Early analysis report

IMPACT OF THE ASEAN ECONOMIC COMMUNITY (AEC) ON SOCIAL FORESTRY AND FOREST PRODUCTS TRADE

Ramon A. Razal, Anna Floresca F. Firmalino, and Maria Cristina S. Guerrero

NTFP-EP non-timber forest products - exchange programme

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ASFN ASEAN Social Forestry Network

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ACRONYMS AND ABBREVIATIONS

AEC	ASEAN Economic Community
AFC	ASEAN Multi-stakeholder Framework on Climate Change: Agriculture, Fisheries and Forestry towards Food Security
AFoCo	ASEAN-Republic of Korea Cooperation in Forestry
AMS(s)	ASEAN member state(s)
APSC	ASEAN Political-Security Community
ARKN-FCC	ASEAN Regional Knowledge Network on Forests and Climate Change
ARKN-FPD	ASEAN Regional Knowledge Network on Forest Product Development
ASCC	ASEAN Socio-Cultural Community
ASEAN	Association of Southeast Asian Nations
ASFCC	ASEAN Swiss Partnership for Social Forestry and Climate Change
ASFN	ASEAN Social Forestry Network
CEPT	common effective preferential tariff
CLMV	newer ASEAN members; consisting of Cambodia, Lao PDR, Myanmar, and Viet Nam
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
FLEGT	Forest Law Enforcement, Governance, and Trade Program of the European Union
GDP	gross domestic product
ha(s)	hectare(s)
INBAR	International Network for Bamboo and Rattan
IP	indigenous people
LDC(s)	least developed country(ies)
NLBI	Non-Legally Binding Instrument on All Types of Forests
NTB(s)	non-tariff barrier(s)
NTFP(s)	non-timber forest product(s)
NTFP-EP	Non-Timber Forest Products Exchange Programme
PIS(s)	priority integration sector(s)
SPA	Strategic Plan of Action
SVLK	Sistem Verifikasi Legalitas Kayu (Indonesia)
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNFF	United Nations Forum on Forests

What is AEC?

ASEAN Economic Community or AEC embodies the aspiration of regional economic integration by the 10 member states[1] of the Association of Southeast Asian Nations by 31 December 2015. The AEC will have the following key characteristics: a) a single market and production base; b) a highly competitive region; c) a region of equitable economic development; and d) a region fully integrated into the global economy.

It is envisioned that the ASEAN region will become one ASEAN Community that is founded on strong economic, political, and socio-cultural partnerships among the ASEAN member states (AMS). Thus, the ASEAN Economic Community (AEC) is one the pillars of the ASEAN Community alongside the Political-Security Community (APSC) and the Socio-Cultural Community (ASCC). The economic aspects of integration will entail liberalization of trade among the AMSs including measures that will eliminate all tariffs and non-tariff barriers, enhance interconnectivity, and other measures that will allow free flow of goods, services, investment, capital and skilled labor.

Study Description

The study was conducted by the Non-Timber Forest Products - Exchange Programme (NTFP-EP) with support from the ASEAN Swiss Partnership for Social Forestry and Climate Change (ASFCC). It determined the impacts (both positive and negative) of the planned economic integration on social forestry stakeholders in the ASEAN member states.

Objectives

The main objectives of the project are to:

1. Situate the different AMSs in terms of how their forestry sectors will possibly be affected by economic integration and trade liberalization embodied by the implementation of the AEC Blueprint;
2. Review national level policy directives, initiatives, and efforts related to the forestry sector, particularly in relation to social forestry, that have bearing or that may be affected by the advent of the AEC;
3. Evaluate the possible impacts of AEC integration on the production, consumption, and trade of timber and non-timber forest products as well as other socio-economic concerns in the ASEAN member countries, particularly on smallholders in the forestry sector;
4. Recommend specific development and policy interventions that may minimize potential negative impacts or that may capitalize on possible benefits or opportunities of the AEC in the forestry sector, particularly in social forestry, based on results; and
5. Disseminate the results through seminars and publications.

[1] Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

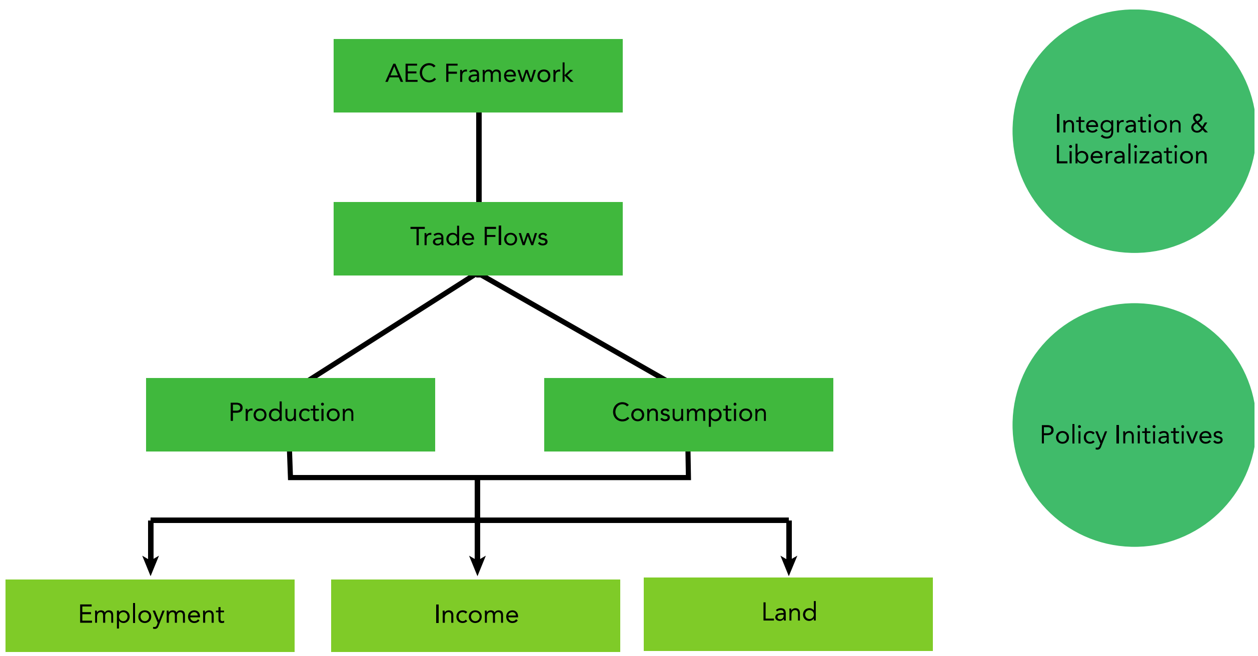
Methodology and Framework

A macro-level assessment of each AMS was conducted to situate how each of them would be affected by AEC. Learnings from economic integration are also taken from other regions. Trade related concerns and trade flows across the region and at the global level were also studied.

Estimation models were utilized and adjusted for suitability in the assessment, considering data availability, followed by approximations of cross-country impacts on production and trade.

The diagram shown (Figure 1) below illustrates the general framework followed in the conduct of the macro level study:

Figure 1: General Framework for the AEC Impact Study



A more micro-level analysis to further elucidate potential involvement and related contributions of social forestry stakeholders was done. Review of relevant literature and ASEAN documents, along with visits to Indonesia, Viet Nam, Thailand and the Philippines for key informant interviews, and gathering of data on awareness and forestry sector readiness for the AEC were conducted. Potential impacts on communities were identified and recommendations to minimize negative impacts and capitalize on benefits were also provided.

Pressures on forests and communities in the AMSs

- Rapid economic development but with a large proportion of the population still living in poverty, especially forest dependent communities

- Inability to deal with illegal logging and trade, resulting in revenue losses and forest degradation
- Some measures to address poverty, such as agricultural conversion and plantation development may be counterproductive in addressing the needs of the rural population
- Technology linkages due to liberalization lead to higher productivity gains but may lead to lower demand (especially labor) per unit of output production
- Unfilled gaps in cooperation areas related to private sector linkages, agricultural cooperatives, research and development, and technology transfer
- Mechanisms to promote products in the regional and global markets may be biased against small-scale producers, and may have tended to cut off IPs

Global Actions on Forestry

International Forums and global agreements recognize the role of local communities and other forest dependents towards the goal of sustainably managed forests[2]. Participation and benefit sharing of local community stakeholders are stressed in such agreements.

This explicit reference to community participation, forest-dependent populations, indigenous peoples (IPs), and the social functions of forest appears to be missing in the main ASEAN Economic Community Blueprint itself. Happily, both the Strategic Plan for ASEAN Cooperation on Food, Agriculture, and Forestry (2016-2020) and the ASEAN Socio-Cultural Community Blueprint amply include measures that ensure that social forestry stakeholders in the respective countries in the ASEAN region shall not be disenfranchised of what is due them upon AEC's full implementation. However, it also remains to be seen whether individual state governments will be able to muster the political will and raise the resources needed to implement most, if not all, of the identified measures on the ground.

ASEAN – led initiatives for increasing ASEAN trade

ASEAN has implemented various initiatives in the forestry sector[3] which directly bear on trade. Other measures, such as those that relate to climate change and rehabilitation efforts[4], have impact on forest communities but do not directly impact on forest products trade.

The *Roadmap for Integration of the Wood-Based Products Sector* lists the specific measures designed to improve intra-ASEAN trade in wood based commodities[5] under four headings: (1) Enhancing cooperation in timber products; (2) Joint marketing and image building; (3) Investment on forest plantation and wood-based industry; and, (4) Human resource development.

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2 UNFF Forest Principles 1992 –UNCED Rio, NLBI on all types of forests, adopted in UN General Assembly 2007

3 This pertains to initiatives on wildlife enforcement, international trade on endangered species, forest law enforcement and governance, forest products development, furniture industries council, forest certification, legality standards and verifiers for timber, and sustainable forest management in general.

4 ARKN-FCC, ARKN-FPD, AFoCo, ASFN, AFCC

5 Qualified wood-based products are listed in a document describing the coverage (Attachment I) of the sector, while a separate list (Appendix II referred to as negative list) is also made available for products in countries for which the tariff could not be immediately reduced to zero.

Work on commodities such as Non-Timber Forest Products (NTFPs) at the regional level has not received similar attention. Available data on NTFP trade among the states in the region are mostly on bamboo and rattan.

AEC provisions on trade in forestry

Measures for increasing intra-ASEAN trade in the food, agriculture, and forestry (FAF) sector and in all the priority integration sectors (PIS), which include wood-based products, are categorized into two: (1) the common measures; and, (2) specific measures. The common measures are those that generally pertain to the facilitation of trade, where improvements will redound to increased trade in all of the goods and services that will be placed in the regional market.

These measures include, but are not limited to the following: (1) tariff elimination; (2) elimination of non-tariff barriers; (3) customs cooperation; (4) effective implementation of common effective preferential tariff (CEPT) scheme; (5) improvement of rules of origin; (6) development of standards and measures of conformance; (7) facilitating investments; (8) establishment of the ASEAN single window; and, (9) improvement of logistics services.

Despite the long list of efforts in the past, intra-ASEAN trade in forest products has not increased – the Strategic Plan of Action (SPA) in Forestry for 2016-2020 even noted declines in some products – prompting a call from the ASEAN Secretariat for review to determine if the proposed non-tariff measures in the sector were actually more trade-impeding rather than trade-enhancing and would eventually become additional non-tariff barriers (NTBs) in the future.

Status of Forest, Country-based Initiatives, and Social Forestry Issues in AMSs

Table 1. Status and quality of forests in ASEAN member states

Country	Total land area (1000 has)	Total forest area (1000 has) [as of 2010]	Percent forest cover (%)	Area of primary forest cover (1000 has)	Percent primary forest cover (%)	Area of planted forest (1000 has)	Area of naturally regenerated forest (1000 has)	Volume of growing stock (million m^3)	Growing stock per hectare (m^3)	Annual rate of change in forest cover (2005-2010)[a]
Brunei	527	380	72.1	263	69.2	3	114	72	190	(0.47)
Cambodia	17,652	10,094	57.1	322	3.2	69	9,703	959	95	(1.22)
Indonesia	181,157	94,432	52.1	47,236	50.0	3,549	43,647	11,343	120	(0.71)
Lao PDR	23,080	15,751	68.2	1,490	9.5	224	14,037	929	59	(0.49)
Malaysia	32,855	20,456	62.3	3,820	18.7	1,807	14,829	4,239	207	(0.42)
Myanmar	65,755	31,773	48.3	3,192	10.0	988	27,593	1,278	167	(0.95)
Philippines	29,817	7,665	25.7	861	11.2	352	6,452	223	22	0.73
Singapore	69	2	2.9	2	100	0	0	-	-	0
Thailand	51,089	18,972	37.1	6,726	35.5	3,986	8,261	283	41	0.08
Viet Nam	31,008	13,797	44.5	80	0.6	3,512	10,205	870	63	1.08

Sources: www.mongabay.com; FAO State of the World's Forest, 2014

Table 2. Forest policy, value of forest product removals, and other benefits from forest.

Country	Year of promulgation of National Forest Policy	Year of enactment of specific forest law	Ownership of forest	Holder of management rights of public forest	Value of forest product removals (2005) (million US$)			Employment in the forestry sector (2011)*	% contribution of forests to GDP*
					Industrial round wood	Woodfuel	NTFPs		
Brunei	1989	1934	100% public	100% public	28	n.s.	0	2,000	0.1
Cambodia	2002	2002	100% public	? – public 2% - communities	-	-	-	7,000	3.2
Indonesia	2006	1999	91% public 9% private	43% public 57% private	-	-	-	445,000	1.7
Lao PDR	1991	2006	100% public	-	18	-	5	8,000	2.1
Malaysia	1992	1984	98% public 2% private	90% public 10% business entities	2706	-	43	210,000	2.0
Myanmar	n.s.	1902	~100% public n.s. – private (local, indigenous & tribal communities)	-	765	812	-	36,000	0.5
Philippines	1995	1975	85% public 15% private	32% public 20% business entities 47% communities	119	2	2	49,000	0.2
Singapore	None	2005	100% public	100% public	0	0	0	6,000	0.1
Thailand	2007	1941	88% public 12% private	-	n.s.	n.s.	-	235,000	0.9
Viet Nam	2003	1992	72% public 24% private 4% others	-	473	116	n.s.	251,000	1.7

n.s. – not specified; Sources: FAO State of the World's Forest, 2014; Forestry Sector 2020 Outlook Study Report

Country level initiatives and issues related to AEC and Trade

Table 3. Country level initiatives and issues related to AEC and Trade

Country	Status and Initiatives	Concerns
Cambodia	• Community forests found to contribute to conservation; community enterprises on NTFPs such as resin, honey, and rattan are now getting some support	• Concerned about its remote forests in view of increasing wood demand from its neighbors • Economic Land Concessions that enable long-term contracts for plantation-type development
Indonesia	• One of the countries dominant in trade in forest products in the ASEAN • Has in place a national wood certification scheme (SVLK) • Has a scheme of low interest loans for developing community forest, village forest, private forest and people's timber estate	• Slow and complicated process of obtaining permits; local government officials unwilling to endorse permit applications
Lao PDR	• Least developed country status; landlocked, and large dependence on its ASEAN neighbors (64% trade is inter-ASEAN) • Pioneered rattan certification and chain-of-custody system	• ASEAN highways to improve connectivity give rise to some social and environmental problems
Malaysia	• Enhanced MyGovXchange /operates MyExport portal to further facilitate access to trade • Carries out missions to promote products and services • Implements its own national timber certification scheme	• Declining saw log production and share of forestry in total "agricultural" production
Myanmar	• Receives heavy Foreign Direct Investment (FDI) inflows from other ASEAN countries such as Thailand, Singapore and Malaysia	• Undergoing rapid transition since end of military rule in 2011 • Banned export of raw logs in March, 2014
Philippines	• a separate assessment showed that the country would benefit from easier raw material imports as it would help ease the scarcity of timber in the immediate term	• Private wood products sector does not know enough about AEC • Poor technology, largely un-mechanized agriculture • Some assessments have declared forestry as a domestic concern and has been left out in analysis in the context of regional integration
Thailand	• A net importer of roundwood, but remains strong producer and exporter of paperboard, wood-based panels and sawnwood	• Benefits from having common borders with Laos, Cambodia, Malaysia and Myanmar with allegations of persisting illegal

	• Has on-going negotiations with EU on legality of timber trade and implementation of FLEGT	trade in logs
Viet Nam	• Considered to belong to CLMV but is already classified as a developing economy • Timber export increasing (20% per year), and forest-based exports account for 3-4% of the country's total exports	• Expands raw material base by investing in rubber plantation in Lao PDR and Cambodia; also targets *Acacia mangium* plantation development outside of Vietnam

Until the formulation (between 2009-2010) of the country reports for the forestry sector outlook 2020, most AMSs did not consider the AEC as an event that would significantly impact on the forestry sector, except for Lao PDR, Viet Nam and the Philippines. Lao PDR, the only landlocked country in the region and consequently having a large dependence on its ASEAN neighbors, had foreseen an even larger increase in trade when the economies are integrated. Viet Nam, which has investments outside of its borders, particularly in Lao PDR and Cambodia and to some extent in Thailand, anticipates being able to take advantage of the more open borders to source materials to meet the processing requirements of its wood processing sector. Thailand, Malaysia, and Indonesia will benefit from the AEC in terms of an expanded customer base for its processed products.

Figure 2 below shows the relative dominance of forest production in Indonesia, Malaysia and Thailand, countries which account for almost a third of ASEAN's forest, continues except for shifts in the ranking of Thailand and Malaysia. Country-based production is influenced by the reduction in forest areas.

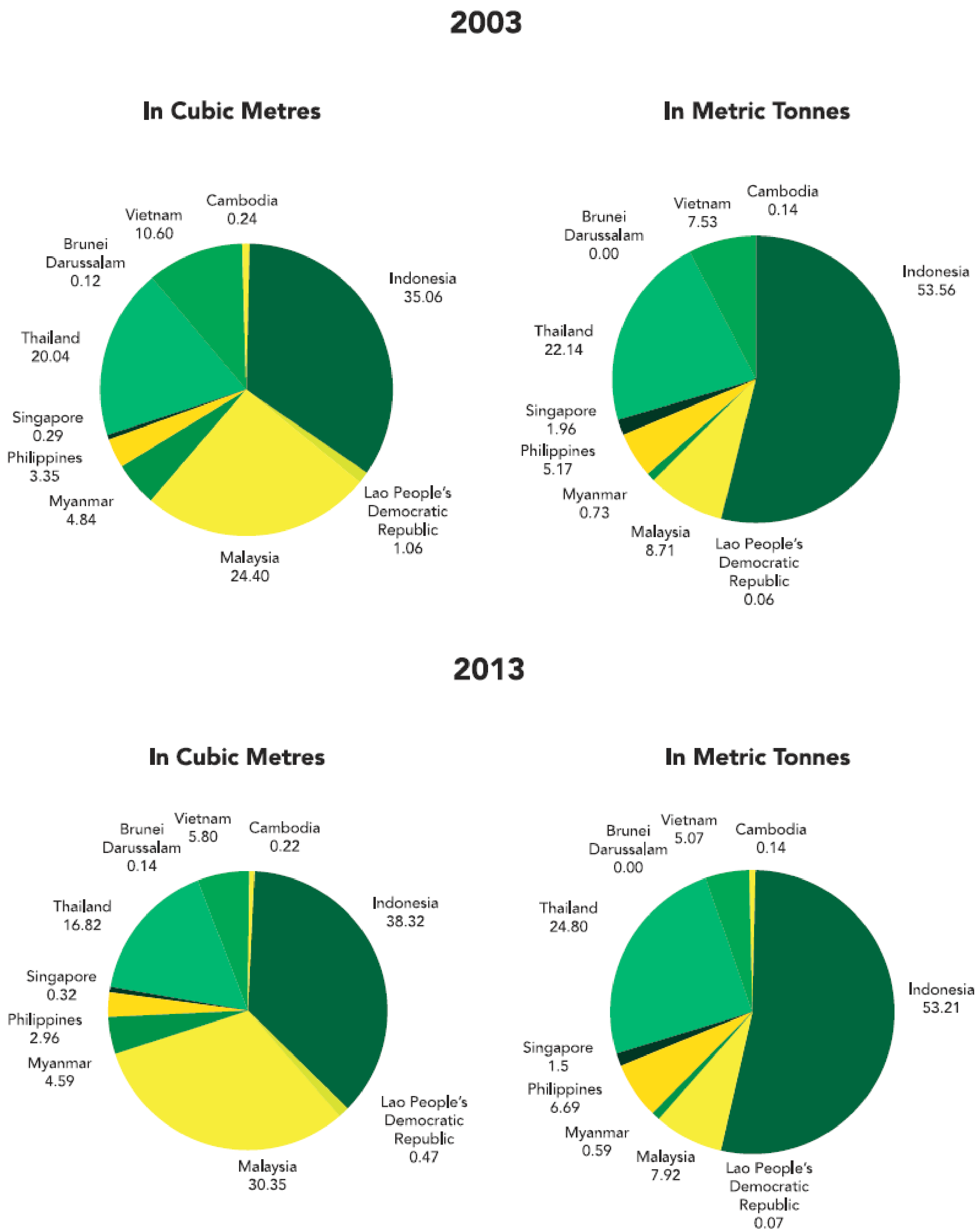

Figure 2. AMS shares in total timber-based forest production in ASEAN, for products measured in cubic meters and in metric tons, 2003 and 2013
(Source of basic data: FAOSTAT, 2014)

Trade of Non-Timber Forest Products

Bamboo and Rattan

Data on NTFP trade across ASEAN are available on bamboo and rattan, but there is scant information on other NTFPs such as resins and exudates, and other vines and palm products.

Table 6 shows the relative shares of the export values of bamboo- and rattan-based products among AMSs from 1989 to 2012. As the data show, Singapore and Malaysia seem to be the main destinations of these NTFPs among the AMSs, in terms of value. In fact, even Malaysia exported most of its products to Singapore just as most other AMSs, except for Cambodia that exported most of its NTFPs to Viet Nam. On the other hand, the smallest values of exports among the AMSs are received by Brunei, Cambodia, and Myanmar.

Conversely, Table 7 reveals the relative shares of the import values of bamboo- and rattan-based NTFPs among the AMSs from 1989 to 2012. The data demonstrates that the highest values of NTFP imports are generally sourced by the AMSs from Singapore and Malaysia, although certain AMSs also source much of their imports from Indonesia. On the other hand, hardly any imports are sourced from Brunei and Myanmar, although Indonesia and Thailand seem to source a substantial amount of their bamboo and rattan from the latter.

Table 6. Average relative shares of exports of bamboo and rattan among ASEAN Member States, based on value, in percent, by AMS, 1989-2012

Country of Origin	Destination Country								
	Brunei	Cambodia	Indonesia	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Brunei		0.00	19.97	50.28	0.00	0.00	29.75	0.00	0.00
Cambodia	0.00		0.00	11.11	0.00	0.00	16.61	12.83	59.46
Indonesia	0.77	0.39		4.54	0.40	5.15	78.34	7.62	2.79
Malaysia	2.65	0.17	3.44		0.09	2.00	88.68	2.40	0.58
Myanmar	0.00	0.00	0.00	0.00		0.00	77.47	9.38	13.15
Philippines	6.77	0.37	5.77	14.68	0.13		57.15	11.98	3.15
Singapore	7.07	1.24	21.09	28.59	2.46	17.86		18.70	3.00
Thailand	2.04	3.43	1.91	26.76	13.42	7.08	40.11		5.26
Viet Nam	0.20	0.76	1.28	24.18	0.00	3.71	53.95	15.92	

Source of basic data: INBAR, 2014

Table 7. Average relative shares of bamboo and rattan imports among ASEAN Member States, based on value, in percent, by AMS, 1989-2012

Country of Origin	Destination Region						
	Africa	Asia	Central America	Europe	North America	Oceania	South America
Brunei	0.00	86.22	0.00	0.05	13.74	0.00	0.00
Cambodia	0.00	44.38	0.00	29.70	21.41	4.51	0.00
Indonesia	1.81	24.99	0.54	49.86	17.96	4.01	0.82
Malaysia	2.73	24.09	2.27	39.09	23.70	7.27	0.84
Myanmar	0.00	96.44	0.00	3.56	0.00	0.00	0.00
Philippines	0.85	14.85	0.66	17.80	62.16	2.80	0.89
Singapore	14.52	53.43	2.89	19.12	3.97	4.00	2.06
Thailand	1.28	31.53	0.41	34.28	25.36	6.31	0.83
Viet Nam	0.67	18.96	0.32	56.59	17.99	3.53	1.95

Source of basic data: INBAR, 2014

As the figures indicate, for the region as a whole, the least trade is in semi-processed products, i.e., bamboo and rattan that have undergone minimal processing from their raw state such as plaits or mats. For exports, most trade is in processed products, where the proportion is almost twice that of raw products. On the other hand, for imports, raw products account for the largest proportion of bamboo and rattan traded. This may indicate that AMSs import raw materials from within the region to meet the demand for their exports of processed products, implying that AMSs that are mainly bamboo and rattan processors may not be producing enough raw materials while chiefly raw material-importing AMSs are mainly growers and not processors of bamboo and rattan. This implication may further be clarified by looking at the trends on a per country basis.

Largely consistent with the regional trend, most AMSs mainly exported processed bamboo and rattan, except for Cambodia, Myanmar, and Singapore which exported more raw materials. On the other hand, most AMSs mainly imported processed bamboo and rattan from within the region, except for Malaysia, Myanmar, Thailand, and Viet Nam which imported more raw materials.

These results would suggest that the region as a whole is chiefly raw material-importing and processed product-exporting.

Honey

With regard to honey as an NTFP, based on the estimates shown in the NTFP-EP Regional Wild Honey Certification Study from selected groups in Cambodia, Indonesia, and the Philippines, total trade for the groups in the three countries amounted to 84 tons of wild honey out of about 240 tons of association production and about 9,500 tons of estimated national production (Andaya 2014). The report also cited previous studies that indicated that about 225 million USD worth of natural honey was imported from the East and Southeast Asian regions in 2012. Fifty per cent (50%) of this was from interregional trade, while half were imported from temperate regions. Japan, China, Hong Kong, Singapore make up 76% of the East/Southeast Asia Market. The premium honey market (above USD 9/ kilo) is growing. Forest honey from local communities, considering their health and medicinal values, can well place themselves in this market if properly researched and positioned to well targeted segments. Consumers' awareness of health and safety issues has increased, leading to higher demand for healthier products as well as demand for unprocessed and functional foods.

Based on an interview with a honey association in Hanoi, both Viet Nam and Thailand are also exporters of honey mainly to the United States, Europe, Japan, Indonesia, and Malaysia, although Viet Nam may be considered as the larger honey producer. About 40,000 tons per year are being produced in Viet Nam and about 80% of this production is being exported to the US at USD 2.50 to USD 2.80 per kilogram, which translates to a value of more than 100 million USD. Although these figures do not refer exclusively to wild honey, the association estimates that the US demand for honey is about 100,000 tons per year. This would provide a large potential market for Viet Nam and the other honey producers in the ASEAN.

Thus, honey could also be considered as a potentially significant contributor to NTFP trade in the ASEAN. Moreover, the honey market could potentially be a major source of income for smallholders in the forestry sector, given the growth of the "healthy food" consumer markets that require wild, natural, and/or other organically produced honey.

Econometric Analysis

Econometric analyses of the impacts of the different socio-economic characteristics of individual AMSs on forest product trade were conducted. An augmented gravity model providing approximations of possible cross-country impacts on trade at the macro-level was used. Estimations of intra-ASEAN trade were done for each of the ASEAN member states, where the trade partners considered comprise all other AMSs. Flows of exports and imports are modeled separately as well as total trade (exports and imports), which could proxy for the openness of each particular economy. Variables included in the models were as follows: a) GDP to capture the factors that could reflect the level of economic development in the trading nations; b) population to take account of the size of the economies; c) distance between trading partners as the proxy for transportation costs and time; d) trading time and trading documents (within port) as proxies for access to markets; and e) exchange rates between trading partners to capture depreciation in the domestic economy which is likely to increase exports, or the appreciation in the trading partner's economy which in turn increases their imports. Secondary to the determination of trade output levels using the gravity model was the attempt to estimate using ordinary least squares method involving linear regression and double log regression, possible determinants of production levels of timber products using only selected trade-related variables in the analysis. Separate regression runs were done for timber products measured in cubic meters (rawer products) and for those measured in metric tonnes (relatively more processed products), using the pooled sample for all AMSs. Variables included in the analyses were a) forest land area, b) the number of employed individuals, c) FDI as proxy for capital inputs, d) the official exchange rate; e) *Landlocked* (binary), or f) *Island* (another binary variable), the latter three to reflect factors that lead to additional production costs. The macro-level results from these modeling studies were then extended to the micro-level to elucidate potential involvement and related contributions of social forestry stakeholders.

Summary of Findings from econometric models

- Resource endowments and inherent country characteristics will affect production of forest products under an integrated ASEAN
- Growth in the forestry sector would be brought about by growth in the GDP and population of the individual economy as well as by decreasing transaction costs of forest products trade
- Specific for NTFPs, growth will be influenced by within country factors as well as by factors in trading partner countries
- The greater mobility of human resources and capital will provide greater impetus for both timber and NTFP production, and more openness in their trade
- Competition from imports will lead to exit of least productive enterprises, and small communities and their enterprises are the most vulnerable

Overall Observations and Insights

- Intra-ASEAN trade is small (24-25%) compared with trade with partners outside of ASEAN. With AEC, intra-regional trade is projected to increase to 30% by 2020
- Tariffs for most goods are already zero or near zero. Thus, most ASEAN countries are already fully liberalized, except CLM where we expect the most change. These countries have common borders with Vietnam which invests in land-based economic activities beyond its borders
- Food, agriculture and forestry as a sector is heavily focused on food safety
- SMSEs have not fully benefited from Free Trade Agreements (Tambunan and Chandra 2014). There is need to improve information dissemination, access to finance, simplify procedures, and to upgrade value chain governance to link small-scale producers with larger scale players.
- Awareness and preparedness vary across sectors and countries. National policies have to be aligned with AEC to ensure that all stakeholders are given equal attention.
- AEC is weak in terms of resolving trans-border issues such as haze from forest fires, and illegal trade in forest products. There is a need to strengthen law enforcement and install a regional grievance mechanism to resolve conflicts.

The future of forestry and trade of the forest products in ASEAN

In the longer term, supply will become a factor affecting the forestry sector's competitiveness, especially if land for growing timber becomes less available owing to AMS expansion of concessions for palm oil, a crop that provides more economic return from land on a per area basis.

An expanding road network to improve transport interconnectivity is supporting AEC implementation[6]. This land transport network will cut across most of the ASEAN member countries in the Asian mainland, from Myanmar in the west, to Thailand, Lao PDR, and Viet Nam in the east. Though the Asian Highway project will increase trade in goods and services and promote tourism, the possible impact on the forest is the major consequence. The proposed road network is shown in Figure 3 below, where the road network is overlapped with the region's land uses. Evident in the resulting map is how the road network would affect the forest because large swaths of forestlands had to give way to road construction.

[6] This road network was started by the UN in 1959 and is supported by many development organizations

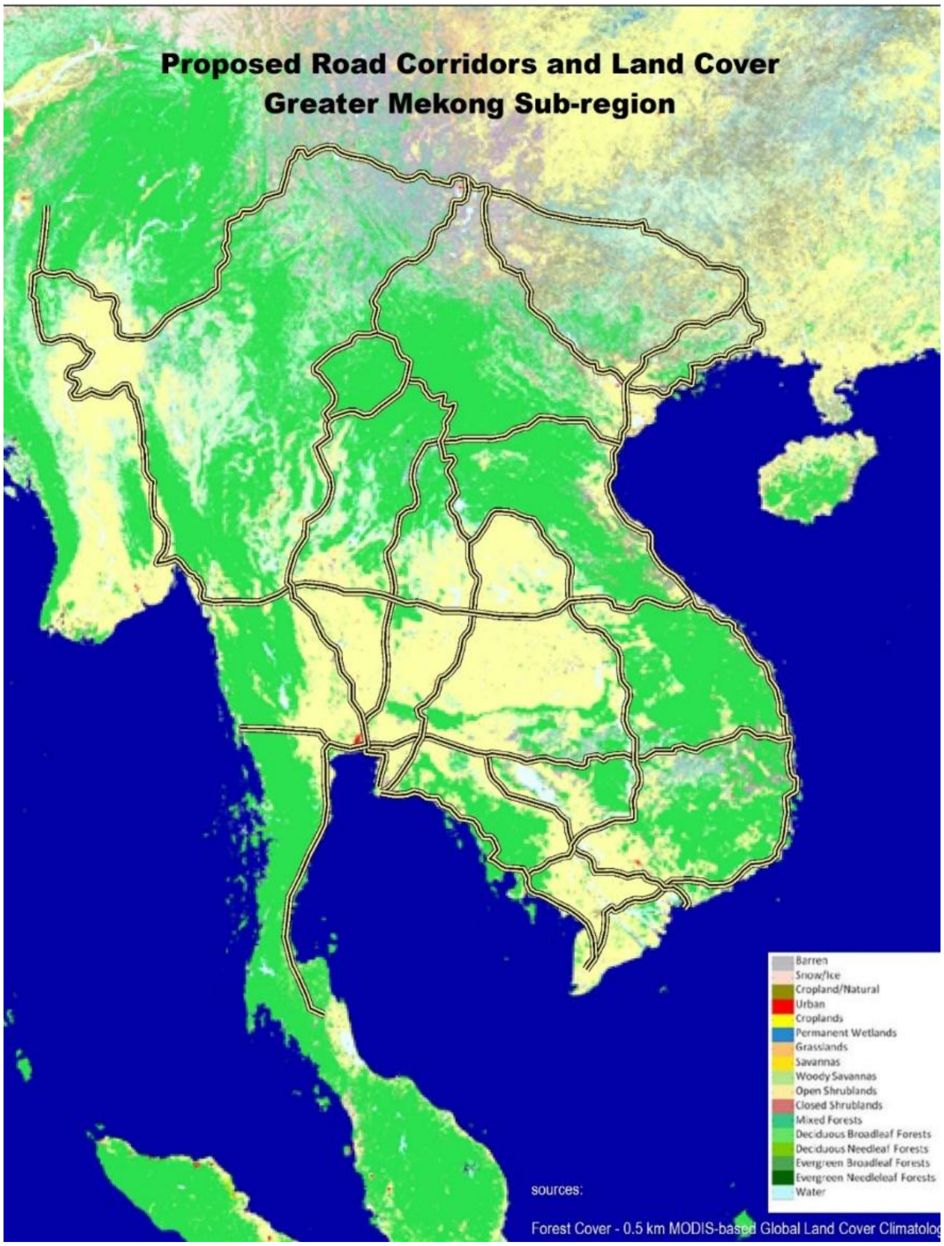

Figure 3 Proposed Road Corridors and Land Cover Greater Mekong Sub Region

Summarized below are some of the anticipated changes to be brought about by AEC and their potential impacts on forest communities:

Increased awareness about AEC. The immediate impact of AEC integration upon its full implementation will be the heightened awareness about the large ASEAN community to which each AMS belong. While there will be differences in how communities will explore the opportunities to be opened up or deal with perceived threats, consciousness of a new regional identity will gradually sink in.

Communities will favorably respond when they realize that they can sell to a more expanded market, but will react negatively when markets they had used to control are now presented with more other options.

Intensified demand for forest products. The liberalization of trade will result not only in a larger market to fill, but also a bigger field of competitors for materials and semi-finished products used as inputs in forest-based materials processing. Primary producers in communities supplying the raw materials maybe pushed to exploit more, produce more, or to dig deeper into the forest to procure more. There will be greater use of intensive agroforestry practices to meet demand for materials, which in the long term will reduce the land's overall productive capacity.

Intensified use of forest for other uses. The bigger ASEAN market, with its more than 600 M people, will increase the pressure on forests to be used for other purposes. There will be enticements for communities to engage in production of commercially important food and food crops such as coffee, cacao, vegetables, and pineapple at the expense of forest trees and non-timber forest products. These non-traditional crops require unsuitable, intensive agricultural practices that will eventually diminish upland soil productivity. Alongside efforts to engage communities in food production is the conversion of forestland to plantation crops such as palm oil and rubber, ventures which rank highly in the economic development models of some countries. Conflicts arise when land areas that are claimed for these purposes overlap with land belonging to communities under their traditional rights.

Timber Certification. If AMS states agree on a regionally accepted timber certification scheme as a prerequisite to trade in timber among them, the short term impact is that there will initially be less legal intra-regional trade in forest products. Small hold farmers and communities linked to timber value chains will face difficulties in initially providing the documentary requirements for certified timber. Countries with existing timber certification schemes such as Malaysia and Indonesia will continue to be able to sell to other countries outside of the region, however. But there will hardly be an impact on communities that do not engage in commercial timber trade.

Combating illegal logging and trade in wildlife (both flora and fauna). If AMS strengthen their resolve to combat illegal logging and trade, short term impacts will depend on whether or not communities tacitly allow the practice, or who are simply incapable of implementing community-based measures to address the problem. In the long term however, and possibly with external donor support, communities will have been capacitated to perform a more active anti-illegal logging role, resulting in greater community participation in this endeavor. There will be consequent improvement in stocks of threatened biodiversity species in forest communities.

Harmonization of standards (for timber products). This is not imminent in the short-term, but in the long run, AMS will agree on common standards for timber-based and NTFP-based forest products. Once standards are in place, initially, there will be rejections of products made, especially by workers not properly trained in forest products manufacturing. In the long run, as workers are equipped with more skills, demand for products will expand and trade will open up not only within the region, but outside of the region as well. Harmonization will bring about capacity in many communities to produce furniture, crafts and toys with uniformly acceptable quality and which will be able to meet volumes required of them in the more developed Northern markets. Hence, extra-ASEAN trade will likewise expand, resulting in improvement in the economic status of members of communities who have the external links (national or even regional value chains).

Infrastructure and connectivity. AEC will improve connectivity through highways that crisscross several countries, particularly those in the Asian mainland. Sectors engaged in infrastructure building makes no qualms about destroying forests for the sake of development, and regardless of whether communities will be displaced or adversely affected by highway construction or improvement. Reports on lewd, unprofessional actions by construction workers highlight atrocious abuses against women and children, the destruction of forests, and preponderant illegal logging and poaching. Once built, the roads will improve access to timber products and wildlife especially across borders. Other adverse impacts, especially to communities in close proximity to newly-built roads would include noise from transport vehicles, dusts, piling up of garbage thrown away from passengers of vehicles, pollution from emissions and oil leakages, and other threats to the peace and security and the sanctity of sacred groves that are part and parcel of community life.

Increased demand for ecotourism and related services. As citizens of ASEAN member states become more aware of each other and what each one can offer in terms of nature and adventure activities, intra-regional ecotourism will increase. The availability of low-budget air fares for travel within the region is another factor that will further boost regional ecotourism. There is a need for communities with special attractions or sites to offer, in building capacity for hosting large number of visitors and in providing amenities for their enjoyment. Communities will also have to deal with large volumes of garbage, degradation of the ecosystem from high impact activities, and the need to protect biodiversity against illegal collection and hunting.

Recommendations

To address impacts of AEC to communities, there will be a need for the following:

- Build capacity for communities to set aside surplus to raise capital for investments and establish cooperative enterprises or similar business ventures
- Link communities to value chains, and to resources and institutions that will assist them in accessing markets, investments for technology and mechanization, and product innovation
- Simplify procedures for permits to accessing forest resources and to participate in global trade, e.g., single window processing of legal permits, and also as a means to guarantee legality of trade
- Encourage cross-country technology and information exchanges in processing and utilization of NTFPs
- Review of initiatives on tariff reduction to include products from indigenous peoples and communities
- Safeguards at the national level must also be in place for the following

    - competing natural resource and land claims,
    - competition for intellectual property rights for traditional knowledge, traditional cultural expressions and traditional occupations
    - infrastructure impacts and impacts of forest conversion
    - participation in planning and decision-making

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