tons/year from 680,000 tons in 2003 to 1.7 million tons in 2020

NWFP products in 2010 were estimated to be rattan and bamboo products, 120,000 tons/year; pine latex, 50,000 tons/year and essential oils, 700 tons/year.

By 2020 NWFP targets:

- Value of NWFPs will reach 20% of the value of forest products in the sector
- NWFP turnover will increase annually by 10% to 15%, reaching US\$700 to 800 million/year in 2020;
- 1.5 million mountainous laborers will be mobilized to collect, process and trade NWFPs, accounting for 50% of the forestry labor force in 2020
- 15% to 20% of income from rural households will be from NWFPs

Optimistic targets are also set for the long-term shift in demand and pricing for the provision of forest ecosystem

21. FSIV, 2009. Vietnam Forestry Outlook Study. Working Paper No. APSOS II/2009/09, Asia Pacific Forestry Sector Outlook Study II, 2009.

services, including protection of soil and water, conservation of biodiversity, management of forests as carbon sinks and other social, cultural and environmental services. Vietnam is committed to participation in the REDD-plus and FLEGT programs.

A2.3.7 Potential for Certification, Verification and NTLAs/VPAs

The potential to increase the certification of sustainable management of natural forests and planted forests is significant in Vietnam. One of the targets in Vietnam's Forestry Strategy 2006–2020 (2007) is to get 30% of production forest certified, which is about 2.5 million ha. However, there is no action plan for this; therefore, this target seems too optimistic.

State enterprises managing 27.3% of the production forests have the greatest potential to increase the certified area, the theoretical reserve consisting of 2.3 million hectares. Private companies managing 1.3% of the forests could theoretically increase the certified area by 100,000 hectares, which is 2.5 times the current level. Individual households manage 37.1% of production forests (3.2 million ha), and only two group certifications have been issued to this type of applicant.

A large number of CoC certificates and increasing market requirements from importing countries will keep the certification of SFM on the agenda. Direct market or fiscal incentives are needed, as well as external support, before state forest enterprises or private households take large-scale initiatives in voluntary certification. In parallel, the capacity of certification bodies should be further strengthened to accommodate any potential increase in the demand for SFM and CoC certificates.

The recent launching of FLEGT-VPA negotiations with the European Union will shift the focus and resources from voluntary certification to the development of national legality verification systems, which most likely will slow down the expansion of certified forest area.

A2.4 Thailand

This section draws upon the 2009 Thailand country report to the Asia Pacific Forestry Outlook Study, II²² and the 2010 Global Forest Resources Assessment (FAO, 2010a).²³

A2.4.1 Forests and Forest Management

Thailand had rich forest resources, but faced severe deforestation in late 1900s as a result of population growth, increased accessibility and high demand for timber products. Commercial logging was banned in 1989, which formally designated protection of existing forest reserves rather than development and exploitation. However, the area of natural forests has continued to decline by about 90,000 hectares/year until present, but the increased area of planted forests has offset this. Table A2.15 summarizes key Thailand forestry data reported to FRA 2010.

Forest area and deforestation in Thailand is summarized in Figure A2.5.

In 1991, the Royal Forestry Department reported the PFE was 23.5 million hectares, much of it without forest cover. The PFE shrunk by almost 50% to 12 million hectares by 2001, by conversion mainly to settlements and infrastructure development, 8.3 million hectares; agriculture, 1.2 million hectares; and other uses, 1.1 million hectares.

More than half of Thai forests are managed for protection or conservation functions; however, they remain under deforestation and forest degradation pressure from local communities. Practically all natural forests are owned by the state and managed by the RFD, National Park, Wildlife and Plant Conservation Department (DNP) or Department of Marine and Coastal Resources (DMC). Privately owned forests are mostly forest plantations, managed for productive

22. FAO, 2009. Thailand Forestry Outlook Study. Working Paper No APFSOSII/WP/2009/22, Working Paper Series, Asia-Pacific Forestry Sector Outlook Study II, FAO, Bangkok, Thailand, 2009.

23. FAO, 2010. Global Forest Resources Assessment 2010. FAO Forestry Paper 163, FAO, Rome, Italy 2010.

TABLE A2.15 Thailand Forests and Forestry Data

<i>Forests and forestry data</i>		
Population	Total 67.4 million, density 132/km ² , growth 0.6%/year	
Land area	51.1 million ha	
Total forest area	19.0 million ha (37% forest cover)	
Designated Function of Forests		
Productive (wood, fiber, fuel, NWFPs)	2.6 million ha (14%)	
Protective (soil, water etc)	1.3 million ha (7%)	
Conservation of Biodiversity	8.9 million ha (46%)	
Social Services	0.2 million ha (1%)	
Multiple Use	0.0 million ha (0%)	
Other	0.0 million ha (0%)	
Unknown/Unspecified	6.0 million ha (32%)	
Forest Characteristics		
Primary forest	6.7 million ha (35%)	
Other naturally regenerating forests	8.3 million ha (44%)	
Planted forests	4.0 million ha (21%)	
Forest ownership	Public 88%, private 12%	
Forest Cover Trends		
1990	19.5 million ha	
2000	19.0 million ha (–0.3% decrease 1990–2000)	
2005	18.9 million ha (–0.1% decrease 2000–2005)	
2010	19.0 million ha (+0.1% increase 2005–2010)	
Wood Removals 1990–2005	Industrial roundwood (1,000 m ³)	Fuelwood (1,000 m ³)
1990	76	534
2000	45	6
2005	11	7
People Employed in Public Forest Institutions		
2000	8,030	
2005	2,338	
2008	2,329	
Main international markets for timber/timber products	Japan and China followed by Taiwan, Korea and Malaysia	
Ratification of international conventions/agreements	CBD, UNFCCC, Kyoto Protocol, UNCCD, ITTA, CITES, RAMSAR, World Heritage Convention, NLBI of UNFF	

Sources: CIA – the World Factbook: <https://www.cia.gov/library/publications/the-world-factbook>, FAO (2010a).

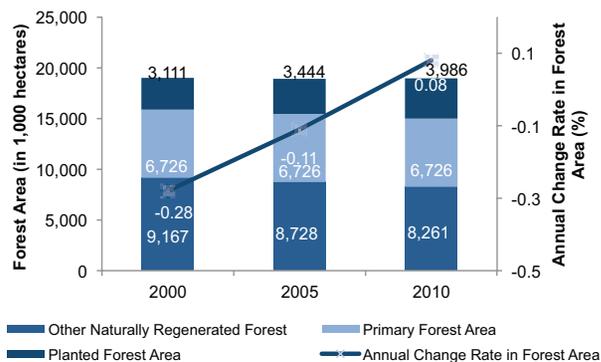
purposes. Trees outside forests are an important resource on the landscape, particularly in the Central Region, for production of wood and NWFPs through agroforestry and silvo-pastoral systems.

Some 11,400 villages are involved in community forests, of which about half are formally registered with RFD for usufruct rights. The majority (72%) are concentrated in the Northeast and North regions, where the highest incidence of poverty and areas of natural

forests are located. Community forests can be harvested for subsistence household living, free of charge, including fuelwood, construction wood, mushrooms, rattan, bamboo, wild vegetables, flowers, fruit, nuts and medicinal plants.

The Community Forestry Bill approved in 2007 awaits Royal Endorsement because of sensitivities relating to illegal immigration, in-migration and potential for changed land-use classification.

FIGURE A2.5 Forest Area and Deforestation Rate in Thailand



Source: FAO (2010a).

A2.4.2 Forest Products, Marketing and Trade

The statistics on forest production have been scarce and vary markedly, even official data. Because of the logging ban, there has been limited legal timber production from natural forests, with most now being harvested from eucalyptus and rubber plantations. RFD, reporting to FRA, 2010, stated that industrial roundwood production reduced from 179,000 m³ in 1990 to 11,000 m³ in 2005 and fuelwood from 534,000 m³ in 1990 to 7,000 m³ in 2005. These data are likely for natural forests only. However, in the Thailand Forestry Outlook Study for the Asia Pacific Forestry Sector Outlook Study II, 2009, reported industrial roundwood production, 19 million m³/year, primarily from privately owned forest plantations.

The production and apparent consumption of forest products in 2004, according to the APSOS II study, including sawnwood, veneer and plywood, fiberboard,

particle board, wood pulp and paper and board, is summarized in Table A2.16.

Thailand depends heavily on importing of logs and sawnwood from Myanmar and Lao PDR and to a lesser degree, Cambodia.

Thailand exports 70% of fiberboard production, 33% of particle board production, 23% paper production and 19% pulp output. Approximately 1 million tons of wood pulp, paper or board is imported to complement local supply. Thailand has no systematic data collection on production and trade of sawnwood and processed products, so these were estimated.

Since the logging ban, the forestry sector earnings to GDP has been declining and was estimated to be US\$120.5 million, or 0.1% of the GDP in 2003. The main international markets for forest products include, particularly, the Republic of Korea, China and Japan and to a lesser extent Taiwan, Korea, Malaysia and Vietnam.

At least 5 million people, the approximate number of forest dwellers in Thailand, are critically dependent on NWFPs. The most important are bamboo, rattan, lac, bee products and medicinal plants. For the rural poor, fuelwood and NWFPs are important sources of livelihoods. Poverty remains the most significant underlying cause of deforestation in Thailand.

A2.4.3 Verification

Legally produced timber can be sourced only from forest tree plantations, agricultural tree plantations or rubber

TABLE A2.16 Production and Apparent Consumption of Wood Products, 2004

Forest Product	Production	Imports	Exports	Consumption
	1,000 m ³			
Sawnwood	2,700–3,000	1,835	1,789	2,746–3,046
Veneer and plywood	455	176	4	627
Fiberboard	914	25	638	301
Particle board	2,600	11	867	1,744
Wood pulp (1,000 tons)	900	457	167	1,190
Paper and board	3,600	560	819	3,341

Source: APFSOS II, Thailand Forestry Outlook Study 2009.

tree plantations that are planted on private or permitted degraded land. Any timber originating from natural forests is illegal because of the logging ban. During the ban, forest legislation has not been updated to tackle the current forms of unauthorized use of natural forests in the country. Consequently, in recent years, the incidence of illegal logging in natural forests has increased.

According to the current control system, timber suppliers and processors must be able to demonstrate the legal origin of any timber and timber product. Processors also need to keep an account of timber stocks on the site and to prevent any timber without the appropriate evidence of legality from being mixed into the stock. Government authorities have the mandate to perform regular checks in timber procurement, transport and processing sites. Evidence on legal origin also is required for imported timber.

The Customs Department controls timber imports and exports, whereas the Royal Forest Department controls domestic timber production. The current control system is paper based and it does not provide fully reliable, up-to-date data for tracing timber at the point of export or processing. The Royal Forest Department is developing a digital, bar-code based monitoring system that will provide a better basis for reliable legality verification. The digital system will allow closer cooperation between the Customs Department and Royal Forest Department in preventing illegal timber imports and exports. Thailand is making preparations and seeking a domestic consensus to start VPA negotiations with the European Union.

A2.4.4 Certification

Thailand is part of the ASEAN framework for timber legality, which defined the general criteria and indicators for legal timber in 2009 and aims at a phased approach for timber certification for sustainability by 2015. The first forest plantation was certified in 2006. Forests and CoC certificates in Thailand are detailed in Table A2.17.

An FSC forest management certificate has been issued to six forest plantation units covering an area of 22,494 hectares, 50% to state enterprises and 50% to private (group). That is only 0.6% of the total area of forest plantations. Five certifications are group certifications of smallholders producing rubber wood or eucalyptus on small farms ranging from 1 to 100 hectares. Two of the group certifications are organized by Siam Forestry Co Ltd and one by Metro MDF. SGS and SmartWood Rainforest Alliance are the predominant forest certification bodies and SGS and BV for CoC Certification. The Rainforest Alliance also developed a forest management standard for Thailand in 2008, but currently no valid forest management certificates have been issued based on the standard.

Also, the state enterprise FIO, which is a legal entity of the Royal Thai Government, has been under the Rainforest Alliance's SmartWood Program – SmartStep for Forest Operations – since 2008, and its teak plantations in Northern Thailand have been audited accordingly. The pre-assessment was undertaken in August

TABLE A2.17 Forest and CoC Certification in Thailand

Certification body	FSC Forest Management Certificates		Type of Forest	Manager	FSC CoC Certificates	
	ha	No			No	%
SGS Qualifor	11,134	5	Plantation	Private (group)	24	63
SmartWood Rainforest Alliance	11,360	1	Plantation	State company	3	8
BV					10	26
SQS					1	3
Total	22,494 (0.6%)	6			38	100

Source: <http://www.fsc-info.org>; February 2012 data.

2007 in an area of 11,360 hectares. FIO manages 86,493 hectares of teak plantations and plans ultimately to achieve a forest management certificate for the area.

There were no instances of FSC controlled wood in Thailand.

There are 38 FSC and 7 PEFC CoC certificates, which is low and reflects the general low level in the production of certified timber. Due to the high number of reputable private timber processing and exporting companies, considerable potential exists to increase CoC certification in the country and the policies to strengthen the legality verification will encourage companies to apply for a CoC certificate.

The certification standards used in Thailand are detailed in Table A2.18.

A2.4.5 Forestry Institutions, Policy, Legislation and Law Enforcement

Under the Ministry of Natural Resources and Environment, there are three departments:

- RFD: Responsible for forests outside protected areas
- DNP: Responsible for forests within protected areas
- DMC: Responsible for coastal and marine resources management, including mangrove forest conservation and rehabilitation

However, other departments of the Ministry of Natural Resources and Environment, Ministry of Agriculture and Cooperatives, Ministry of Interior, Ministry of Industry, Ministry of Commerce and the National Economic and Social Development Board have some jurisdiction over forests, forest resource, forest industries or forest products trade. There are two state enterprises in the forestry sector: FIO, which is involved in reforestation, teak plantation, sawmilling and development of forest villages, and the FIO’s subsidiary Thai Plywood Company Ltd, which produces plywood and other wood products.

Although more than 20 laws and numerous Cabinet decisions have an impact on forests and forest management, there are five main forestry acts:

- *Forest Act, B.E. 2484 (1941)*, concerns logging operations and non-wood forest products collection, transportation of timber and non-timber products and sawnwood production and forest clearing
- *National Park Act, B.E. 2504 (1961)* covers determination of National Park land, the National Park Committee and protection and maintenance of National Parks
- *National Forest Reserve Act, B.E. 2507 (1964)* includes the determination of National Forest Reserved Forest and control and maintenance of the National Forest Reserved Forest
- *Wildlife Conservation and Protection Act, B.E. 2535 (1992)* establishes provisions for national wildlife preservation, establishment of a Protection Committee and identification of 15 species of reserved wildlife

TABLE A2.18 Forest Certification Standards Implemented in Thailand

Scheme	Standards	Owner
<i>Forest Management</i>		
FSC	SGS Qualifor. Forest management standard for Thailand AD 33-02 (2010)	SGS
	SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Thailand (FM-32 Thailand)	SmartWood Rainforest Alliance
<i>Chain of Custody</i>		
FSC	CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004)	FSC
	Standard for company evaluation of FSC controlled wood (FSC STD 40-005)	

Source: <http://info.fsc.org/>; March 2012; authors’ compilation.

- *Forest Plantation Act, B.E. 2535 (1992)* covers the determination of reforestation and land registration of private reforestation rights, ownership and exemption from royalty on forest products from reforested areas

A National Forest Policy was adopted by the Cabinet in 1985. Priorities included private sector investment and partnerships in afforestation and reforestation to supply future wood for the country. However, the policy did not address the root causes of deforestation (mainly outside the forestry sector) and poverty reduction in forest areas and it did not explicitly involve rural communities. The policy swung toward conservation and a long-term target to achieve 40% forest cover, including 25% for protection and conservation and 15% for production. However, unauthorized logging continues in all parts of the country. The legislation tackling illegal logging is not strongly enforced. Timber production is encouraged in forest plantations established on degraded forest lands.

The government is not deeply involved and does not intensively control practical forest management, (e.g., forest management planning). In this respect, monitoring and policing compliance with forestry policy and management plans is weak.

A2.4.6 Forests and Forestry toward 2020

The Tenth National Economic and Social Development Plan (2007–2011) highlighted relevant priorities to:

- Increase the potential of communities by linking them in networks to serve as the foundation for developing the economy and quality of life and to conserve, rehabilitate and utilize the environment and natural resources in a sustainable fashion to achieve sufficiency and reduce poverty
- Reform the production structure for goods and services for value creation on a foundation of knowledge and innovation and promote linkages among production sectors to increase value added
- Build safety nets and risk management system for finance, banking and energy sectors, factory markets, the labor market and investment

- Ensure fair competition in trade and investment for national benefit and create mechanisms for fair distribution of the benefits of development to all segments of the population
- Preserve natural resources and biodiversity, along with safeguarding the quality of the environment to be a secure foundation for national development and livelihoods for both current and future generations and create mechanisms to safeguard national benefit in a fair and sustainable manner
- Promote good governance in government administration, the private sector and the public sector; expand the role and capacity of local government bodies; promote mechanisms and processes in development; and nurture a culture of democracy for peaceful coexistence

It is proposed to conserve natural resources and biodiversity by maintaining forest cover at no less than 33% of the total land area, with conservation forest at no less than 18% of the total land area. Production of industrial roundwood and fuelwood will be mainly from forest plantations, agroforestry and trees outside forests owned by corporate and smallholder investors.

A2.4.7 Potential for Certification, Verification and NTLAs/VPAs

Significant potential exists to expand voluntary forest and CoC certification in Thailand. Due to the logging ban on natural forests, interest in certification would be focused on forest plantations. However, companies are not willing to invest in certification if it is not supported by the government or timber processing industry. Smallholder plantations and agroforestry production on private farms are typical in Thailand, which raises the need for group certifications to produce substantial amounts of certified timber. Such certifications have been successfully implemented in Thailand, but they need good organization and commitment on the part of the parties taking the initiative. Currently, 7,000 smallholders are participating in group certification schemes, but the potential for eucalyptus plantations alone is 20,000 farmers. The forest industry recognizes the need to provide evidence of legal compliance and sustainable management to the international markets. In addition

to the locally produced plantation wood, legal compliance is urgently needed for imported timber originating from the natural forests of the neighboring countries Lao PDR, Myanmar and Cambodia.

In summary, potential exists to increase the supply of certified timber from forest plantations, but there are no possibilities to produce certified timber from natural forests. To facilitate this potential expansion in certified timber, the capacity of Thailand's certification bodies should be further strengthened to ensure efficient and effective processing and auditing procedures.

Thailand is struggling with requirements for defining legality and preparing a TLAS, so progress has been slow. However, a study for understanding timber flows in Thailand and their control by Thailand's timber tracking systems is being undertaken as a preliminary step on:

- Rubberwood products
- Pulp and paper species (primarily *Eucalyptus* species)
- Products processed from imported timber from a non-VPA country in the Mekong region (e.g., Lao PDR or Cambodia)
- Products processed from another country (e.g., Malaysia)

A2.5 LAO PDR

A2.5.1 Forests and Forest Management

Lao PDR is well endowed with valuable, productive and ecologically unique forests in contrast to its neighboring countries. Eighty percent of the population relies heavily on the forest for timber, food, fuel, medicines and spiritual protection. Key forestry data are summarized in Table A2.19.

The forest cover has decreased despite an official logging ban. The main causes of deforestation are forest clearing for agricultural purposes and other land clearing (e.g., mining industry expansion, hydropower projects). High demand for wood and NWFPs in the wood-deficient neighboring countries and the logging bans in some neighboring

countries increased the formal and informal markets for Lao PDR timber products. Overcapacity in national timber processing, together with gaps in planning, issuance of logging rights and enforcement also contribute to overexploitation. Forest change, including forest degradation (decrease in growing stock and size of trees), loss of wildlife and plant habitats, is also a serious problem. In the past, shifting cultivation expansion into pioneer areas (protected or primary forests) is also an important factor of forest degradation (Vesa, 2010; Lao Agricultural, 2010).

Commercial logging activities have been mainly concentrated in central and southern areas in Lao PDR, and timber harvesting is based on annual logging quotas. The main sources of timber are:

- Commercial harvesting in the PFAs
- Land clearing for new hydropower project reservoirs
- New mining areas

Currently, and in the near future, only a small share of timber is harvested on PFAs, the majority coming from areas where forests are cleared for other land uses. PFAs are administrative areas and forest management planning units that are declared by the government. Currently there are 51 PFAs in the country, covering a total area of 3.1 million hectares, but only a few have a management plan, which limits commercial logging on the areas.

Forest clearing estimates include hydropower projects, 9,800 hectares/year (0.1%); mining, 10,000 hectares/year (0.1%); and foreign investments, in industrial plantations (eucalyptus and rubber) and other crops such as sugar cane, cassava and tea (c.f. Vesa, 2010). Figure A2.6 highlights forest area and deforestation rate reported by Lao PDR to FRA 2010.

The 2009 Lao PDR report to FAO Country Outlook report on Lao PDR states the legality of Lao PDR exports, in accordance with the Forestry Law²⁴:

- Logging is allowed only in PFAs that have an approved management plan

24. Forest Law PM Decree 59, MAF Reg. 0204 and PM Order 30 on the Enhancement of Forest and Timber Business Management (2007–2008).

TABLE A2.19 Lao PDR Forests and Forestry Data

<i>Forests and Forestry Data</i>		
Population	Total 6.2 million, density 27/km ² , growth 1.9%/year	
Land area	23.1 million ha	
Total forest area	15.8 million ha (68% forest cover)	
Designated Function of Forests		
Productive (wood, fiber, fuel, NWFPs)	3.6 million ha (23%)	
Protective (soil, water etc)	9.2 million ha (58%)	
Conservation of biodiversity	3.0 million ha (19%)	
Social services	0.0 million ha (0%)	
Multiple use	0.0 million ha (0%)	
Other	0.0 million ha (0%)	
Unknown/unspecified	0.0 million ha (0%)	
Forest Characteristics		
Primary forest	1.5 million ha (9%)	
Other naturally regenerating forests	14.0 million ha (89%)	
Planted forests	0.2 million ha (1%)	
Forest ownership	Public 100%, private 0%	
Forest Cover Trends		
1990	17.3 million ha	
2000	16.5 million ha (–0.5% decrease 1990–2000)	
2005	16.1 million ha (–0.5% decrease 2000–2005)	
2010	15.8 million ha (–0.5% decrease 2005–2010)	
Wood Removals 1990–2005	Industrial roundwood (1,000 m ³)	Fuelwood (1,000 m ³)
1990	477	6,488
2000	682	6,742
2005	292	6,825
People Employed in Public Forest Institutions		
2000	Na	
2005	Na	
2008	Na	
Main international markets for timber/timber products	ASEAN states, China, Japan, South Korea, Taiwan, Hong Kong, Australia and United States	
Ratification of international conventions/agreements	CBD, UNFCCC, Kyoto Protocol, UNCCD, CITES, RAMSAR, World Heritage Convention, NLBI of UNFF	

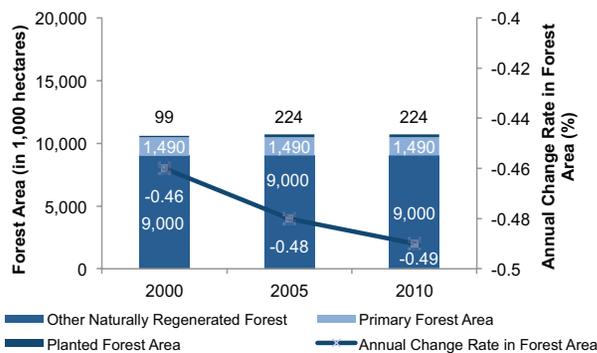
Sources: CIA – the World Factbook: <https://www.cia.gov/library/publications/the-world-factbook>, FAO (2010a).

- Forest management must involve local communities in planning and operations
- Export of roundwood, sawnwood and “semi-finished products” is prohibited, as is the harvesting of a “select list of species”

Before logging operations the contractors or companies must receive permission from state authorities. However, only a few PFAs have a management

plan in line with the current legislation; villagers are meaningfully involved in forestry and given their legally guaranteed share of benefits in the sites where the SUFORD project is working; and nearly all the exports of Lao PDR timber are in the form of roundwood or sawnwood. Thus, the government is facing the challenge to strengthen the administrative procedures to the level that can provide the basis for legal compliance (FAO, 2010b9).

FIGURE A2.6 Forest Area and Deforestation Rate in Lao PDR



Source: FAO (2010a).

Forest plantations have been increasingly promoted in government policy to reduce the pressures on natural forests, as well as to augment local wood availability and meet processing capacity requirements. Major plantation species are *Tectona* (Teak), *Eucalyptus*, *Acacia*, *Jatropha*, *Hevea* (Rubber) and *Aquilaria* (Agarwood). Forest plantations do not yet produce timber for export markets, and it is questionable whether the plantation timber can replace the demand for valuable native species in the future. The area of forest plantation has increased by 53% since the year 2005, from 146,000 hectares to 224,000 hectares (FAO, 2010a); however, the productivity and yields are often low. The forest plantations are typically 20- to 30-hectare plots owned by farmers or entrepreneurs (47.5%). Smallholders have about 30% of the tree plantations, but their plots are smaller (1.8 ha). Companies own about 10% of the plantation forest area and their average plantation size is 200 hectares.

Community forestry strongly focuses on production forests and benefit sharing in timber wealth. Village forestry as a method of joint forest management was trialed by the Forest Management and Conservation Project (FOMACOP) and now adapted in the SUFORD project.

A2.5.2 Forest Products, Marketing and Trade

With the depletion of the resources in the neighboring countries, Lao PDR has become a major supplier of tropical timber from natural forests. Timber royalties

and related fees establish a considerable source of income for the state budget. It is reported that in 2005, approximately 11% of total tax revenues and 25% of export revenues in Lao PDR came from timber royalties (Global Development Solutions, 2005; and Lao PDR, 2005). It was reported by the Asian Development Bank (ADB, 2000) that weak law enforcement capacity contributing to illegal and poorly regulated logging caused government annual losses of US\$20 million.

Total installed wood processing capacity was estimated at 3 to 3.4 million m³ in 2003 to 2008, which far exceeded the annual allowed cuts approved by the government of 150,000 to 640,000 m³ during the period. In 2001 and 2002, wood products exports were valued at US\$67 to 75 million, but increased in 2005 and 2006 to US\$97 million. The forest industry is considered generally inefficient, resulting in low recovery rates and generating low-value products produced from small to medium-size mills. The bulk of exports are unprocessed, basic sawnwood and planks, with additional minor quantities further processed into strip parquet flooring, furniture and various secondary products.

Constraints to the development of the forest industries sector are the variable annual allowable cuts, low access to finance, poorly skilled labor and lack of technology. The private sector has formed the Lao Wood Processing Association to facilitate the allocation of government timber quotas, upgrade technology, improve skills, increase market cooperation and promote exclusive use of legal logs among members. The association is also collecting CoC certification information in relation to processing and export of certified wood.

Current energy use is dominated by household consumption of traditional fuels, wood and charcoal, which account for 90% of energy consumption in rural areas.

Most NWFPs are for subsistence use, although some go to local markets and even international markets. For most rural poor households, NWFPs remain the most important forest products. UNDP (2001) estimated that NWFPs accounted, on average, for 40% of total household income. Key NWFPs include food (game, fish, bamboo shoots, fruits, greens, honey), fiber (khem grass), condiments and medicinal products (cardamom

TABLE A2.20 Forest and CoC Certification in Lao PDR

Certification Body	FSC Forest Management Certificates		Type of Forest	Ownership	FSC CoC Certificates	
	Area (ha)	No			No	%
SW Rainforest Alliance	82,760	1	Natural	State/village group	13	87
GFA Consulting GmbH	86	1	Plantation	Private group		
BV Certification					2	13
Total	82,846 (2%)	2			15	100

Source: <http://www.fsc-info.org/>; March 2012 data.

and malva nuts), inputs for chemical and perfume industries (benzoin, peuak meuak, resins and leoresins, kisi resin and lamxay), bamboo poles, rattan and fuelwood (World Bank et al, 2001).²⁵ NWFPs provide both cash and non-cash income.

Vietnam has surpassed Thailand as the major importing country for timber from Lao PDR, because their furniture industry cannot source high-quality tropical species in country. It has been concluded that Vietnam's demand for Lao PDR natural forest wood products has a strong influence on how Lao PDR forests are managed and how forest revenues are controlled and distributed (FAO, 2010b).

A2.5.3 Verification

Forest land is divided by Forest Law (2007) into production, conservation or protection forests. Timber harvesting is allowed only in production forests. Planted forests may be established only on fallow land. Forest land may also be allocated to villages as village conservation forest and village utility forests. Villages get

25. World Bank et al, 2001. Lao PDR Production Forestry Policy; Status and Issues Dialogue, Vol. 1., Main Report; Vol. Annexes, World Bank, Washington D.C.

permits to harvest (e.g., construction wood from the village utility forests).

PM Decree 59/2002 on Sustainable Management of Production Forests sets the basic principles for establishment and management of PFAs, but forest management planning lags behind and leads to uncontrolled forest use. The Ministry of Agriculture and Forestry and Prime Minister's Office have the overall control on forest management planning. They work in cooperation with local authorities on field surveys and monitoring. Village forestry organizations organize villagers to participate in implementation of forest management activities based on an agreement with villagers and district FMUs.

Lao PDR does not have a legality standard that could be used to monitor legal compliance.

A2.5.4 Certification

As detailed in Table A2.20, two FSC forest management certificates cover 82,846 hectares of village-based forest management of natural forests and one FSC forest management certificate covers 86 hectares of plantation teak under a private smallholder

TABLE A2.21 Forest Managers Complying with FSC Controlled Wood Standards in Lao PDR

Certification Body	FSC Controlled Wood			Ownership
	Area (ha)	No	Type of forest	
SW Rainforest Alliance	239,529	2	Natural	State
Total FSC Controlled Wood	239,529	2		

Source: <http://info.fsc.org/>; March 2012; author's compilation.

TABLE A2.22 Forest Certification Standards Implemented in Lao PDR

<i>Scheme</i>	<i>Standard</i>	<i>Owner</i>
<i>Forest Management</i>		
FSC	SmartWood Rainforest Alliance Interim Standard for Assessing Forest Management in Lao PDR. FM-32 (2008)	SW Rainforest Alliance
FSC	SCS Interim Standard for Forest Management Certification, April 2012	SCS
FSC	FSC STD 01-003 SLIMF; eligibility criteria in teak plantations	FCS
<i>Chain of Custody</i>		
FSC	CoC standard for companies supplying and manufacturing FSC certified products (FSC STD 40-004)	FSC
FSC controlled wood	FSC STD 30-010 V-20 EN	

Sources: <http://info.fsc.org/>; March 2012; authors' compilation.

group. There are 15 CoC certificates. The certification has been done with the support of the World Bank-financed SUFORD-project. Despite the high export volumes of timber and timber products, the number of timber processing companies with CoC certificates remains low.

Nearly 100% of forest management certification in Lao PDR is on natural forests owned by the state, under village management and supported by the SUFORD project. The area of forest certification is less than 2% of the production forest area.

The provincial forest authorities of Saravan and Savannakhet have been granted FSC controlled wood status as an elementary entry point to legal harvesting as a preliminary step toward certification.

The forest and CoC certification standards used in Lao PDR are detailed in Table A2.22.

A2.5.5 Forestry Institutions, Policy, Legislation and Law Enforcement

Lao PDR development goals have taken precedence over environmental protection, particularly in relation to revenue-generating activities such as mining, hydro-power generation and logging. The direct impacts of economic development on forests include deforestation and land conversion, as well forest depletion from poorly regulated legal and illegal logging. With the recent

economic boom in the region, it appears that unsustainable forestry activities may be on the rise.

The economy of Lao PDR is dependent upon international trade and investment, with Thailand as the largest trading partner, followed by Vietnam. China is fast becoming an investor, aid donor and the third largest trading partner.

The new regulations and policies related to timber logging and exports aim to conserve existing natural forests and shift the country toward participatory SFM. Sustainable production of timber has been a major policy objective of the Lao PDR government since 1975. The Ministry of Agriculture and Forestry has taken various steps in bringing the remaining forests under sustainable management. In 2005, the government approved the Forest Strategy for the Year 2020 of Lao PDR that guides the development of forestry sector in line with overall national plans and strategies for socio-economic development and environmental conservation (Lao PDR, 2005).

Tree planting has been a national priority since the 1980s. The annual targets for tree planting are set in national socioeconomic development plans. The government provides incentives, including allocation or lease of land for tree planting, property rights on planted trees, land tax exemptions for registered plantations and free distribution of seedlings to farmers and organizations. A reforestation fee being levied on logs and NWFPs harvested from natural forests is also used in seedling

and plantation development. The government is also cooperating with several donor organizations on tree plantation promotion (Forestry Strategy, 2005). Forest land is owned by the state, but companies or households may gain ownership of the planted trees.

The donor-funded project framework on SUFORD was established to assist the government to put the country's PFAs under participatory SFM. Forest management plans developed for each sub-forest management area describe the annual allowable cut, harvesting coupe, HCVF management, regeneration, etc., which are necessary for management. Key issues include strengthening of forest inspection and ensuring the control over the supply chain from forests to the mill gate and the point of export.

The Forestry Law (2007) was amended to reflect the following priorities:

- Prevention and control of fires and restriction of shifting cultivation and illegal logging
- Forest regeneration and forest plantations
- Regulation of the allowable extent of natural forest conversion and forest land-use
- Provision for a Department of Forest Inspection

In 2011 a new Ministry of Environment was established with responsibility for protection and conservation forests. The National Assembly will undertake another review of the Forestry Law (2007) to further clarify roles and responsibilities. The Department of Forestry will be responsible for production forests and forestry inspection.

Lao PDR is part of the ASEAN working group on forests that promotes a legality definition and forest certification in the region.

A2.5.6 Forests and Forestry toward 2020

In the Forestry Strategy 2020, the government focus is on land-use planning, village-based natural resources management and sustainable harvesting; rationalization of the wood processing industry; collaboration with domestic and international players in forest plantation development; law enforcement and participation to

prevent unauthorized activities; and protection of watersheds. The targets include:

- Improving the quality of forest resources by natural regeneration and tree planting for protection and livelihood support
- Providing sustainable flow of forest products for domestic consumption and household income generation
- Preserving species and habitats
- Conserving environmental values in relation to soil, water and climate

Positive changes in forestry could be toward sustainable development in 2020 that include the SUFORD model of village-based forest management at the national level, increased payments for environmental services, improved awareness of the values of forests and forestry by officials and the public and implementation of REDD-plus, particularly in reducing deforestation and forest degradation.

Toward 2020, it is anticipated that the annual allowable cut will be approximately 1 million m³. Plantation supplies will increasingly complement the declining supplies from natural forests, but significant new investments are necessary.

A2.5.7 Potential for Certification, Verification and NTLAs/VPAs

Some resistance by state forest industries to certification has occurred, and communities tend to be daunted by the high costs and perceived low benefits of certification. Alternative strategies under consideration include the WWF-GFTN and TNC Responsible Asia Forest and Trade (RAFT) initiatives, which offer market access for legal and certified wood. In 2009, the project GFTN-Lao PDR was launched.

GFTN-Lao PDR is the Lao PDR chapter of GFTN, WWF's initiative to eliminate illegal logging and improve the management of valuable and threatened forests. GFTN-Lao PDR is the first GFTN office operating under a collaborative partnership program with TFT. The strategic approach of this partnership is to

develop a favorable environment for certification of natural and planted forests to:

- Support international companies with strong corporate policy on sustainability to create good examples for SFM and plantation development in Lao PDR
- Facilitate CoC certification of committed processing companies and link them to certified supply bases in Lao PDR
- Provide a set of services and benefits (i.e., market links) to participants of the GFTN/TFT program in Lao PDR to enhance economic benefits from certification
- Promote improved forest management practices among small forest owners and community forests
- Explore and implement strategies to lower costs of certification

Legal timber has gained momentum in markets in recent years, particularly in Europe and North America, and more consuming countries have green procurement policies that demand legality as a minimum requirement. China and Vietnam have expressed their interest in VPAs, and because they are major trading partners with Lao PDR, timber legality issues are likely to be prioritized in the near future.

Lao PDR has been involved with the FLEGT program since 2009 and is in transition with the establishment of a FLEGT steering committee and the leader of the Department of Forest Inspection as Focal Point to

oversee two working groups on (i) timber legality; and (ii) NTLAS. The next major step is to decide whether or when to enter into formal negotiations for a VPA with the European Union.²⁶

The government target is to increase interest in CoC certification among the timber processing companies and to reach the level of 10 certificates in the near future. Other investors establishing forest plantations in the country are also interested in certifying their plantation forest management.

Despite the ambitious target in the number of certificates, the potential to expand the certified forest area in natural forests in the near future is slight because of the limited resources in forest administration and the challenges in establishing the PFAs in line with the prevailing legislation. The area of forest plantations is still small, and despite the high interest in them, it is foreseen that their area will expand only gradually. In the long run, certification of individual PFAs in Lao PDR is possible, and this would have considerable impact on the supply of certified timber from natural tropical forests.

Rough estimates for the expansion of certified forest areas during the next five years would be two PFAs with a total area of 100,000 to 150,000 hectares and forest plantation areas of below 10,000 hectares.

26. MAF, Department of Forest Inspection presentation to ASEAN-EU-FLEGT Asia, Sub-regional Training Workshop on TLAS, Kota Kinabalu, State of Sabah, Malaysia, 25–27 October 2011.

ANNEX 3: COMPATIBILITY OF NATIONAL LEGALITY STANDARDS AND VOLUNTARY CERTIFICATION SCHEMES WITH ASEAN TIMBER LEGALITY CRITERIA

<i>Legality Criteria</i>		<i>Comply</i>
Criterion 1. The forest management enterprise holds the <i>legal right</i> to operate and to harvest timber at the designated forest area.		
Indonesian SVLK	Management unit has a <i>legal permit</i> to operate and to harvest timber at the designated forest area. <ul style="list-style-type: none"> ■ No requirements on the validity of the process to obtain the license to operate 	Yes
Malaysian TLAS	State authority issues the harvest licenses. Licensee is required to demarcate the license area and to <i>register the property mark</i> . <ul style="list-style-type: none"> ■ No requirements on the validity of the process to obtain the license to operate 	Yes
SmartWood Rainforest Alliance Standard for VLO, Malaysia	The <i>legal status</i> of the forest management unit shall be clearly defined and boundaries delineated. The forest management enterprise shall prove that it has <i>validly obtained the legal right</i> to operate and to harvest timber from within the defined forest management unit.	Yes
SmartWood Rainforest Alliance Standard for VLC, Malaysia	The <i>legal status</i> of the forest management unit shall be clearly defined and boundaries delineated. The forest management enterprise shall prove that it has <i>validly obtained</i> the legal right to operate and to harvest timber from within the defined forest management unit.	Yes
LEI STANDARD 5000-1	The legal right to operate and the delineation of the forest management unit are required.	Yes
Malaysian MC&I 2002 PEFC	Availability of documentation of <i>legal status, and established forest use rights</i> of the land or forest resources within the relevant national and regional legal frameworks. Forest managers should support legally recognized mechanisms for resolving land claims.	Yes
SGS QUALIFOR Standard, Malaysia	Clear, long-term tenure and forest use rights to the land (e.g., <i>land title, customary rights or lease agreements</i>) shall be demonstrated. <ul style="list-style-type: none"> ■ No requirements on the validity of the process to obtain the license to operate, the <i>legal status of land title?</i> 	Yes
Criterion 2. The forest management enterprise holds <i>approved authorization</i> for its harvesting operations, based on an <i>approved cut</i> .		
Indonesian SVLK	A <i>legal work plan</i> is required to gain a harvest permit.	Yes
Malaysian TLAS	An approved <i>harvesting plan</i> is required.	Yes
SmartWood Rainforest Alliance Standard for VLO, Malaysia	The forest management enterprise shall have received the necessary <i>approval</i> for the basic and fundamental <i>planning</i> requirements <i>legislated as necessary to enable forest management</i> and shall adhere to fundamental planning and operational requirements and <i>production restrictions and quotas</i> within the permitted harvest rights.	Yes
SmartWood Rainforest Alliance Standard for VLC, Malaysia	The forest management enterprise shall have received the necessary approval for the basic and fundamental planning requirements legislated as necessary to enable forest management and shall adhere to fundamental planning and operational requirements and production restrictions and quotas within the permitted harvest rights.	Yes
LEI STANDARD 5000-1	A legally approved harvesting plan is required.	Yes

Legality Criteria		Comply
Malaysian MC&I 2002 PEFC	<p>Forest managers are <i>knowledgeable</i> of the relevant national and local laws and the regulatory framework. <i>Availability</i> of legal provisions for the establishment and protection of the PRF for Peninsular Malaysia and forest management areas for the States of Sabah and Sarawak.</p> <p>Forest Management Plan (Peninsular Malaysia, Long -Term Timber License Agreement (State of Sarawak)</p> <p>Record of violations and actions taken to address them</p> <p>Different regulations in Peninsular and the States of Sabah and Sarawak</p> <ul style="list-style-type: none"> ■ <i>Timber license and forest management plan include the approved cut and are officially approved only for enterprises that have authorization to harvesting. The MTCS standard for native forests requires awareness on legislation.</i> 	Yes
SGS QUALIFOR Standard, Malaysia	<p>A detailed <i>management plan</i> is required. The rate of harvest of forest products shall not exceed levels, which can be <i>permanently sustained</i>.</p> <ul style="list-style-type: none"> ■ <i>Management plan includes the approved cut and are officially approved only for enterprises that have authorization to harvesting.</i> ■ <i>Standard as such does not require official approval; depends on the status and content of the plan in the country</i> 	Yes
Criterion 3. The forest management enterprise fulfills <i>CITES compliance</i> and the requirements of <i>relevant environmental laws and regulations</i> .		
Indonesian SVLK	<p>The management unit is required to obtain the environmental impact assessment (EIA). <i>Negative environmental impacts</i> related to felling have to be <i>mitigated</i>. The EIA document has to be legally approved.</p> <ul style="list-style-type: none"> ■ <i>EIA is required by the legislation that also defines its content.</i> 	Yes
Malaysian TLAS	<p>The licensee has to determine if timber harvesting in the approved area constitutes a prescribed activity. EIA and proposed mitigation measures have to be undertaken if required by the Department of Environment. The environmental management is based on environmental legislation.</p> <ul style="list-style-type: none"> ■ <i>CITES not referred to</i> 	Yes
SmartWood Rainforest Alliance Standard for VLO, Malaysia	<ul style="list-style-type: none"> ■ <i>CITES not referred to</i> 	No
SmartWood Rainforest Alliance Standard for VLC, Malaysia	<p>The forest management enterprise shall demonstrate compliance with all <i>local and national laws</i> relating to the environmental obligations of a forest management operation.</p> <ul style="list-style-type: none"> ■ <i>CITES compliance not addressed.</i> 	Partly
LEI STANDARD 5000-1	<p>Forest management activities’ impacts on forest structure, plant species, soil and water</p> <ul style="list-style-type: none"> ■ <i>Requires identification of impacts, measures to avoid adverse impacts as required by legislation and to monitor the compliance level not included in the standard</i> ■ <i>Scope of environmental impacts is broad</i> 	Yes
Malaysian MC&I 2002 PEFC	<p>Forest managers <i>are aware of all binding</i> international agreements, such as CITES, core ILO Conventions, ITTA, and Convention on Biological Diversity.</p> <p>Forest management shall <i>respect</i> all national and local laws and administrative requirements. Records and availability of up-to-date relevant national and local laws, regulations and policies, among others</p> <p><i>Record of violations and actions</i> taken to address them</p> <p>Different regulations in Peninsular Malaysia and States of Sabah and Sarawak</p>	Yes
SGS QUALIFOR Standard, Malaysia	<p>Assessment of <i>environmental impacts and implementation</i>; species protection, erosion control, minimizing mechanical disturbance and water resources protection; pest management, waste management, use of biological control agents and the use of exotic species; forest conversion to plantations or non-forest land uses shall not occur.</p> <p>CITES compliance required, as well as compliance with all national and local laws and requirements.</p>	Yes

(continued)

Legality Criteria				Comply
Criterion 4. The forest management enterprise fulfills the requirements of relevant <i>social laws and regulations</i> .				
	Rights of local communities	Rights of indigenous people	Worker safety and health, labor rights	
Indonesian SVLK	Commitment for the welfare of the local community required. <ul style="list-style-type: none"> Linkage to normative regulations weak; scope unspecified 	–	Safety and welfare of workers is guaranteed. <ul style="list-style-type: none"> Linkage to normative regulations weak, scope unspecified 	Partly
Malaysian TLAS	–	Free use of forest products by indigenous people on the land areas lawfully occupied by them	Safety and welfare of workers is guaranteed. <ul style="list-style-type: none"> Linkage to normative regulations weak, scope unspecified 	No local communities
SmartWood Rainforest Alliance Standard for VLO, Malaysia	–	–	–	No
SmartWood Rainforest Alliance Standard for VLC, Malaysia	Taking into account legally recognized customary user rights, conflict mitigation mechanisms	–	Compliance with laws covering health and safety issues and labor laws	Partly <ul style="list-style-type: none"> Indigenous people not addressed
LEI STANDARD 5000-1	Commitment for the welfare of the local community Compensation for the use of the community's traditional knowledge	–	Health and safety regulations implemented, as well as other rights of employees	Partly <ul style="list-style-type: none"> Indigenous people not addressed; does not address user rights
Malaysian MC&I 2002 PEFC	Different regulations in Peninsular Malaysia and the States of Sabah and Sarawak			
	Provisions and measures within relevant national and regional legal frameworks should be taken to prevent loss or damage affecting the local people's legal or customary rights, property, resources, or their livelihoods.	Availability of appropriate mechanisms and compensation for the commercial utilization of traditional forest-related knowledge and practices of indigenous people in accordance with existing legislation or by mutual agreement Recognition in legislation of native courts and customary rights.	Health and safety issues and right to organize addressed in legal requirements Provisions for workers to freely organize into union of their own choice in accordance with ILO Convention No. 87. (Note limitations in public sector in the right to bargain.)	Yes <ul style="list-style-type: none"> Certification based on legislation, verifies compliance
SGS QUALIFOR Standard, Malaysia	Management planning based on social impacts evaluations; mechanisms for resolving grievances and for providing fair compensation in the case of loss or damage	Control of forest management by indigenous people on their lands; their resources or tenure rights shall not be threatened; sites of special significance shall be identified; and indigenous peoples shall be compensated for the application of their traditional knowledge regarding forests	Forest management should meet or exceed all applicable laws and regulations covering health and safety of employees and their families and the rights of the workers to organize and negotiate with the employer	Yes Broadest and most system oriented; specifies requirement, may exceed national regulations

Legality Criteria		Comply
Criterion 5. The forest management enterprise has <i>paid all statutory charges</i> directly related to timber <i>harvesting</i> and timber <i>trade</i> .		
Indonesian SVLK	The management unit has paid government retribution requirement related to timber harvesting. <ul style="list-style-type: none"> Transport-, processing-, trade-related fees not covered 	Partly
Malaysian TLAS	The licensee has paid the royalties and fees directly related to harvesting. <ul style="list-style-type: none"> Transport-, processing-, trade-related fees not covered 	Partly
SmartWood Rainforest Alliance Standard for VLO, Malaysia	The forest management enterprise shall <i>fulfill all obligatory taxes, fees and/or royalty payments</i> associated with maintaining the legal right to harvest and permitted harvesting volumes. <ul style="list-style-type: none"> Transport-, processing-, trade-related fees not covered 	Partly
SmartWood Rainforest Alliance Standard for VLC, Malaysia	The forest management enterprise shall <i>fulfill all obligatory taxes, fees and/or royalty payments</i> associated with maintaining the legal right to harvest and permitted harvesting volumes. <ul style="list-style-type: none"> Transport-, processing-, trade-related fees not specifically covered 	Partly
LEI STANDARD 5000-1	–	No
Malaysian MC&I 2002 PEFC	All applicable and legally prescribed fees, royalties, taxes, and other charges shall be paid. Availability of current list of all legally prescribed fees, royalties, taxes, and other charges.	Yes
SGS QUALIFOR Standard, Malaysia	All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid. <ul style="list-style-type: none"> Transport-, processing-, trade-related fees not covered 	Partly
Criterion 6. The forest management enterprise implements a <i>traceability</i> system that allows for the <i>tracking of all logs from the forest gate to the relevant harvesting sites</i> . Note: Does not address transport and processing.		
Indonesian SVLK	The management unit guarantees that all transported logs have physical markings/identity and legal documents to trace them back to the stumps.	Yes <i>Covers only logs in forest transport</i>
Malaysian TLAS	The movement of log from harvesting site to the forest gate is controlled.	Yes <i>Covers only logs in forest transport</i>
SmartWood Rainforest Alliance Standard for VLO, Malaysia	Documented control of the CoC of <i>forest products</i> from the point of harvest up to the <i>forest gate and between handling steps</i>	Yes <i>Covers CoC only in forest</i>
SmartWood Rainforest Alliance Standard for VLC, Malaysia	Documented control of the CoC of forest products from the point of harvest up to the forest gate and between handling steps	Yes <i>By definition covers CoC only in forest; should extend to final product</i>
LEI STANDARD 5000-1	Validity of timber tracking system in the forest	Yes <i>Covers only logs in forest transport</i>
Malaysian PEFC scheme	Production, transport and sales of labeled products must be in compliance with PEFC international CoC standard.	Yes
SGS QUALIFOR Standard, Malaysia	Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to <i>trace each forest product</i> from its origin, a process known as the “CoC.”	Yes <i>Covers processing and transport</i>

Sources: Authors’ compilation.

ANNEX 4: BANKING SECTOR KNOW YOUR CLIENT CRITERIA/GUIDELINES

A4.1 International Finance Corporation (IFC)

A4.1.1 Sustainability Framework

The IFC Sustainability Framework reflects their commitment to sustainable development and is an integral part of their approach to risk management. The framework is made up with a comprehensive set of policy, technical and general guidelines, including the 2012 Policy on Environmental and Social Sustainability, Performance Standards and Guidance Notes on Environmental and Social Sustainability, Environmental Health and Safety Guidelines and Exclusion List Guidelines.

A4.1.2 Policy on Environmental and Social Sustainability

Central to IFC's Environmental and Social Sustainability Policy is the provision of investment and advisory activities with the intent to "do no harm" to people and the environment, to enhance the sustainability of private sector operations and the markets they work in and to achieve positive development outcomes. There is a commitment to ensure that the costs of economic development do not fall disproportionately on those who are poor or vulnerable, the environment is not degraded in the process and the renewable resources are managed sustainably. A central pillar to achieving this is regular client engagement with stakeholders to minimize risks and impacts to people, communities and environment. Additionally, IFC encourages sector-wide market transformations that are consistent with sustainable development objectives.

A4.1.3 Access to Information Policy

IFC's Access to Information Policy reflects their commitment to transparency and good governance on its operations and outlines their institutional disclosure obligations regarding its investment and advisory services.

A4.1.4 Performance Standards on Environmental and Social Sustainability

The Performance Standards on Environmental and Social Sustainability provide clients guidance on how to identify risks and impacts and are designed to help avoid, mitigate and manage risks and impacts as a way of doing business in a sustainable way. The eight performance standards that clients must meet are detailed in Table A4.1.

Performance Standard 1 establishes the importance of (i) integrated assessment to identify the environmental and social impacts, risks and opportunities of projects; (ii) effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and (iii) the client's management of environmental and social performance throughout the life of the project. Performance Standards 2 to 8 establish objectives and requirements to avoid, minimize, and, where residual impacts remain, to compensate/offset for risks and impacts to workers, affected communities and the environment. Where environmental or social risks and impacts are identified, the client is required to manage them

TABLE A4.1 IFC Performance Standards on Social and Environmental Sustainability

<i>Performance Standard</i>	<i>Standard Content</i>
1	Assessment and Management of Environmental and Social Risks and Impacts
2	Labor and Working Conditions
3	Resourced Efficiency and Pollution Prevention
4	Community Health, Safety and Security
5	Land Acquisition and Involuntary Resettlement
6	Biodiversity Conservation and Sustainable Management of Living Natural Resources
7	Indigenous Peoples
8	Cultural Heritage

Source: IFC Performance Standards on Environmental and Social Sustainability: http://www1.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Documents.pdf?MOD=AJPERES

through its environmental and social management system, consistent with Performance Standard 1.

A4.1.5 Environmental, Health and Safety Guidelines (EHS Guidelines)

The EHS Guidelines contain the technical performance levels and measures that are normally acceptable to IFC and are generally considered to be achievable in new facilities at reasonable costs by existing technology. For IFC-financed projects, application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets with an appropriate timetable for achieving them. The components and sub-components of the EHS Guidelines are detailed in Table A4.2.

TABLE A4.2 IFC/World Bank Group, EHS Guidelines (2007)

1. Environmental	1.1 Air Emissions and Ambient Air Quality 1.2 Energy Conservation 1.3 Wastewater and Ambient Water Quality 1.4 Water Conservation 1.5 Hazardous Materials Management 1.6 Waste Management 1.7 Noise 1.8 Contaminated Land
2. Occupational Health and Safety	2.1 General Facility Design and Operation 2.2 Communication and Training 2.3 Physical Hazards 2.4 Chemical Hazards 2.5 Biological Hazards 2.6 Radiological Hazards 2.7 Personal Protective Equipment (PPE) 2.8 Special Hazard Environments 2.9 Monitoring
3. Community Health and Safety	3.1 Water Quality and Availability 3.2 Structural Safety of Project Infrastructure 3.3 Life and Fire Safety (L&FS) 3.4 Traffic Safety 3.5 Transport of Hazardous Materials 3.6 Disease Prevention 3.7 Emergency Preparedness and Response
4. Construction and Decommissioning	4.1 Environment 4.2 Occupational Health and Safety 4.3 Community Health and Safety

Source: <http://www.ifc.org/ifcext/sustainability.nsf/Content/EHSGuidelines> (Sourced: 24 February 2011).

A4.1.6 Environmental, Health and Safety Guidelines Applicable in the Forestry Sector

Specific EHS guidelines exist for (i) forest harvesting operations (managed natural and plantation forests), (ii) sawmilling and manufactured wood products, (iii) board and particle-based products and (iv) pulp and paper mills. Each Guideline is formatted according to:

- Industry-specific impacts and management recommendations
- Performance indicators and monitoring
- References and additional sources
- General description of industry activities

The guidelines are based upon principles of legality and sustainability.

A4.1.7 Exclusion List

The Exclusion List, as detailed in Table A4.3 defines the types of project that the IFC does not finance.

TABLE A4.3 IFC Exclusion List

No.	Excluded projects
1	Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCBs, wildlife or products regulated under CITES.
2	Production or trade in weapons and munitions.
3	Production or trade in alcoholic beverages (excluding beer and wine).
4	Production or trade in tobacco.
5	Gambling, casinos and equivalent enterprises.
6	Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment or any equipment in which IFC considers the radioactive source to be trivial and/or adequately shielded.
7	Production or trade in unbonded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting in which the asbestos content is less than 20%.
8	Drift net fishing in the marine environment using nets in excess of 2.5 km in length.

Source: http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc1sustainability/sustainability1framework/ifc1exclusion1list/ifcexclusionlist (Sourced: 30 March 2011)

TABLE A4.4 IFC Client Additional Exclusion List

<i>Additional Exclusions for the Clients of the IFC</i>	
1	Production or activities involving harmful or exploitative forms of forced labor/harmful child labor.
2	Commercial logging operations for use in primary tropical moist forest.
3	Production or trade in wood or other forestry products other than from sustainably managed forests.

Source: <http://www.ifc.org/ifcext/sustainability.nsf/Content/IFCExclusionList> (Sourced: 30 March 2011).

In addition, all financial intermediaries must apply the exclusions, as detailed in Table A4.4, in addition to the IFC's Exclusion List:

A4.2 Equator Principles

The Equator Principles were launched by 10 financial institutions²⁷ in Washington D.C. on 4 June 2003 as a global banking industry credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions. The Equator Principles were based on the IFC Performance Standards for Social and Environmental Sustainability (2006) and the World Bank Group's Environmental, Health and Safety Guidelines (2007). The Equator Principles Association Steering Committee has amended the Equator Principles consistent with the IFC Performance Standards (2012) that took effect for Equator Principles Association Members on 1 January 2012. The Equator Principles are adopted voluntarily by financial institutions as a minimum standard for due diligence to support responsible risk decision making for projects in which capital costs exceed US\$10 million. Table A4.5 indicates the Equator Principles standard content.

27. Foundation signatories to the Equator Principles: ABN AMRO Bank, N.V., Barclays plc, Citi, Crédit Lyonnais, Credit Suisse First Boston, HVB Group, Rabobank Group, The Royal Bank of Scotland, WestLB AG and Westpac Banking Corporation.

TABLE A4.5 The Equator Principles

<i>Principle</i>	<i>Standard Content</i>
1	(Project) Review and Categorization
2	Social and Environmental Assessment
3	Applicable Social and Environmental Standards
4	Action Plan and Management System
5	Consultation (of Affected Communities) and Disclosure
6	[Establishment of] Grievance Mechanism
7	Independent (Social or Environmental Expert) Review
8	Covenants
9	Independent Monitoring and Reporting
10	EPFI Reporting (Publicly)

Source: http://www.equator-principles.com/documents/Equator_Principles.pdf (Sourced: 24 February 2011).

The Equator Principles serve as a common baseline and framework for each financial institution to adopt its own internal social and environmental policies, standards and procedures related to their project financing activities. In March 2012, 74 banking groups had become EPFIs globally, with only Sumitomo Mitsui of Japan from Asia.

EPFIs commit to not lending to projects in which the borrower will not, or is unable, to comply with their respective social and environmental policies and procedures based upon the Equator Principles. Although the Equator Principles are not intended to be applied retroactively, EPFIs will apply them to all project financing covering expansion or upgrade of an existing facility where changes in scale or scope may create significant environmental and/or social impacts, or significantly change the nature or degree of an existing impact. EPFIs are required to report annually on compliance with the Equator Principles in their lending portfolios.

The Equator Principles have greatly increased the attention and focus of financial institutions and their clients on social/community standards and responsibility, including standards for indigenous peoples, labor standards, and consultation with locally affected communities within the project finance market. They have also promoted convergence around common environmental and social standards. Multilateral development banks

and export credit agencies through the Organization for Economic Co-operation and Development (OECD) Common Approaches are increasingly drawing on the same standards as the Equator Principles.

A4.3 Asian Development Bank (ADB)

A4.3.1 ADB's Strategy 2020

The Asia Pacific region, the most populated and fastest-growing region in the world, is undergoing dramatic social and environmental changes. Concerns have grown about the long-term sustainability of development in many Asian countries. Rapid industrialization and urbanization, coupled with increased demand for natural resources, are triggering changes in land use and human settlement, declining water quality and quantity, loss of biodiversity, deforestation and desertification, elevated pollution and negative impacts on human health. High population densities and rising demand for land for urban development and infrastructure have increased the risks associated with involuntary resettlement of people and the adverse impacts on such vulnerable groups as the poor and indigenous peoples.

ADB's Strategy 2020 advocates arresting deforestation as an approach to reduce greenhouse gas emissions, with the sustainable management of lands, forests and other natural resources also supporting local livelihoods, strengthening resilience to climate change, maintaining clean water supplies and protecting biological diversity. ADB is supporting the region's SFM and conservation efforts, as well as agricultural land use improvements, to promote carbon conservation and sequestration and achieve other local and global benefits.

The ADB is active in the Mekong Basin and Indonesia programming support in collaboration with other multilateral and bilateral programs such as the Climate Investment Fund's FIP (Indonesia is a pilot country), the World Bank's FCPF, the UN-REDD Program and the Global Environment Facility's Sustainable Forest Management Program.

A4.3.2 Safeguard Policy Statement (SPS)

The ADB's SPS, approved by the Board of Directors in July 2009, supersedes ADB's Involuntary Resettlement Policy (1995), Policy on Indigenous Peoples (1998) and Environment Policy (2002) and brings them into a consolidated policy framework of environmental and social safeguards that aim to balance economic growth, food security, poverty alleviation and social and environmental sustainability. The SPS objectives are to avoid, minimize and mitigate adverse ADB-supported project impacts on the environment and affected people and to help borrowers strengthen their safeguards and develop capacity to manage environmental and social risks. The SPS is applied to all ADB-supported projects reviewed by ADB's management after 20 January 2010. ADB works with borrowers to put policy principles and requirements into practice through project review and supervision and capacity development support. The SPS also provides a platform for participation by affected people and other stakeholders in project design and implementation.

ADB's SPS sets out the policy objectives, scope, triggers and principles for safeguards on the environment, involuntary resettlement and indigenous peoples, as detailed in Table A4.6.

Environmental Categories

A project's category is determined by its most environmentally sensitive component, including direct, indirect, cumulative and induced impacts in the project's area of influence. Each proposed project is scrutinized as to its type, location, scale and sensitivity and the magnitude of its potential environmental impacts. Projects categories are:

- *Category A:* Significant adverse environmental impacts are irreversible, diverse or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.
- *Category B:* Potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific; few, if any, are irreversible, and in most cases mitigation measures can be designed. An initial environmental examination is required.

TABLE A4.6 ADB Safeguard Policy Statements on Environment, Involuntary Resettlement and Indigenous Peoples

<i>Safeguard</i>	<i>Objective</i>	<i>Scope, Triggers and Requirements</i>
Environment	To ensure environmental soundness and sustainability of projects and support integration of environmental considerations into project decision making process	If project likely to have potential environmental risks and impacts. Requirements:
Involuntary resettlement	To avoid involuntary resettlement wherever possible, minimize involuntary resettlement by exploring project and design alternatives, enhance or restore livelihoods of all displaced persons in real terms relative to pre-project levels and improve the standards of living of the displaced poor and other vulnerable groups.	Physical displacement (relocation, loss of residential land or shelter) and economic displacement (loss of land, assets, access to assets, income or means of livelihoods) as a result of (i) involuntary acquisition of land or (ii) involuntary restrictions on land use or access to legally designated parks and protected areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary.
Indigenous peoples	Design and implement projects in a way that fosters full respect for indigenous peoples' identity, dignity, human rights, livelihood systems and cultural uniqueness as defined by the indigenous peoples themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of projects and (iii) can participate actively in projects that affect them.	Indigenous peoples safeguards triggered if project directly or indirectly affects dignity, human rights, livelihood systems or culture of indigenous peoples or affects territories or natural or cultural resources that indigenous peoples own, use, occupy or claim as an ancestral domain or asset. The term <i>indigenous peoples</i> is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics: (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; (iii) customary cultural, economic, social or political institutions that are separate from those of the dominant society and culture; and (iv) a distinct language, often different from the official language of the country or region. In considering these characteristics, national legislation, customary law and any international conventions to which the country is a party will be taken into account. A group that has lost collective attachment to geographically distinct habitats or ancestral territories in the project area because of forced severance remains eligible for coverage under this policy.

Source: ADB's Safeguard Policy Statement (ADB, 2009).

- *Category C*: Minimal or no adverse environmental impacts. No environmental assessment is required, although environmental implications need to be reviewed.
- *Category FI*: Involves investment of ADB funds to, or through, a financial intermediary.

Involuntary Resettlement

All projects are screened to determine whether they involve involuntary resettlement. Where involuntary resettlement is involved, a resettlement plan is prepared that is commensurate with the extent and degree of the impacts. The degree of impacts is determined by the scope of physical and economic displacement and vulnerability of the affected persons.

Indigenous Peoples

All projects are screened to determine whether they have potential impacts on indigenous peoples. Where indigenous peoples impacts are involved, an indigenous peoples plan is prepared that is commensurate with the degree of impacts. These are determined by evaluating the magnitude of the impact on the indigenous peoples' customary rights of use and access to land and natural resources; socioeconomic status; cultural and communal integrity; health, education, livelihood systems, and social security status; or indigenous knowledge; and vulnerability of the affected indigenous peoples.

Safeguard Requirements

Table A4.7 details the safeguard requirements based upon different levels of potential impacts.

TABLE A4.7 Safeguard Requirements

Category Risk Rating	Environmental Safeguards	Involuntary Resettlement Safeguards	Indigenous Peoples Safeguards
Category A (potential significant impacts)	Comply with safeguard requirement 1 of the ADB Safeguard Policy Statement, including environmental impact assessment preparation and submission, and national laws	Comply with safeguard requirement 2 of the ADB Safeguard Policy Statement, including resettlement plan preparation and submission, and national laws	Comply with safeguard requirement 3 of the ADB Safeguard Policy Statement, including indigenous peoples plan preparation and national laws
Category B (less significant impacts)	Comply with national laws and ADB’s Prohibited Investment Activities List	Comply with national laws and ADB’s Prohibited Investment Activities List	Comply with national laws and ADB’s Prohibited Investment Activities List
Category C (minimal or no impacts)	Comply with national laws and ADB’s Prohibited Investment Activities List	Comply with national laws and ADB’s Prohibited Investment Activities List	Comply with national laws and ADB’s Prohibited Investment Activities List

Source: ADB. 2009. ADB Safeguard Policy Statement.

ADB Investment through Financial Intermediaries

For projects involving investment of ADB funds to, or through, financial intermediaries, ADB conducts safeguard due diligence to assess the potential environmental and social impacts and risks associated with the financial intermediaries’ existing and likely future portfolio and its commitment and capacity in social and environmental management. All financial intermediaries are to ensure that their investments are in compliance with applicable national laws and regulations and apply the ADB’s prohibited investment activities list to sub-projects financed by ADB. Where the financial intermediaries’ investments have minimal or no adverse environmental or social risks, the financial intermediaries’ project are treated

as a category C project and need not apply any other specific requirements. All other financial intermediaries are required to have in place or establish an appropriate environmental and social management system (ESMS) commensurate with the nature and risks of the financial intermediaries’ likely future portfolio to maintain as part of the its overall management system.

A4.3.3 Prohibited Investment Activities List

The ADB’s Prohibited Investment Activities List is detailed in Table A4.8 for activities that do not qualify for Asian Development Bank financing:

TABLE A4.8 ADB Prohibited Investment Activities

No.	Excluded activity
1	Production or activities involving harmful or exploitative forms of forced or child labor
2	Production of, or trade in, any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or, subject to international phase-outs or bans
3	Production of, or trade in, weapons and munitions, including paramilitary materials
4	Production of, or trade in, alcoholic beverages, excluding beer and wine
5	Production of, or trade in, tobacco
6	Gambling, casinos, and equivalent enterprises
7	Production of, or trade in, radioactive materials, including nuclear reactors and associated components
8	Production of, trade in, or use of unbonded asbestos fibers
9	Commercial logging or purchase of logging equipment to use in primary tropical moist forests or old-growth forests
10	Marine and coastal fishing practices harmful to vulnerable species and damaging to marine biodiversity and habitats

Source: Annex 1 in <http://www2.adb.org/Documents/RRPs/PRC/45907/45907-001-prc-oth-05.pdf> (Sourced: 25 February 2011).

A4.4 Hong Kong Shanghai Banking Corporation (HSBC)

A4.4.1 Forest Land and Forest Products Sector Policy

In 2008, the HSBC (an EPFI foundation member, 2003) released its revised Forest Land and Forest Products Sector Policy,²⁸ which is consistent with the Equator Principles and provides guidance on their legality and

28. HSBC Forest Land and Forest Products Sector Policy: http://www.hsbc.com/1/PA_esf-ca-app-content/content/assets/csr/080905_forest_land_and_forest_products_sector_policy_summary.pdf

sustainability standards that represent international good practice. The policy prohibits illegal logging and forestry in highly sensitive areas and supports clients whose operations are independently certified as legal and sustainable. Table A4.9 summarizes the key criteria of their Forest Land and Forest Products Sector Policy.

A4.4.2 Certification Standard

HSBC recognizes that national and international certification schemes provide varying degrees of assurance on legality and sustainability and use third party technical experts and commissioned studies to determine the extent to which a scheme meets the HSBC standard.

TABLE A4.9 HSBC Forest Land and Forest Products Sector Policy (2008)

Policies		HSBC Criteria
Prohibitions	No finances directly supporting:	Illegal logging
		Operations in UNESCO World Heritage Sites
		Operations in wetlands on the RAMSAR list
Restrictions	Policy guidelines potentially: high-impact business sector:	<i>High Conservation Value Forest (HCVF)</i> : In countries with high incidence of illegal logging, biodiversity or social conflict, independent confirmation is required to demonstrate that their non-certified operations do not negatively impact HCVF.
		<i>Plantations</i> : Plantations converted from natural forests are not financed, unless independently certified or confirmed as not adversely impacting HCVF. Clearance of forest land by burning is not supported.
		<i>Pulp and Paper</i> : HSBC does not finance manufacture of pulp and paper where raw material supplies are not certified in accordance with their policy.
		<i>Biofuels</i> : Cautious approach to financing biofuels, ensuring that wider sustainability impacts are taken into account.
		<i>Palm Oil and Soy</i> : As for plantations above. Preference for clients investing in palm oil to be certified under the Roundtable on Sustainable Palm Oil certification scheme. For other agri-commodities, actively support multi-stakeholder initiatives to establish principles of sustainability.
		<i>Peat</i> : Cautious approach to business proposals on peatlands considering potential negative local impacts on biodiversity, communities and carbon emissions.
Legality	Logging and harvesting activities must respect:	Permits, quotas and concession areas
		Local laws on taxation and corruption
		Protected species (including CITES)
		Legal rights of communities
		Areas defined as HCVFs, only consider low-impact operations on HCVF
Sustainability	In addition to meeting legality criteria, activities must:	Minimize harm to ecosystems
		Maintain forest productivity
		Maintain forest ecosystem health and vitality
		Safeguard traditional or customary rights of forest communities (including protection of the rights of indigenous peoples, maintenance of community relations, benefits for local communities, protection of workers' rights and dispute resolution mechanisms)
		Balance economic, social and environmental interests

Source: HSBC Forest Land and Forest Products Sector Policy: http://www.hsbc.com/1/PA_esf-ca-app-content/content/assets/csr/080905_forest_land_and_forest_products_sector_policy_summary.pdf

Clients are considered fully compliant with their policy when client activities are 70% certified as sustainable and there is evidence that the remainder is legal, in line with best practice certification procedures. HSBC is committed to work with and encourage clients toward certification and support stepwise approaches by supporting clients that are “near-compliant” if on a credible path to meeting the HSBC Forest Land and Forest Products Sector Policy. Five years is the required time for clients to demonstrate material progress toward certification.

HSBC requires clients to obtain independent certification to their standard, to demonstrate that their forest operations and forest products are legal and sustainable. Their standard is based upon the principles and criteria of the FSC certification scheme and their commitment to the Equator Principles.

HSBC supports clients to seek certification and to adopt best practices on management of sustainability impacts. They recognize the technical advice of the Global Forest and Trade Network, Proforest, Rainforest Alliance and Tropical Forest Trust.

A4.5 Standard Chartered Bank (SCB)

A4.5.1 Commitment to Sustainable Development

SCB, a founding member of the Equator Principles and EPFI since 2003, is an active financial institution in Asia, Africa and the Middle East. They have an aspiration as a “force for good” in serving their clients, while actively engaging with them and their stakeholders toward undertaking sustainable business practices.

A4.5.2 Position Statement on Forestry and Palm Oil

In recognition that the forestry and oil palm sectors are not always conducted in accordance with sustainability principles, standards and practices, the SCB, prepared a Forestry and Palm Oil Position Statement to detail the standards and practices that new and existing clients have

to demonstrate to access SCB financial services worldwide. The position statement follows the IFC Environmental, Health and Safety sector guidelines on forestry and plantation crop production (2007) and complements and reinforces their commitment to the Equator Principles.

For purposes of the Position Statement, the forestry sector includes (i) upstream production companies (logging in natural and plantation forests, including forestry equipment and forest conversion) and (ii) downstream users (milling of logs for pulp, paper, sawnwood, plywood or veneer).

The SCB has a specific Position Statement on Forestry and Palm Oil, outlined in Table A4.10.

A4.5.3 Time-Bound Action Plan

Due to different political, social, cultural, environmental and economic contexts, SCB (or independent technical specialist where necessary) will work with clients who do not currently meet these standards to develop a time-bound action plan for compliance and to monitor the client’s progress.

A4.6 Citibank

A4.6.1 Environmental and Social Risk Management and Sustainable Forestry Policy Sector Standard

The Citibank Group (an EPFI since 2003) does not engage in business with companies in violation of local or national laws regarding illegal logging. Citi’s ESRM includes a Sustainable Forestry Policy Sector Standard, first developed in 2004 under an Anti-Illegal Logging Initiative. The approach was refined and expanded in 2006 so that Forest Products Obligors (clients with logging or primary processing of timber as their material business) were subject to risk management standards based on the sensitivity and location of operations, as detailed in Table A4.11. The Sustainable Forestry Policy Sector Standard refers to a list of “high-risk” countries that have a higher rate of illegal logging than

TABLE A4.10 Position Statement on Forestry and Palm Oil

Requirement area	Criteria	
SCB will not provide financial services for:	Commercial logging operations or purchase of logging equipment to be used in:	Primary tropical moist forests
		HCVFs ²⁹
		Critical natural habitats
		Logging operations that are in violation of local or national laws in respect of illegal logging
		Logging operations that include CITES listed species
	a) Companies that directly purchase, trade or process timber from the above-mentioned sources	
b) Companies that engage in illegal logging and the uncontrolled and/or illegal use of fire in their forestry or plantation operations		
c) Conversion of primary tropical moist forest or HCVF to plantation use		
SCB encourages new and existing clients to:	Forest stewardship practices	Manage forests certified by FSC or equivalent standard.
		Demonstrate a credible path toward operating managed forests that are certified by FSC or equivalent standard.
		Process or trade in products that are FSC certified or have equivalent certification (with appropriate CoC or equivalent documentation).
	Timber plantations	Undertake environmental and social impact assessments for all new plantations.
		SBC will finance plantation projects on previously cleared forest land, only after 5 years have passed and only if no direct link to the original deforestation can be demonstrated.

Sources: http://www.standardchartered.com/_documents/Forestry_and_Palm_Oil_Position_Statement.pdf (Sourced: 15 May 2012).

29. Unless the Precautionary Principle is applied and conservation-based management plans, which deliver preservation or enhancement of the high conservation values, are implemented.

other countries. Forest Product Obligor (FPOs) operating in these “high risk” countries must develop a plan to achieve independent certification by a scheme acceptable to Citi within an agreed timeframe (e.g., 3–5 years). Citi’s Sustainable Forestry Policy Sector Standards are based on the IFC Performance Standards and relevant technical guidelines of the IFC EHS Guidelines. Citi’s partners in implementing and monitoring the Sustainable Forestry Policy Sector Standard are the Ecologic Development Fund, World Resources Institute’s Global Forest Watch Program, Rainforest Alliance’s SmartWood Program and WWF.

A4.6.2 Risk Management in the Forestry Sector

Table A4.11 outlines the Citibank ESRM Sustainable Forestry Policy Sector Standards for risk management in the forestry sector.

There is no minimum dollar threshold amount for this Sector Standard.

A4.7 Bank of America:

The Bank of America (an EPFI since 2004) has Global Corporate Investment Bank Policies applied to new business from 15 May 2004 and for existing contracts at the time of renewal. The Bank of America believes responsible environmental stewardship is an integral component of doing sustainable business – minimizing waste and consumption, addressing climate change and preserving biodiversity. The bank has three pillars to their global corporate investment bank policy in forestry, including (i) Forest Practices, (ii) Forest Certification and (iii) Paper Procurement.

A4.7.1 Forest Practices

Table A4.12 details the forest practices policies that apply to new businesses from 15 May 2004 and for existing contracts at their time of renewal.

TABLE A4.11 Citibank ESRM Sustainable Forestry Policy Sector Standards for Risk Management in Forestry

FPO ESRM Risk Levels	Citi Required Risk Management Actions
LEVEL 1: Applies to <i>all</i> ESRM covered FPOs in Citi CMB’s ³⁰ portfolio (all clients involved in logging or primary processing of timber)	<ul style="list-style-type: none"> ■ Compliance with this policy is undertaken on an annual basis via FPO risk assessment process, including an annual interview with the client. The process confirms that the customer is in compliance with local and national forestry and environmental laws to prevent illegal logging.
LEVEL 2: Applies to FPOs who are undertaking commercial logging of timber (from lands under their control) or primary processing of timber in “high-risk” countries. ³¹ Note: FPOs required to achieve CoC certification of their operations	<ul style="list-style-type: none"> ■ FPO subject to standard compliance with law representation. ■ The FPO presents Citi with a plan to achieve independent certification within a timeframe (e.g., 3–5 years) to be agreed upon between Citibank and the client. This time-bound action plan must be presented to Citi within a reasonable timeframe (e.g., within 6 months of the transaction’s close). Intermediary milestones must be met to continue the financing relationship between Citi and client. ■ The relationship manager should provide the ESRM Director, or designate, a status update on the client’s progress in achieving the action plan’s milestones during each annual review.
LEVEL 3: For FPOs where a significant threshold of concern has been raised about the legality of their operations	<ul style="list-style-type: none"> ■ FPO subject to standard compliance with law representation ■ FPO presents Citi with a plan to achieve FSC certification within a timeframe to be agreed upon between Citi and the customer. <p>The significant threshold of concern must be evidenced by credible and objective third party information, as determined by Citi.</p> <p>Intermediary milestones would be required to continue the financing relationship between Citi and the customer. Development of a time-bound action plan, and the monitoring of progress of the action plan, would be conducted by a credible external party consistent with IFC Performance Standard 6 requirements.</p> <p>In these cases, if a customer refuses to embark on developing an action plan toward FSC certification, Citi would embark on steps to consider exiting the relationship.</p> <p>The ESRM Director, or designate, will be notified and review these transactions.</p>
LEVEL 4: Operation significantly convert/degrade critical habitat	<ul style="list-style-type: none"> ■ This is a precluded activity under Citi’s ESRM Policy. Even if such activity is allowable under law, Citi will not execute such transactions.

Source: <http://www.citigroup.com/citi/environment/data/forestry.pdf> (Sourced: 27 February 2011).

30. Citi Markets & Banking.

31. FPOs involved in primary processing of timber will be required to achieve a CoC certification of their operations. Citibank has compiled a “high-risk” countries list based on data from a variety of third party sources, such as the World Bank and the WWF.

A4.7.2 Forest Certification Policy

BoA requires forest products suppliers to document the sustainability of their wood and fiber sources and obtain third party certification in accordance with an acceptable forest certification standard. They recognizes that different certification schemes have different standards, so their policy is to have wood and fiber supplies certified by credible, independent and widely accepted standards, such as the FSC, SFI and CSA.³² BoA strives to lever their program through the supply chain to create a

market for certified forest wood and fiber and to accelerate acceptance of the certification process.

A4.7.3 Paper Procurement Policy

BoA’s paper procurement policies seek to maintain the ecological health of forests through source reduction and recycling, sustainable forest practices and protection of endangered forests. The bank will apply the policies as detailed in Table A4.13 to all new agreements to purchase paper products from 1 April 2005 and for existing agreements at the time of renewal. The bank also encourages third party suppliers of goods and services to employ sound environmental business practices. BoA’s Paper Procurement Policy is summarized in Table A4.13.

32. Bank of America Forest Certification Policy: http://webmedia.bankofamerica.com/environment/pdf/Forest_Certification.pdf (Sourced 21 May 2012).

TABLE A4.12 Bank of America Global Corporate Investment Bank Policy on Forest Practices:

<i>Policy</i>	<i>Bank of America Forest Practices Policies</i>
Legality	The Bank will not finance companies or projects that collude with, or knowingly purchase timber from, illegal logging operations. Due diligence will include company representation as to its practices and monitoring for illegal logging.
Sustainability	The bank will partner with existing environmental alliances to evaluate the value of various forestry certification programs as a means to both reduce risk and further encourage recognized best practices in sustainable forestry.
Critical habitats	<p>Due diligence measures will be exercised to ensure that lending proceeds are not used to finance commercial operations in resource extraction or clearing of primary tropical moist forests.</p> <ul style="list-style-type: none"> ■ Primary forests in temperate or boreal forest regions that are not managed using sustainable forestry practices as verified by an independent third party audit ■ HCVPs unless under approved conservation plans verified by an independent, third party, audit with necessary permits granted by applicable governmental/regulatory authorities ■ Additionally, lending proceeds will not go to logging operations in intact forests as defined by World Resource Institute (WRI) mapping as it is developed (Bank of America will assist in funding the development of WRI mapping). <p>In all cases the borrower must remain in compliance with applicable laws and regulations governing timber harvesting.</p>
Reforestation	The Bank will finance tree plantations on previously cleared forest land if the clearing and/or degradation of the land was conducted in accordance with applicable laws and regulations. Exceptions are allowed only after 5 years have passed and only if no direct link to the original deforestation can be demonstrated.
Indigenous communities	<p>The Bank respects the rights of indigenous communities whose livelihoods or cultural integrity could be adversely affected. Due diligence procedures for projects in primary temperate/boreal or HCVPs will weigh the impact of credit decisions on the indigenous peoples that could be affected.</p> <p>The bank will not finance the operations unless it is determined that indigenous peoples affected by projects in these sensitive areas, whether directly or by induced impact, have the opportunity and, if needed, culturally appropriate representation, and have access to the information to engage in informed participation.</p> <p>The Bank will not finance operations in areas where indigenous land claims are not settled.</p>
Uncontrolled fire	The Bank will not finance companies that do not have an explicit policy against the uncontrolled and/or illegal use of fire in their forestry or plantation operations. Due diligence will include company policy and monitoring.
International commitments	The Bank will not finance companies or projects that contravene relevant binding international environmental agreement to which the member country concerned is a party to or that violate local, state or national environmental, labor or social laws. Due diligence will include company policy and monitoring.

Source: Bank of America Policy on Forestry Practices: http://webmedia.bankofamerica.com/environment/pdf/Forest_Lending_Policy.pdf (Sourced: 21 May 2012).

A4.8 Kasikorn Bank

The Kasikorn Group (not an EPFI) has no detailed environmental or social safeguards or standards. There is a very basic frame for a CSR Policy Guideline, as detailed in A4.14, without elaboration on the measurable indicators or procedures for implementation of the guidelines.

The risk management principles of the Kasikorn Bank were very traditionally based on financial management, without apparent specific environmental and social dimensions to sustainable business development. The code of conduct was aimed at the employees of the bank, rather than clients or customers.

TABLE A4.13 Bank of America Policy on Paper Procurement

<i>Policy Component</i>	<i>The Bank of America Policy</i>
Source reduction and recycling	<ul style="list-style-type: none"> ■ Minimize volume, by weight, of paper product purchases, where cost, quality and general business needs allow, by adopting procurement best practices ■ Maximize purchase of paper products containing post-consumer recycled content, where cost, quality and feature requirements allow (target was 90% of paper purchases to contain minimum of 20% post-consumer recycling by 2006) ■ Will recycle paper in internal operations and from external sources ■ Will encourage suppliers of goods and services to use recycled paper products and to implement and adhere to environmentally beneficial policies and practices
Sustainable forest practices	<ul style="list-style-type: none"> ■ Will not do business with companies that collude with, or purchase wood products from, illegal logging operations ■ Encourage suppliers of paper products to the bank to comply with applicable laws and regulations governing timber harvesting and ensure their third party suppliers also comply ■ Avoid aligning with suppliers engaged in conversion of HCVMs or natural forest ecosystems to tree farms or plantations. Promote retention of HCVMs and natural ecosystems ■ Require suppliers of paper products required to possess independent third party certification of sustainable forestry practices for all forests they own or manage ■ Require suppliers of paper products to have procurement procedures in place to monitor compliance with legal and policy requirements. Suppliers will need to warrant that: <ul style="list-style-type: none"> ■ All wood fiber sourced from third party suppliers to be harvested using sustainable harvest practices (verified by audit system documentation and capacity building in supply chains) to ensure a minimum of 90% of wood fiber from a crew with at least one member trained in sustainable harvest practices ■ No products/inputs derived from genetically modified organisms
Protecting endangered forests	<ul style="list-style-type: none"> ■ Require suppliers of paper products to warrant that neither their products nor product inputs, whether sourced from internal or third party suppliers, were derived from harvest of: <ul style="list-style-type: none"> ■ Primary tropical moist forests ■ Primary forests in temperate or boreal forest regions that are not subject to SFM as verified by a third party audit ■ Require suppliers of paper products to assess all land they own or operate for HCVMs refrain from harvesting wood fiber from such areas unless management activities maintain or enhance attributes that define such forests, as verified by independent, third party ■ Requires suppliers of paper products to the bank to work with their third party suppliers to avoid sourcing any form of wood fiber harvested from HCVMs, unless management activities maintain or enhance the attributes that define such forests. Suppliers are to submit a management plan with time-bound goals and report on a regular basis toward achieving objectives.

Source: Bank of America, Paper Procurement Policy: http://www.bankofamerica.com/newsroom/press/pdfs/Paper_Procurement_Policy.pdf (Sourced: 21 May 2012).

TABLE A4.14 Kasikorn Bank: CSR Policy Guideline

<i>Policy</i>	<i>Requirement</i>
1	All business units shall strictly adhere to the Statement of Business Conduct and participate in environmental preservation and social responsibility activities.
2	All employees shall act in strict compliance with the Code of Conduct, being responsible for society and environmental preservation.
3	The Bank shall pursue activities for public interests, society and the environment, with fair treatment to all stakeholders.
4	The Bank shall pay due attention to safety and occupational health in the workplace, with pleasant surroundings and basic facilities for staff members and customers.
5	The Bank shall promote environmental preservation activities.
6	The Bank shall refrain from granting credit support to any projects that violate the environmental laws of the country.

Source: Kasikorn Bank CSR Policy Guidelines: <http://www.kasikornbank.com/EN/SocialActivities/Pages/SocialActivities13.aspx> (Sourced: 21 May 2012).



**Sustainable Development Department
East Asia and Pacific Region**

THE WORLD BANK

1818 H Street, N.W.
Washington, D.C. 20433, USA

Telephone: 202 473 1000
Facsimile: 202 522 1666
Internet sites: www.worldbank.org/eaprural