

Series on Trade and the Environment in ASEAN– Policy Report 1

# How Trade Facilitation Measures Impact Current Law and Policy on the Wildlife and Timber Trade

## Case Study of the Greater Mekong Subregion

Lai-Lynn Angelica B. Barcenas

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## Abstract

International trade is a strong driver of economic growth, and for developing countries like those in the Greater Mekong Subregion (GMS) there is a strong incentive to maximize its potential. Thus, efforts are being made to facilitate trade within the subregion through improvements in infrastructure, telecommunications and transportation. Among these efforts are trade facilitation measures designed to ease the export and import of goods. However, while these measures will increase the international trade of each GMS state, they may also have adverse effects on the biodiversity of the subregion. Global demand for wildlife and timber is already depleting the rich habitats of the GMS. The increased facility in the movement of goods across international borders that these trade facilitation measures would provide could further exacerbate such depletion. It is thus important for policymakers to carefully assess the emerging trade facilitation mechanisms and processes and determine potential risks and opportunities in curbing the unsustainable harvest of wildlife and timber, and their attendant trade.

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Case Study of the Greater Mekong Subregion

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## About the Trade Knowledge Network

<http://www.tradeknowledgenetwork.net>

The Trade Knowledge Network is a global collaboration of research institutions across Africa, Asia, Europe and the Americas working on issues of trade and sustainable development. Coordinated by the International Institute for Sustainable Development (IISD), the TKN links network members, strengthens capacity and generates new research to assess and address the impact of trade and investment policies on sustainable development.

The overarching aim of the TKN is to help ensure that trade and investment contribute to sustainable development, with social development and the environment equitably addressed in trade and investment policies. The TKN furthers this aim by generating compelling research with clear policy recommendations and communicating those effectively to decision makers nationally, regionally and globally.

The TKN is hosted by the International Institute for Sustainable Development, a Canada-based not-for-profit organization promoting change towards sustainable development. As a policy research institute dedicated to the effective communication of its findings, the Institute engages decision-makers in government, business, NGOs and other sectors in the development and implementation of policies that are simultaneously beneficial to the global economy, the global environment and to social well-being.

This study is part of a larger TKN project that seeks to better environmental impacts of trade and investment policy in ASEAN, and specifically the Mekong subregion. It was made possible through the generous support of the Swedish Environment Secretariat for Asia (SENSA) which is part of the Swedish International Development Cooperation Agency (SIDA). The project outputs are available on the TKN website.

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IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC) and Environment Canada; and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

## Foreword

The neoliberal economic paradigm that dominated the last quarter century has gone through a serious crisis in the past two years. The global recession that hit in 2008 has triggered a rethinking of both our economic model and the assumptions on which it is based. The old paradigm focused on economic growth and wealth generation. Under this model, a steadily improving living standard would lead the population increasingly to demand a clean environment, greater rule of law, and a level of equity that would eliminate the most extreme poverty and exclusion. As demand for these public goods grew, economies would have generated the funding necessary to address these issues.

This paradigm ruled with near-religious fervour and this fervour discouraged attempts to test the assumptions on which it was based. Where honest criticism prevailed, a number of worrying trends were detected. Firstly, if economic growth did indeed take place, the wealth generated tended to be concentrated within the commercial and financial sectors, such that the gaps between rich and poor, both within and among countries, grew wider rather than shrinking. Secondly, much of the economic expansion led to forms of wealth generation that reduced employment prospects rather than creating jobs. And by relegating environmental concerns to a lower level of political priority, it undermined the very basis on which economic prosperity is founded.

Even economically, the gains were often built on sand, as the bursting of one speculative bubble after another has demonstrated. Wealth creation became ever more divorced from the production of goods and services as banks and investment houses built complex pyramids of derivatives with little connection to reality. Ironically, it is the countries that shunned the orthodoxy of the neoliberal paradigm that have tended to escape the worst of the economic collapse.

If there is a lesson to be drawn from the trying experience of these last years, it is that there will be no acceptable future—no acceptable model for economic organization—that does not value the creation and defence of livelihoods, the maintenance of employment and the restoration of a healthy environment as being equally important as the dry statistics of economic growth and wealth creation.

This is one in a series of papers, made possible by the generous support of the Swedish Environment Secretariat in Asia (SENSA), that investigate the relationship between economic development and environmental sustainability. Making a new, sustainable economy a reality is a goal shared by SENSA and the Trade Knowledge Network (TKN). SENSA has long understood that without the policy, capacity and institutions to manage the environment, the rapid economic changes in Southeast Asia could devastate the foundation for prosperity and wellbeing. TKN is part of that enterprise—not only building the capacity to understand the linkages between economic development and sustainability, but ensuring that the solutions are crafted with full knowledge of local realities, local aspirations and local conditions. Nothing else will work.

Mark Halle  
Executive Director, IISD Europe

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## Abbreviations and acronyms

ACB	ASEAN Center for Biodiversity
ADB	Asian Development Bank
AEC	ASEAN Economic Community
ASCC	ASEAN Socio-Cultural Community
ASEAN	Association of Southeast Asian Nations
ASEAN Customs Agreement	ASEAN Agreement on Customs
ASEAN Single Window	Agreement to Establish and Implement the ASEAN Single Window
ASEAN-WEN	ASEAN Wildlife Enforcement Network
BCI	Biodiversity Conservation Corridors Initiative
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CLMV	Cambodia, Lao PDR, Myanmar and Vietnam
CNY	Chinese yuan renminbi
Cross Border Transport Agreement	Agreement for the Facilitation of Cross Border Transport of Goods and People
EU	European Union
FLEGT	Forest Law Enforcement, Governance and Trade
GDP	gross domestic product
GMS	Greater Mekong Subregion
GZAR	Guangxi Zhuang Autonomous Region
IAI	Initiative for ASEAN Integration
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
Lao PDR	Lao People's Democratic Republic
NGO	non-governmental organization
PRC	People's Republic of China
USD	U.S. dollar
WWF	World Wildlife Fund for Nature
WTO	World Trade Organization

## Executive summary

The Asian region has been experiencing phenomenal economic growth over the past decades. This has been fuelled in large part by the growth of the East Asian economies of Japan, South Korea and China. China in particular has achieved spectacular growth since it opened its economy in the 1980s. Interest in other parts of the region, especially the Greater Mekong Subregion (GMS), has also been growing as its vast resources provide a huge potential for economic growth. The GMS comprises the countries of mainland Southeast Asia (Cambodia, Lao PDR, Myanmar, Thailand and Vietnam), and two provinces of the People's Republic of China (Yunnan Province and Guangxi Zhuang Autonomous Region).

Recognizing the potential for growth in the GMS, the Asian Development Bank (ADB) and the GMS states have initiated development programs in the subregion, the most notable of which is the economic corridors that link the various GMS states through a series of transportation and telecommunications networks, and other supporting infrastructure. These economic corridors are intended to ease the movement of goods and people among the GMS states and encourage more trade and economic activity within the region.

At the same time, efforts to facilitate trade have also been initiated at the multilateral (under the Doha Development Round of negotiations in the World Trade Organization), regional (through the Association of Southeast Asian Nations [ASEAN]) and subregional (among the GMS states) levels. These efforts would further facilitate trade within the GMS and complement the current development initiatives undertaken by the ADB and GMS states.

However, the demands of economic growth have placed the biodiversity of the GMS at severe risk. Unchecked and unsustainable harvesting of wildlife and timber and their attendant trade has been depleting these resources to the point of extinction. The huge global and regional demand for such trade has made it difficult to implement and enforce conservation laws, as the weak governance structures and limited information systems and capacity of each state hamper state efforts to curb the trade.

Controlling and regulating wildlife and timber trade is part of a whole set of conservation measures being implemented in the GMS and within the ASEAN region in compliance with obligations of the GMS and ASEAN states under the Convention on International Trade in Endangered Species and the Convention on Biological Diversity. These measures may be classified into: (1) wildlife conservation and enforcement; (2) sustainable forest management; and (3) biodiversity conservation (in general). Several regional and subregional initiatives are also being implemented to this end. In addition, as part of the ASEAN integration process, ASEAN has set out policy guidelines for the promotion of the sustainable use of biodiversity and the prevention of illegal wildlife and timber trade.

These measures, while a positive development, may also have limited effectiveness if they are not properly rationalized and implemented without proper coordination among GMS states. As trade facilitation measures begin to be implemented within the subregion, the resulting ease of movement of goods and people across the borders of the GMS states has the potential of worsening the depletion and degradation of the forest resources and wildlife of the subregion. At the same time, some proposed measures could also be harnessed to control and regulate the attendant trade of such resources.

Thus, as GMS states implement these trade facilitation measures, they must: (1) identify existing constraints, whether inherent or institutional, that hamper efforts to address the unsustainable harvesting of wildlife and timber and their attendant trade; and (2) determine actions necessary to address these constraints in order to mitigate or neutralize the adverse effects of these trade facilitation measures.





## 1. Introduction

As biodiversity within the Greater Mekong Subregion (GMS) continues to be threatened by rampant and unchecked trade in wildlife and timber, developments in infrastructure, telecommunications and trade within the subregion are threatening to worsen the situation. While these improvements ease the movement of people and goods across borders, they also provide illegal traders of wildlife and timber easy access to these improved facilities as they continue to transport their goods.

One of the current trade initiatives at the multilateral (World Trade Organization), regional (within Southeast Asia) and subregional (within the GMS) levels that could also potentially impact wildlife and timber trade are trade facilitation measures. These are measures that are intended to ease the movement of goods and people through the respective customs and border checkpoints of states that are parties to the relevant trade facilitation agreements. These measures provide both potential risks and opportunities in terms of efforts to combat illegal wildlife and timber trade. Whether or not these risks and opportunities are realized is dependent on the effectiveness of conservation laws and policies within the subregion, as well as the capacity to enforce such laws and policies.

This case study will examine the current state of biodiversity in the GMS and the effect of international trade on its wildlife population and forest cover. It will then examine how the current trade facilitation measures at the multilateral, regional and subregional levels could potentially affect the growth of illegal wildlife and timber trade. It will also assess their impact on current efforts to combat such trade and assess the subregion's capacity to address the new challenges posed by trade facilitation measures.

Finally, the case study will make relevant recommendations on how to address these challenges and improve the current system.

## 2. State of biodiversity in the Greater Mekong Subregion

The GMS is composed of Cambodia, the Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, Vietnam, and Yunnan Province and Guangxi Zhuang Autonomous Region (GZAR) of the People's Republic of China (PRC) (ADB, 2007a).<sup>1</sup> The first five countries comprise mainland Southeast Asia and are members of the Association of Southeast Asian Nations (ASEAN).

The subregion is home to some of the richest and most biologically diverse habitats in the world. These habitats include forests and inland bodies of water within these forest systems. Habitats range from evergreen and semi-evergreen, mixed deciduous to deciduous dipterocarp forests, and to panoramic grasslands, swamp forests and mangroves (Thompson, 2009: 3). However, both these forests and the rich biodiversity found in them are dwindling or are threatened by extinction as a result of human activities.

The United Nations Environment Program report entitled *Sustainable development strategy for the Greater Mekong Subregion* (UNEP, 2009) states that about 45 percent of the GMS area was classified as forest land in 2005. This is substantially reduced compared to previous decades, since forest areas within the subregion have been progressively declining as a result of various stresses.

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1 Guangxi Zhuang Autonomous Region was formally included in the GMS in December 1994 (ADB, 2007a: 3, fn. 1).

While Vietnam has experienced a recovery of forest cover over the past decade as a result of heavy investments in afforestation and reforestation (Vietnam, 2009: 14; ADB, 2004: 65), the net forest loss within the subregion is still substantial. In 1969 Cambodia had forest cover of approximately 13.2 million hectares, or 73 percent of the country's total land area (Cambodia, 2009: 12). As of 2007, however, forest cover had declined to 55.3 percent. Forest cover in Lao PDR declined over the past 50 years from 70 percent of the land area in 1940 (GMS EOC, n.d.) to 40 percent in 2007 (ASEAN, 2009b: 54). Thailand had forest cover of around 53.35 percent of its total land area in 1961 (Thailand, 2009: 16), which had since decreased to approximately 28 percent by 2007. Meanwhile, Myanmar's forest cover of 58 percent of total land area in 1990 had declined to around 46 percent in 2007 (ASEAN, 2009b: 54). Table 1 summarizes forest cover loss from 2000 to 2007 and the percentage of forest cover as a share of land area.

**Table 1: Forest cover in GMS countries, 2000–07**

Country	Area 2000 (1,000 ha)	Area 2007 (1,000 ha)	Annual change rate, 2007 (%)	Forest land area as a share of land area, 2007
Cambodia	11,541	10,009	-1.66	55.3
GZAR, PRC	—	—	—	57.45 <sup>a</sup>
Yunnan Province, PRC	—	—	—	49 <sup>b</sup>
Lao PDR	9,933	9,640 <sup>c</sup>	-0.37	40.7
Myanmar	34,554	31,290	-1.18	46.3
Thailand	14,814	14,402	-0.35	28.1
Vietnam	11,725	13,413	1.8	38.5

a Data for 1999 (Cossalter, 2006: 3).

b UNEP (2009); estimate as of 2006.

c Based on Lao PDR (2009).

— Data not available.

Source: ASEAN (2009b)

Like the forest systems of the GMS, wildlife is also suffering an alarming decline and some species are already threatened with extinction. This and other similar declines in the rest of Southeast Asia have become a cause for global concern. Note that while only occupying about 3–4 percent of the surface of the earth, Southeast Asia accounts for 20–25 percent of all known plant, animal and marine species (ASEAN, 2009b: 53; Woodruff, 2010: 920).

In the GMS, approximately 20,000 plant species, 1,200 bird species, 800 reptile and amphibian species, and 430 mammal species can be found, and more are still being discovered. For the period 1997–2007 alone at least 1,068 new species were discovered, i.e., two new species per week on average every year for the 10-year period (Thompson, 2009: 2). These species are spread out across the various biodiversity habitats of the ecoregions within the GMS. An inventory of these species found in the GMS countries as of 2008 is given in Table 2.

**Table 2: Recorded species in the GMS, 2008**

Country	Amphibians	Birds	Butterflies	Dragonflies	Mammals	Plants	Reptiles	Total
Cambodia	63 <sup>a</sup>	545 <sup>a</sup>	38	43	123 <sup>a</sup>	2,308 <sup>a</sup>	88 <sup>a</sup>	3,208
GZAR, PRC	—	—	—	—	—	—	—	—
Yunnan Province, PRC	—	729 <sup>b</sup>	—	—	284 <sup>b</sup>	14,000 <sup>b</sup>	145 <sup>b</sup>	15,158 <sup>b</sup>
Lao PDR	89	700 <sup>a</sup>	532	65	282	412	150	2,230
Myanmar	82 <sup>a</sup>	1,056 <sup>a</sup>	682 <sup>a</sup>	244 <sup>a</sup>	251 <sup>a</sup>	11,800 <sup>a</sup>	272 <sup>a</sup>	14,387
Thailand	139	936	1,338	331	269	3,730	401	7,144
Vietnam	162 <sup>a</sup>	840 <sup>a</sup>	1,153	158	310 <sup>a</sup>	13,800 <sup>a</sup>	317 <sup>a</sup>	16,740

a Based on Cambodia (2009).

b Clarke (n.d.).

— Data not available.

Source: ASEAN (2009b)

But with the rapid decline in wildlife populations, a substantial number of species have been classified by the International Union for Conservation of Nature (IUCN) as either critically endangered, endangered or vulnerable. As of 2008 threatened and endangered species identified by the IUCN within each GMS state range between 109 and 710 (see Table 3).

**Table 3: Recorded threatened species in the GMS, 2008**

Country	Mammals	Birds	Reptiles	Amphibians	Molluscs	Other invertebrates	Plants	Total
Cambodia	18 <sup>a</sup>	22 <sup>a</sup>	18 <sup>a</sup>	3 <sup>a</sup>	0	67	31	159
GZAR, PRC	—	—	—	—	—	—	—	—
Yunnan Province, PRC	—	—	—	—	—	—	208 <sup>c</sup>	208 <sup>c</sup>
Lao PDR	46	23	11	5	0	3	21	109
Myanmar	39 <sup>b</sup>	45 <sup>b</sup>	21 <sup>b</sup>	n.a. <sup>b</sup>	n.a. <sup>b</sup>	1 <sup>b</sup>	38 <sup>b</sup>	144
Thailand	57	44	22	4	1	179	86	393
Vietnam	72 <sup>a</sup>	53 <sup>a</sup>	52 <sup>a</sup>	17	0	91	425 <sup>a</sup>	710

Note: Threatened species include those critically endangered, endangered and vulnerable (based on 2008 IUCN Red List of Endangered Species).

a Cambodia (2009).

b Country data updated by ASEAN member states.

c Clarke (n.d.).

n.a. = not available at time of publication.

— Data not available.

Source: ASEAN (2009b)

Such declines have raised global concern as they threaten to wipe out biodiversity in these areas. But what purpose does biodiversity serve? Would the benefits of preserving it outweigh the costs? These questions are relevant as the pace of development in the GMS and the whole Asian region forces policymakers to make a choice between preserving the environment and utilizing it to raise standards of living and boost economic growth.

## 2.1 Why conserve biodiversity?

Biodiversity embraces the totality of life forms, from species to subunits (races, populations), together with ecosystems and their ecological processes. It provides various economic and environmental services that span not only the areas where these life forms thrive, but across long distances through the symbiotic relationships among various species, organisms and the atmosphere (Myers, 1996: 2764).

The economic and material services of biodiversity are easily measurable and quantifiable. They include new and improved foods, medicines and drugs; raw materials for industry; and sources of bioenergy (Myers, 1996: 2764). Societies seek to utilize these services as they provide immediate and quantifiable benefits.

Environmental services, on the other hand, are more difficult to measure and their economic value is not easily quantifiable. In an effort to provide a basis for measuring these services, Myers (1996) identifies a few to illustrate the far reaching benefits of biodiversity. In the process, he also illustrates how the economic services that it provides are inextricably linked to such environmental services. According to Myers (1996: 2765–67), the following such services can be distinguished:

1. *Climate*: Biodiversity helps maintain the gaseous composition of the atmosphere and thus to regulate climate. It also affects climate by recycling vast amounts of water. Biodiversity–rainfall connections are evident in several parts of the humid tropics, such as the Panama Canal zone, northwestern Costa Rica, southwestern Ivory Coast, the mountainous parts of Tanzania, southwestern India, the northwestern Malaysian Peninsular and parts of the Philippines, where rainfall regimes have been disrupted and/or depleted in the wake of deforestation.
2. *Biogeochemical cycles*: While it is not clear if this function depends on biodiversity, it is established that vegetation and other biomass act as major sinks of carbon dioxide. Preliminary studies have also shown that species-rich ecosystems can often consume carbon dioxide at a faster rate than less diverse ecosystems; this in turn suggests that biodiversity decline may promote the buildup of carbon dioxide.

The value of carbon storage in tropical forests as a counter to global warming is estimated to be around USD 1,000–3,500 per hectare per year, depending on the type of forest and primarily reflecting the amount of biomass in the forest (rather than the amount of biodiversity in forest communities).

3. *Hydrological functions*: Plants play a part in hydrological cycles by controlling water runoff. Thick and sturdy vegetation permits a slower and more regulated runoff, allowing water supplies to make a steadier and more substantive contribution to their ecosystems, instead of quickly running off into streams and rivers, possibly resulting in flood and drought regimes downstream. Excessive runoff causes soil erosion in catchment zones and siltation in valleyland water courses. The siltation of reservoirs costs the global economy some USD 6 billion a year in lost hydropower and irrigation water.

In addition, wetlands supply freshwater for household needs, sewage treatment, cleansing of industrial wastes, habitats for commercial and sport fisheries, recreation sites and storm protection.

4. *Soil protection*: Similarly, vegetation and, to some extent, biodiversity protect soil cover. Soil erosion leads to (1) significant declines in soil fertility and, thus, in the productivity of croplands and pastures and (2) the sedimentation of rivers and other bodies of water, affecting downstream communities.
5. *Crop pollination*: About one third of the human diet depends on insect pollinated vegetables, legumes and fruits. Pollination is a service for which there is no technological substitute.

6. *Pest control*: Around 35 percent of the world’s crop production is lost to pests, of which there are at least 67,000 recognized species. Only about 300 species have been targeted by biological controls and, of these, controls on 120 species have been success stories. So there is much scope to draw on the vast stock of natural controls ‘out there’ in the form of predators and parasites, plus host plant resistance.
7. *Ecosystem resilience*: There is some evidence that biodiversity can make an important contribution to ecosystem resilience. However, the biodiversity–resilience relationship is so beset with uncertainty that scientific assurance as to how far biodiversity limits can be stretched before unacceptable risks are encountered may never be achieved until it is too late.

It is apparent that the health of biodiversity is inextricably linked to the economic services it provides. Its existence provides the basis on which complex processes interact to provide the raw materials for the economic services it produces.

Thus, with shrinking biodiversity as a result of rapid development within the GMS, there is an even more urgent need to address environmental considerations in development initiatives.

### 3. International trade as a major driver of forest loss and decline in wildlife populations

Among the significant drivers of economic growth within the GMS is international trade. The trade to gross domestic product (GDP) ratios of the GMS states in the period 2006–08 range from 52.8 percent in Myanmar to as high as 167.1 percent in Vietnam (see Table 4).

**Table 4: Trade to GDP ratios, 2006–08**

Country	Trade to GDP ratio (%)
Cambodia	143.5
China	68.5
Lao PDR	89.2
Myanmar	52.8
Thailand	151.5
Vietnam	167.1

Source: WTO (n.d.)

It is thus not surprising that one of the major causes of the decline in forest cover and wildlife in the GMS is the international trade in wildlife and timber. Unsustainable and often illegal harvesting occurring in this subregion and its associated trade is putting pressure on habitats and related biodiversity. For example, by some estimates, up to 90 percent of the timber from Cambodia is being harvested illegally (DFID, 2007: 6). While accurate data on the scope of illegal forest activities is not available, the World Bank estimates that losses from illegal logging in terms of global market value are more than USD 10 billion annually and lost government revenues total about USD 5 billion (FAO, n.d.a).

In addition, a recent review of international wildlife trade in Southeast Asia based on a comparison of official data from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and listing species with scarce data from illegal exports suggests that true levels of exports of wildlife are higher than reported, and that for selected species this will exceed sustainable levels of exploitation (Nijman, 2010: 1103).

Over the past two to three decades affluence in the subregion as a result of market liberalization, particularly in China, Thailand and Vietnam, has grown. This growing affluence, coupled with competing external demand from Japan, Korea, the United States and Europe, has placed great stress on the remaining resources of the GMS as large commercial interests take advantage of the huge demand and the local populace continued to rely on these resources for their livelihoods (World Bank, 2005).

A recent study by the World Bank indicates that high world demand for wildlife and wildlife products, with the resultant increase in world prices, provides a strong incentive for wildlife suppliers to enter and stay in the trade (World Bank, 2008). In Lao PDR, for example, the vast majority of the wildlife trade is driven by demand from China, Vietnam, Thailand, Japan, Korea and the overseas Chinese population who use these products for food and ingredients for traditional Chinese medicine and as rare collector's items (Nooren & Claridge, 2001: 41).

As their forest resources dwindled as a result of domestic and global demand, Thailand, China and Vietnam adopted logging restrictions within their borders. Thailand terminated all logging concessions and banned all logging at the end of the 1980s (FAO, n.d.b). In 1998 flooding in the Yangtze, Songhua and Nen rivers that caused the death of 30,000 people and serious economic losses was attributed to ecological deterioration and soil erosion resulting from excessive logging in China's forests. As a result, China also imposed strict restrictions on domestic logging in the same year (Stark & Cheung, 2006: 16). Vietnam also instituted a logging ban in the early 1990s as part of its efforts to reforest and reverse significant declines in its forest cover (Phuc & Sikor, 2006).

But as Asia increasingly became an important hub for processed wood products, Thailand, China and Vietnam became significant wood exporters. Hampered by their respective logging restrictions, these countries are forced to rely on the timber resources of neighbouring GMS countries, particularly Myanmar, Lao PDR and Cambodia (Rosander, 2008: 11). For example, after 1998, domestic timber production in China declined. But with the steady rise in global demand, China began sourcing its wood raw materials from imports, particularly from neighbouring countries, and quickly became one of the world's most important importers and consumers of wood. Substantial amounts of these imports such as those from Vietnam, Myanmar and Lao PDR are illegally harvested due to weak forest governance in these countries.

Figure 1 shows the trend of industrial wood consumption, imports and exports in China as a result of logging restrictions and global demand.

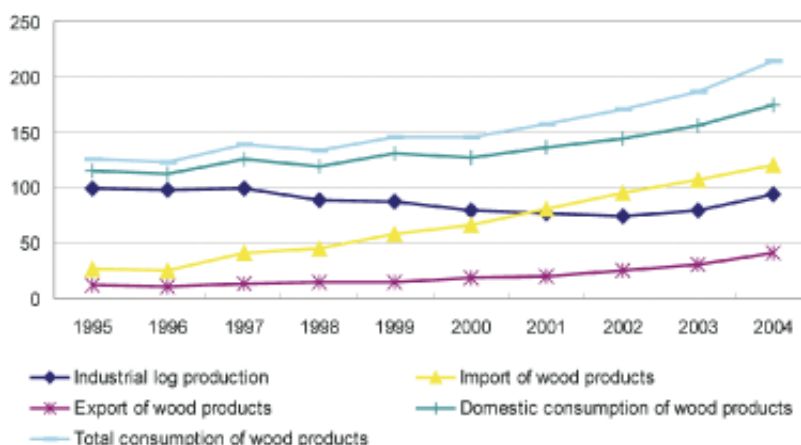
As international trade grew, and recognizing the potential of the GMS for more substantial growth, the Asian Development Bank (ADB) initiated a program of subregional economic cooperation among the six GMS states aimed at enhancing economic relations among them. Among its most significant projects to date are the economic corridors<sup>2</sup> that connect the whole subregion through highways and increased telecommunications capabilities. The corridors concentrate on infrastructure development as a means of promoting subregional growth (ADB, n.d.).

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2 These are: North–South Economic Corridor, East–West Economic Corridor, and Southern Economic Corridor.



Figure 1: Trends of industrial wood consumption, imports and exports in China, 1995–2004 (CNY million)



Source: Stark & Cheung (2006)

This has raised concerns over the impact of these corridors on the illegal wildlife and timber trade as they are likely to increase illegal trade in timber, wildlife and related products in the subregion and beyond (Rosander, 2008: 11) by making their transportation easier. This, together with existing ‘alternate routes’ (i.e., away from border checkpoints) along which such products are smuggled to neighbouring states, provides greater incentive for traders to continually deplete the GMS’s forests and the resources in them.

## 4. Do trade facilitation measures take environmental considerations into account?

Another development that complements the thrust of these economic corridors is the trade facilitation measures initiated at the multilateral (World Trade Organization), regional and subregional levels. Very little has been said about the impact of these initiatives in the subregion. As these measures also have the potential of worsening the illegal wildlife and timber trade within the GMS, this case study intends to take a preliminary look at such measures developing at all levels and assess whether environmental considerations are being taken into account in their development, or whether the measures leave room for policymakers to address the environmental fallout from these initiatives.

### 4.1 Trade facilitation under the WTO

Trade facilitation under the World Trade Organization (WTO) is laid down in Articles V (‘Freedom of transit’), VIII (‘Fees and formalities connected with importation and exportation’) and X (‘Publication and administration of trade regulations’) of GATT (1947), as incorporated into GATT (1994).<sup>3</sup> These provisions lay down four basic principles that are designed to guide the development of national and international mechanisms for trade facilitation reforms. These are:

<sup>3</sup> As incorporated into the agreement establishing the World Trade Organization: Article II: ‘The agreements and associated legal instruments included in Annexes 1, 2, and 3 (hereinafter referred to as ‘Multilateral Trade Agreements’) are integral parts of this Agreement binding on all Members. Annex 1 includes GATT 1994, which consists of GATT 1947, among others.’



1. *Freedom of transit:* Transport barriers are eliminated and no distinction shall be made based on the flag of vessels, the place of origin, departure, entry, exit or destination, or on any circumstances relating to the ownership of goods, of vessels or of other means of transport (GATT, 1994: art. V).
2. *Lowering export and import processing costs:* Fees and charges are to be limited to the approximate cost of services rendered and shall not represent an indirect protection to domestic products or a taxation of imports or exports for fiscal purposes (GATT, 1994: art. VIII[a]).
3. *Simplification of import and export formalities* (GATT 1994, Art. VIII[c]).
4. *Transparency and impartial application:* All laws, rules and regulations related to the processes of international trade and agreements affecting international trade policy between governments shall be published in such a manner as to make them accessible to governments and traders. These laws must be applied uniformly, impartially and in a reasonable manner. For such purpose, parties are required to maintain independent judicial or administrative tribunals authorized to conduct a prompt review and correction of administrative action relating to customs matters (GATT, 1994: art. X).

Since 2004 members of the WTO have been negotiating trade facilitation within the Doha Development Round. As part of the negotiation process, members, particularly developing and least developed countries, are mandated to identify their trade facilitation needs and priorities (WTO, 2004: Annex D, 4), for the purpose of clarifying and improving the above provisions with a view to further expediting the movement, release and clearance of goods, including goods in transit.

While negotiations on the draft negotiating text of the facilitation agreement are still under way, several current proposals may have implications or may be expanded to account for the illegal wildlife and timber trade. The draft of the text, however, is not clear as to whether these measures are concurrent or alternative, as more refinement is still needed.

GMS countries may take note of these matters in their negotiations in the Doha Round and in the implementation of related ASEAN initiatives, as well as related initiatives within the GMS itself. Some of the proposed trade facilitation measures are outlined in Table 5.

**Table 5: Some proposed measures under the draft negotiating text of the WTO trade facilitation agreement that may have implications for efforts to address illegal wildlife and timber trade**

No. <sup>a</sup>	Proposed measures	Conditions of implementation <sup>b</sup>	Comments
1	Risk management system • Risk means the potential for non-compliance with customs and/or other relevant laws.	<ul style="list-style-type: none"> <li>Members shall establish a system of documentary and physical examination that is meant to concentrate on the examination of high risk goods and facilitate the movement of low risk goods.</li> <li>Members shall establish appropriate selectivity criteria as a basis for identifying risk.</li> <li>Members shall adopt the necessary legislation to carry out a post-audit of documents relevant to import and export transactions of enterprises directly or indirectly involved in international trade based on risk analysis results.</li> </ul>	<ul style="list-style-type: none"> <li>Considering the facility with which wildlife and timber are illegally traded in the GMS, policymakers may consider applying similar measures to traded wildlife and timber, classifying these as high risk goods and subjecting their import, export and transit to closer inspection and examination at border checkpoints.</li> <li>Risk identification, however, should not be left to the determination of customs authorities alone. There must be a coordinated effort among conservation, law enforcement and customs officials, with the participation of other relevant stakeholders, to establish criteria for identifying such risks.</li> <li>Post-audits may have very limited effect in curbing illegal wildlife and timber trade in the GMS, as most entities involved in the trade are criminal organizations that do not pass through legitimate trade channels (see ASEAN-WEN, n.d.).</li> </ul>
2	Authorized trader schemes	<ul style="list-style-type: none"> <li>Members shall apply further simplified import, export and transit formalities to economic operators within a state's customs territory that meet specific criteria related to compliance with customs and other border agencies specified by domestic customs legislation.</li> <li>If authorized trader schemes are applied at the customs union level they shall as much as possible be applied uniformly by all member states.</li> <li>There shall be mutual recognition of each member's authorized trader schemes.</li> </ul>	<ul style="list-style-type: none"> <li>Providing special incentives to traders compliant with customs and other relevant laws may provide an inducement not to violate laws protecting wildlife and timber.</li> <li>For this measure to provide a profitable alternative to illegal trading there must be complementary measures that increase the cost of illegal trading and available profitable alternatives.</li> </ul>
3	Coordination of activities and requirements of all border agencies	<ul style="list-style-type: none"> <li>Members shall harmonize and coordinate procedures with one another in order to facilitate trade, which may include:                             <ul style="list-style-type: none"> <li>the alignment of procedures and formalities</li> <li>the development and sharing of common facilities</li> <li>the establishment of one stop border post controls</li> <li>the setting up of juxtaposed customs offices to facilitate joint controls</li> <li>the provision of expedited processes for goods in transit</li> <li>the development of procedures for the exchange of non-confidential information for conducting joint controls and recognition of inspection results</li> <li>the design and functioning of authorized trader schemes.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Coordinated action and shared responsibility at border checkpoints among neighbouring states must be transparent to the extent that confidential information is not compromised, so as to discourage the use of undue influence in the processing of import, export and transit transactions.</li> <li>This may have very limited effect as illegal traders have already established trade routes that avoid border checkpoints.</li> </ul>
4	Single window approach	<ul style="list-style-type: none"> <li>Documentation and/or data requirements for exportation, importation and transit procedures are submitted by a trader at a single entry point to all stakeholders in international trade procedures.</li> <li>The single window will be responsible for distributing the documents to relevant authorities and transmitting to the applying trader the decision of these authorities with respect to its submission.</li> </ul>	<ul style="list-style-type: none"> <li>This measure has the potential of vastly reducing the cost of importation and exportation, and therefore the prices of legally traded wildlife and timber, thus making them more competitive against those that are smuggled and illegally traded.</li> <li>At present, the huge market for illegally traded wildlife and timber is driven by its cheap price, because traders dealing in these products avoid the transaction costs of legal trade.</li> </ul>

No. <sup>a</sup>	Proposed measures	Conditions of implementation <sup>b</sup>	Comments
5	Freedom of transit	<ul style="list-style-type: none"> <li>• Goods from the territory of one member state shall be allowed free passage through the territory of another member state for a portion of a complete journey beginning and terminating beyond the borders of the member state through which the traffic passes.</li> <li>• Routes used must be acceptable to the member state whose territory is being transited.</li> <li>• Restrictions may be imposed on such transit for legitimate public policy objectives, such as those laid down in GATT Articles XX ('General exceptions') and XXI ('Security exceptions').</li> <li>• In designing transit formalities and documentation requirements, members shall take account of the characteristics of traffic in transit.</li> <li>• There shall be limited physical inspection of goods using risk management techniques to enable targeted inspections on the basis of the degree of risk attached to individual consignments.</li> </ul>	<ul style="list-style-type: none"> <li>• While border controls most often suffer from weak governance constraints, the relevant authorities of GMS countries must assess whether the further lowering of statutory and regulatory customs controls for goods in transit will limit the tools available to customs authorities to curb illegal wildlife and timber trade if enough political will is harnessed to implement these rules. In other words, they must assess the usefulness of current statutory and regulatory measures in detecting contraband goods passing through their borders.</li> <li>• Using the Article XX exception<sup>4</sup> (which includes measures protecting human, animal and plant life or health and those relating to the conservation of exhaustible natural resources, among others), GMS countries may impose measures designed to mitigate any adverse effects of the freedom of transit provision, as determined in the previous paragraph.</li> <li>• Note that while wildlife and timber smugglers most likely already have established routes for their contraband products, less stringent customs rules may provide them with additional alternative routes (if the current routes become more expensive, because of, for example, bribes and more expensive transport costs). Easy passage through state borders that does not require the need to bribe customs authorities will most likely encourage rather than discourage illegal trade.</li> <li>• In addition, once the goods are on territory of the transit state, contraband goods that slipped through the border checkpoints could be dropped off within the state and delivered to their destination by other means or processed and delivered in different forms to avoid detection.</li> <li>• Note, however, that states under the present draft may dictate the specific routes through which the vehicle in transit may pass. Thus, the state can provide sufficient controls and security along these routes to prevent unloading of contraband goods within its borders (see also point 6, below).</li> </ul>
6	Bonded transport regime and guarantees	<ul style="list-style-type: none"> <li>• Guarantees may be required to avoid inland diversion of goods in transit. This could be in any form of security acceptable to customs and other border authorities, such as bonds.</li> <li>• If a WTO member chooses to apply other measures to prevent inland diversion, it is proposed that either a guarantee shall not be required or a member may decide whether or not a guarantee shall be required for the transit of goods.</li> </ul>	<ul style="list-style-type: none"> <li>• In addition to the authority to specify routes along which inland transit may pass as a security measure against the diversion of contraband goods in transit, the requirement of bonds or guarantees could be an added protection against inland diversion of such contraband.</li> </ul>

a These numbers are introduced by the author of this report for ease of cross reference, and do not reflect numbering in the original text.

b For the purposes of this case study, references to customs unions shall be deemed to include free trade areas.

Source: WTO (2009)

- 4 Article XX provides, among others, that WTO member states may adopt or enforce measures (directly quoted from the original but reordered by the present author):
- Necessary to protect human, animal or plant life or health;
  - Imposed for the protection of national treasures of artistic, historic or archeological value;
  - Relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption, subject to the condition that these measures are not applied in a manner which would constitute:
    - a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or
    - a disguised restriction on international trade.

The trade facilitation measures taking shape in the negotiations under the Doha Development Round contain potential risks and opportunities regarding efforts to combat illegal wildlife and timber trade in the GMS. There are risks where the increased facility of movement of goods across borders is not effectively regulated. The likelihood that illegal trade will increase under this scenario is considerable.

In addition, potential opportunities in the current draft require further actions from GMS states in order to maximize their benefits. To mitigate the risks and maximize the potential opportunities under the present draft, GMS countries must strengthen their conservation laws, both individually and through coordinated efforts, as well as improve enforcement capabilities. Strengthening conservation laws includes not only imposing stricter sanctions for violations, but also providing economic incentives to encourage a change in behaviour.

Thus, in considering these provisions GMS state negotiators must assess and consider, among others, their potential impact on efforts to curb illegal wildlife and timber trade, including the status of current national, regional and subregional initiatives. Such assessment will enable them, as well as concerned policymakers, to determine:

- how the draft provisions may be improved to take into account the difficulties facing GMS countries in dealing with the illegal wildlife and timber trade;
- relevant policies to be adopted in implementing the final trade facilitation agreement (assuming that these same provisions are included in the final draft), taking into consideration the problem of the illegal wildlife and timber trade;
- whether certain GMS states may need time to make the necessary adjustments to their internal laws and institutions to deal with the challenges of the trade facilitation regime under the WTO;
- the specific changes in laws and institutions, particularly in dealing with the illegal wildlife and timber trade, that are necessary to address such challenges; and
- the areas where technical assistance may be necessary to help GMS states transition to the trade facilitation regime without unduly worsening the threat to their biodiversity.

## 4.2 Trade facilitation under ASEAN

The GMS states, except for the Chinese provinces, are all members of ASEAN. In addition to the ongoing trade facilitation negotiations under the Doha Development Round, ASEAN has also embarked on regional initiatives in trade facilitation as part of efforts towards the establishment of an ASEAN Economic Community.

These initiatives include the ASEAN Agreement on Customs (ASEAN Customs Agreement)<sup>5</sup> and the Agreement to Establish and Implement the ASEAN Single Window (ASEAN Single Window).<sup>6</sup>

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5 Signed 1 March 1997 in Phuket, Thailand.

6 Signed 9 December 2005 in Kuala Lumpur, Malaysia.

### 4.2.1 ASEAN Customs Agreement

The ASEAN Customs Agreement aims to: (1) simplify and harmonize customs valuation, tariff nomenclatures and customs procedures; (2) ensure consistency, transparency and the fair application of customs laws and regulations, procedures and other administrative guidelines within each ASEAN member state; (3) ensure efficient administration and expeditious clearance of goods to facilitate intraregional trade and investments; and (4) explore other appropriate intra-ASEAN cooperation arrangements in the field of customs, particularly with regard to the prevention and repression of all forms of smuggling and other customs frauds (ASEAN Customs Agreement, art. 1).

In relation to point (4), above, the ASEAN Customs Agreement provides that member states ‘shall be encouraged to exchange vital information on the prevention and repression of smuggling, trafficking of narcotics and psychotropic substances, and other Customs frauds’. Subject to each member’s national laws, rules and regulations and within the limits of the competence of each state’s customs administration and available resources, ASEAN customs authorities ‘shall cooperate among themselves in the conduct of investigation relating to smuggling and other Customs frauds’ (ASEAN Customs Agreement, arts. 7 [1] & [2]).

Such cooperation is further strengthened by the creation of the ASEAN Wildlife Enforcement Network (ASEAN-WEN) created by ASEAN member states to enforce CITES and related national legislations. ASEAN-WEN will be discussed in more detail below.

While the ASEAN Customs Agreement does not expressly address environmental concerns, particularly the illegal wildlife and timber trade, the general reference to smuggling and other customs fraud provides ample leeway for GMS states to address this issue through their respective customs authorities.

### 4.2.2 ASEAN Single Window

Similar to the proposed single window approach under the draft negotiating text of the WTO trade facilitation agreement, the main features of the ASEAN Single Window are:

- a single submission of data and information;
- a single and synchronous processing of data and information; and
- a single decision making process for customs release and clearance. Such a process is to be uniformly interpreted as a single point of decision for the release of cargoes by customs on the basis of decisions, if required, taken by line ministries and agencies and communicated in a timely manner to customs.

As noted in the comment on the same measure in Table 5, the single window approach has the potential to vastly reduce the costs of the importation, exportation and transit of legally traded wildlife and timber or related products, thus making them more competitive than those that are smuggled and illegally traded.

## 4.3 Trade facilitation in the GMS

In the GMS, Lao PDR, Thailand and Vietnam entered into a trade facilitation agreement in November 1999. The agreement, known as the Agreement for the Facilitation of Cross Border Transport of Goods and People (Cross Border Transport Agreement) was subsequently ratified by the other GMS states, i.e.,

Cambodia, Myanmar and China. (All references in this section are to this agreement.) Its objectives are to:

- Facilitate the cross-border transport of goods and people between and among the Contracting Parties ('Freedom of transit');
- Simplify and harmonize legislation, regulations, procedures and requirements relating to cross-border transport of goods and people; and
- To promote multimodal transport (art. 1).

To effect the agreement, the following will be implemented among the countries of the GMS:

(1) States will simplify and expedite border formalities in the following ways:

- *single window inspection*: joint and simultaneous performance by the respective authorities of each border country of inspection and controls the movement of people and goods across borders (art. 4 [b], annex 4, art. 4);
- *single stop customs inspection*: subjecting the transport operation to customs inspection only once during border crossing (art. 4 [b], annex 4, art. 5);
- *the harmonization and simplification of documents*: documents used shall accord with international standards; number of documents and procedures for border crossing shall be limited, and/or reduced or eliminated; and all documents shall be drawn up in English (art. 4 [b], annex 4, art. 6);
- the exchange of information on border crossing legislation, regulation, formalities, procedures, and practices and their subsequent changes (art. 4 [b], annex 4, art. 7);
- the exchange of cargo clearance information (art. 4 [b], annex 4, art. 8); and
- the reduction of routine and exhaustive physical inspections (art. 4 [b], annex 4, art. 10).

2. As a general rule, cargoes in international transit are exempt from: '(i) routine customs physical inspection at the border; (ii) customs escorts in the national territory; and (iii) the deposit of a bond as a guarantee for the customs duties' (art. 7 [a]). As it affects illegal wildlife and timber trade, this rule will not apply under the following conditions:

- National laws and regulations on prohibited and restricted goods for transit transport will still apply. The GMS states shall disseminate the list of prohibited and/or restricted goods in transit to the relevant authorities (Annex 6, art. 1 [b] [ix]).
- Motor vehicles and containers not equipped in accordance with the standards of the agreement will not be subject to the exemption above.

Motor vehicles and containers used for the transport of goods ... shall be constructed and equipped in such a manner that:

- i. any smuggling of goods through substitution or removal from or introduction into the load compartment without breaking the customs seal is prevented;
- ii. it allows the simple and efficient affixing of customs seals and tracking devices;
- iii. it does not contain any concealed spaces where goods may be hidden;
- iv. all spaces capable of holding goods are readily accessible for customs inspection (Annex 6, art. 3 [a] [i]).



3. There shall be freedom of transit traffic to and from the territory of other GMS states (art. 8).
4. Motor vehicles registered in one GMS state shall be admitted into the territories of the other GMS states (part V).
5. Transport operators established in one GMS state shall be permitted to undertake transport operations into, from or across the territory of other GMS states (art. 19).

To facilitate border crossings, the Cross Border Transport Agreement has identified specific cross border points throughout the North–South, East–West and Southern Corridors. These are found in the areas identified in Annex A of this case study. A map showing these border points is given in Annex B.

A notable feature of the Cross Border Transport Agreement is Annex 1, ‘Carriage of dangerous goods’. Dangerous goods are those substances and articles that may adversely affect the environment, health, safety and national security. Classification of these goods in the annex covers explosives, gases, flammable liquids, toxic and infectious substances, and similar goods. The annex provides specific and strict rules for the transport of such goods into and through the territories of the GMS states.

This is clearly an application of the security exceptions to the rule of non-discrimination allowed under the WTO Agreement (GATT, 1994). This is also provided as an exception under the draft negotiating text of the WTO trade facilitation agreement (WTO, 2009), as noted in Table 5, point 5. However, the Cross Border Transport Agreement, unlike the draft WTO text, does not provide for stricter measures for environmentally related prohibited or regulated goods, such as wildlife and timber. Thus, the regulation of these items is left to the national authorities of individual GMS states.

Given the constraints in enforcing conservation laws that regulate and control the illegal wildlife and timber trade, the facility with which borders may be crossed once the Cross Border Transport Agreement is fully implemented is a cause for concern. The rules that allow freedom of transit (if this provides a less expensive alternative to already existing routes and networks, and as discussed in Table 5, point 5, above), the admission of motor vehicles into the different GMS states and the right of transport operators to operate across the territory of the GMS could be exploited by illegal traders to transport wildlife and timber across borders. This is particularly true if the enforcement of customs and other relevant rules is weak, as is the case in the enforcement of conservation laws.

Illegal traders have been found to be very creative in bringing their contraband products to their destined consumers. For example, in the Chu Yang Sin National Park in Dak Lak Province in Vietnam, loggers have devised ways to bring illegally logged timber out of the protected area in order to supply middlemen and other traders.<sup>7</sup>

An examination of these multilateral, regional and subregional trade facilitation initiatives indicates that the illegal wildlife and timber trade may thrive when the relevant agreements are implemented. At the same time, these measures provide opportunities for policymakers to address this illegal trade if accompanied by effective laws and enforcement capacity within the subregion.

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7 As reported in Birdlife International Vietnam Programme (2008: 34): ‘Illegally logged timber from CYSNP [Chu Yang Sin National Park] passes through small and large-scale traders, before being delivered to carpenters and other wood processors both locally and in the Buon Me Thuot. Illegal timber follows the same trade routes and is traded by the same peoples as legally logged timber, making detection of illegal logging difficult.’

## 5. How are ASEAN, the GMS and individual countries responding to the problem?

The national laws and policies governing biodiversity and international trade of certain species are imposed in accordance with the requirements of two international conventions: (1) CITES and (2) the Convention on Biological Diversity (CBD). All GMS states are signatories to these conventions and are required to pass national laws, rules and regulations to implement their provisions. Regional and subregional initiatives affecting GMS states (and other ASEAN countries) are likewise undertaken to assist such states with their compliance requirements under these conventions.

### 5.1 Convention on International Trade in Endangered Species

CITES is an international agreement that regulates the international trade in identified and listed endangered species through a process of listing, a permit and certification system, and non-detriment findings. These species are classified into CITES Appendices I, II and III. Appendix I include all species threatened with extinction and are or may be affected by trade. These species cannot be used for commercial purposes and their trade is subject to very strict regulations to avoid endangering their survival. Such trade must only be authorized in exceptional circumstances (CITES, art. II [1]).

Appendix II includes:

- (a) all species which although not now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible to their survival; and (b) other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) ... may be brought under effective control (CITES, art. II [2]).

Appendix III include all species that 'any party [to CITES] identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation and as needing the co-operation of other parties in the control of trade' (CITES, art. II [3]).

Trade in specimens of these species needs import and export permits issued by relevant national authorities after they have determined that certain requirements have been met. For instance, in the case of Appendices I and II species, a non-detriment finding is required from a scientific authority in all cases of export import, and introduction from the sea of such specimens. For the export of specimens of Appendices I, II and III species, a management authority must also certify that the species was not obtained in violation of conservation laws.

GMS states are also required under CITES to enact the relevant laws, rules and regulations to enforce their CITES obligations within their borders and prohibit trade in specimens in violation of CITES. These include measures: '(a) to penalize trade in, or possession of, such specimens, or both; and (b) to provide for the confiscation or return to the State of export of such specimens' (CITES, art. VIII [1]).

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Timber is transported between the buffer zone and Buon Me Thuot, or elsewhere in Dak Lak Province using trucks, farm vehicles, and motorbikes. Illegal timber transportation between the buffer zone and Buon Me Thuot City is undertaken during the night, whilst illegal trade in timber within the buffer zone often takes place in daylight hours, using farm vehicles. CYSNP rangers report that large-scale traders often use trucks for transportation of large amounts of wood. On some occasions, large convoys of trucks full of illegally logged timber have been given police escorts, creating serious difficulties for rangers trying to stop illegal activities.'



## 5.2. Convention on Biological Diversity

The CBD is an international agreement that aims to conserve biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (CBD, 1992: art. 1). All GMS states are parties to the CBD and are thus bound by its terms.

## 5.3 Measures adopted by GMS countries

Laws and policies adopted within and among the GMS states to comply with the above conventions are discussed below.

### 5.3.1 Wildlife conservation and enforcement

In assessing the effectiveness of wildlife conservation measures implemented under CITES, analysis must cover two elements:

1. *whether the measures in themselves, when applied effectively, are sufficient to discourage the unsustainable harvest and trade of wildlife and other species:*

As noted above, under CITES, parties are required to include sanctions for violation of these laws. However, it leaves to individual states the determination of the extent of these sanctions. Thus, penal sanctions imposed by the GMS states may vary widely.<sup>8</sup> Varied sanctions among such states provide traders with choices on where to harvest and trade their illegally obtained merchandise. For example, if penalties in Thailand are heavier, there is greater incentive for poachers to move across the borders of Cambodia and Vietnam. Their borders, together with Thailand, are located within the Cardamom Mountains Rainforest ecoregion (see the discussion on ecoregions below). This gives facility for poachers hunting for wildlife within these forests to move across states where penal laws are not as heavy.

In addition, enacting laws in compliance with CITES does not take into account the other species that may be similarly endangered but have not been detected, or where the danger has already been detected, but there is no national political will to protect such species.

Given the rate at which wildlife is diminishing as a result of unsustainable use and harvesting, there is a need to review the effectiveness of existing penal laws and species covered. Such a review must take into account the effects of these laws on the conservation of individual forest systems and not be limited to each state's international borders. Thus, close coordination among GMS states is necessary;

2. *whether these measures are effectively implemented and enforced:*

On 1 December 2005 the ASEAN ministers responsible for the implementation of CITES launched the ASEAN Wildlife Law Enforcement Network to coordinate enforcement efforts against illegal wildlife trade. The ministers acknowledged 'the need to strengthen enforcement of CITES and other legislation for wildlife protection to address serious problems caused by illegal domestic and

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8 See, for example, Cambodia Law on Forestry (2002), Lao PDR Decree on the Management and Protection of Wild Animals, Fisheries and on Hunting and Fishing (1989), Myanmar Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law (1994) and Thai Wildlife Preservation and Protection Act (1992).

international trade in wild fauna and flora, and that the available resources for enforcement are inadequate' (ASEAN, 2005: Preamble, para. 3).

They expressly recognized that the illegal harvesting of wild fauna and flora within the ASEAN region is a regional problem that is best solved through regional efforts (ASEAN, 2005: Preamble, para. 12). As part of ASEAN, the GMS states, except the regions in China, are now part of the law enforcement network of ASEAN-WEN.

In addition to ASEAN-WEN, the ASEAN states adopted the ASEAN Regional Action Plan on Trade in Wild Fauna and Flora, 2005–2010 (ASEAN, 2005a) to enhance regional cooperation in the fight against illegal wildlife and timber trade. The plan seeks to achieve six key objectives and proposes relevant courses of action. These objectives are as follows:

- To assist ASEAN Member countries in adopting effective and enforceable legislation for CITES implementation
- To promote networks among relevant law enforcement authorities in ASEAN countries to curb illegal trade in wild fauna and flora
- To promote research, monitoring and information exchange on CITES-related issues
- To encourage industry groups, trade associations/traders and local communities to comply with legality and sustainability requirements of CITES and national regulations on trade in wild fauna and flora, and to support research and capacity building on sustainable management of trade in fauna and flora
- To encourage greater regional cooperation on specific issues
- To seek sufficient technical and financial assistance through collaborative initiatives (ASEAN, 2005a).

These regional initiatives implicitly acknowledge the difficulty of enforcing wildlife conservation laws at the state level due to weak governance, insufficient information and limited state capacity.

### 5.3.2 Forest management

In compliance with their obligations under the CBD, and particularly to meet the 2010 target to protect at least 10 percent of the world's major forest types and other ecologically significant habitats, GMS countries have increased their protected areas over the past decade and developed, or are in the process of developing, sustainable forest management systems (ASEAN, 2009b: 55).

#### 5.3.2.1 Protected areas

Protected areas in GMS states as a percentage of land area as of 2008 range between 7.3 percent in Myanmar to 23.5 percent in Cambodia (see Table 6).

**Table 6: GMS protected areas as percentage of total land area, 2008**

Country	Land area (km <sup>2</sup> )	Total protected areas (km <sup>2</sup> )	% of protected areas to total land area
Cambodia	181,035	42,592	23.5
GZAR, PRC	—	—	—
Yunnan Province, PRC	—	—	—
Lao PDR	236,800	36,992	15.6
Myanmar	676,577	49,456	7.3
Thailand	513,120	108,958	21.2
Vietnam	329,315	25,417	7.7

— Data not available.

Source: ASEAN (2009b)

Note, however, that these protected areas do not cross international borders, despite the fact that biodiversity habitats do so. These biodiversity habitats are classified by the World Wildlife Fund for Nature (WWF) as ecoregions<sup>9</sup> in order to provide a basis for more relevant conservation. Through its Global 200 project, WWF identified approximately 200 ecoregions as priority areas of biodiversity conservation. Of these 200, six can be found in the GMS (ADB, 2004: 69).

Protected areas separately established by the GMS states in these ecoregions cover between 5 percent and 33 percent of their total area. The six ecoregions are given in Table 7.

**Table 7: Priority areas for conservation within the GMS**

Ecoregion	Countries covered	Proportion of protected area to total area (%)
1. Northern Indochina Subtropical Forests	Myanmar; Yunnan Province, PRC; Thailand; Lao PDR; Vietnam	5
2. Annamite Range Forests	Lao PDR, Vietnam, Cambodia	
Northern Annamites Rainforest	Central Lao PDR, Vietnam	26
Southern Annamites Montane Rainforest	Lao PDR, Vietnam, Cambodia	5
3. Cardamom Mountains Rainforests	Thailand, Cambodia, Vietnam	33
4. Indochina Dry Forest		
Central Indochina Dry Forests	Thailand, Cambodia, Lao PDR, Vietnam	5
Southeastern Indochina Dry Evergreen Forests	Thailand, Cambodia, Lao PDR, Vietnam	18
5. Peninsular Malaysian Montane Rainforests	Southern Thailand, Malaysia	30
6. Kayah-Karen Montane Rainforests	Myanmar, Thailand	20

Sources: ADB (2004); Encyclopedia of Earth (n.d.); National Geographic (n.d.)

The WWF classification of ecoregions provides a more rational basis for protection, given the ecological interactions within these areas that are critical to their long term persistence. There is thus a need for GMS states to adjust their conservation efforts in order to increase cooperation and coordination in the joint management of these forest resources and biodiversity. Several regional and subregional initiatives are already being undertaken in this regard. These are discussed in more detail below.

- 9 An ecoregion is defined as a large area of land or water that contains a geographically distinct assemblage of natural communities that:
- share a large majority of their species and ecological dynamics;
  - share similar environmental conditions; and
  - interact ecologically in ways that are critical for their long term persistence (WWF, n.d.).

### 5.3.2.2 Sustainable forest management

Forest conservation laws and policies of the GMS countries seek to achieve forest conservation through the implementation of sustainable forest management. This approach aims to balance the ecological and developmental objectives of the state in order to sustainably maximize its forest resources.

**Cambodia** has two major forest laws. These are:

1. the 2002 Forestry Law (Cambodia, 2002), which provides for the preparation of national forest management plans that will establish forest ecosystem-related activities with the objective of maximizing the social, economic, environmental and cultural heritage benefits for the people of Cambodia.<sup>10</sup> While the law mandates the classification of forests into those that can be used productively and those that should be protected for ecological purposes, it does not provide any standard for such classification, and the determination of a particular forest's classification is left largely to the discretion of government authorities. Thus, while there are specific rules to regulate forest use (through the issuing of permits), as well as prohibited forest activities, there is substantial leeway for circumventing these rules through the process of forest classification; and
2. the 2004 Cambodia Community Forest Law, which grants forest plantations to local communities living in or near the forests to manage and utilize the forest in a sustainable manner (Cambodia, 2004: art. 5 [6]).

The 2007 Forestry Law of **Lao PDR**, on the other hand, while essentially having similar features as the Cambodian forestry laws, provides some general definitions and standards of what should be classified as protection forests, production forests or conservation forests. Forest management is not left entirely to the discretion of government authorities. The Lao PDR law also outlines general content and principles in the development of programs for forest management. In addition, it specifies the contents of forestry programs, such as forest surveys, the preservation of production forests, the preservation of water resources in forest zones, and the preservation of trees and non-timber forest product species, among others (Lao PDR, 2007: chap. III).

As of 2004 **Myanmar** is also in the process of developing a sustainable forest management framework. Model forests have been established to demonstrate best forest management practices and to strengthen the role of partners in forest management and conservation. The National Code of Forest Harvesting Practices in Myanmar has already been developed and a timber certification process reflecting the country's forest management system was under development in 2004 (FAO, 2008; ITTO, n.d.).

Like Myanmar, **Thailand** is also in the process of developing a sustainable forest management framework. Together with China, Myanmar and the Philippines, Thailand participates in a regional project to assist in the establishment of model forests for sustainable management with support from the International Tropical Timber Organization. Its activities are currently focused on reforestation and the rehabilitation of forests (FAO, n.d.b).

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<sup>10</sup> These activities include programs on relevant research on the state of Cambodia's forests and the development of forest technology; the classification of forests into those that can be used productively ('production forests') and those that should be protected for ecological purposes ('protection forests'); programs designed to assist stakeholders in the management of state and private forests; and programs for forest industry development and markets for forest products and byproducts (Cambodia, 2002: art. 9).

**Vietnam**, on the other hand, encourages private investment in plantations and allocates government funds for the establishment of state-led plantations. Among its programs aimed at achieving this end is the 1989 Tropical Forestry Action Program, which seeks to link improved land use practices with improved standards of living (FAO, n.d.c). A unique characteristic of Vietnam's forest policy is increased public participation in forest protection ('community forest management'). For example, a 1994 decree issued by the Vietnamese government allocated land to be managed by individuals, households and organizations. As a result, the management of more than five million hectares of forest land has been devolved to one million Vietnamese families (FAO, n.d.d).

Forest management in the GMS is clearly undertaken by each individual state within its own borders. Each state decides what laws, rules and regulations to promulgate in order to implement related government forest policies. These laws are binding and enforceable only within these states. Thus, national forest policies and programs vary among them.

Noting again the interconnectedness of the forest systems and biodiversity within the GMS, a more coordinated and cooperative approach among these states is clearly called for. Within ASEAN, there is an increasing recognition of this necessity as forests continue to decline due to varying and sometimes inadequate measures, limited resources and state capacity, and weak governance.

### **5.3.2.3 Regional initiatives**

Recognizing the need for closer cooperation within the ASEAN region in conserving forests systems, ASEAN states have committed to several regional initiatives. The major forest conservation initiatives are discussed below.

#### *5.3.2.3.1 ASEAN Declaration on Heritage Parks (2003)*

As part of their efforts to comply with the CBD's 2010 target, the ASEAN states identified national protected areas as ASEAN Heritage Parks. They agreed that common cooperation is necessary to conserve and manage these parks for the development and implementation of regional conservation and management action plans and regional mechanisms complementary to and supportive of national efforts to implement conservation measures.

#### *5.3.2.3.2 ASEAN Statement on Strengthening Forest Law Enforcement and Governance (2007)*

Recognizing the vital role of forest resources in sustaining human, animal and plant life, as well as mitigating climate change as carbon sinks, the ASEAN states agreed to:

- strengthen forest law enforcement and governance in their respective countries, particularly in preventing and combating illegal logging and its associated trade;
- enhance collaborative activities and programs, such as regional customs and trade cooperation; forestry and sector transparency; and joint approaches in timber certification, country diagnostics and experience sharing;
- build on the East Asia Forest Law Enforcement and Governance initiative as a meaningful platform for synergistic partnership and cooperation;
- task the senior ASEAN officials responsible for forestry to prepare and implement a work plan to achieve the abovementioned measures; and

- urge the ASEAN dialogue partners, international and regional organizations, and the business community to extend technical assistance and support.

### *5.3.2.3.3 Strategic Plan of Action on ASEAN Cooperation in Food, Agriculture and Forestry for 2005–2010 (2004)*

The Ministerial Understanding on ASEAN Cooperation in Food, Agriculture and Forestry adopted in 1993 identified seven priority areas of cooperation, among which was the management and conservation of natural resources for sustainable development (ASEAN, 1993).

The Strategic Plan of Action on ASEAN Cooperation in Food, Agriculture and Forestry for 2005–2010 (ASEAN, 2004) identified the following strategic thrusts in the forestry sector:

- Strategic Thrust 1: Ensuring Sustainable Forest Management ('SFM') and Conservation of Natural Resources
- Strategic Thrust 2: Strengthening ASEAN's Cooperation and Joint Approaches in Addressing International and Regional Forestry Issues
- Strategic Thrust 3: Promotion of Intra and Extra-ASEAN Trade in Forest Products and Private Sector Participation
- Strategic Thrust 4: Increasing Productivity Efficiency and Sustainable Utilization of Forest Products.

The strategic plan recognizes the value of balancing the state's economic goals with the need to conserve forest resources.

### **5.3.3 Biodiversity conservation**

With the assistance of international institutions, such as the ADB, both ASEAN and the GMS states have also agreed to collaborate on matters dealing with the biodiversity of the region and general environmental concerns. Some of these collaborations are discussed below.

#### **5.3.3.1 ASEAN Centre for Biodiversity (2005)**

The ASEAN states agreed to establish the ASEAN Centre for Biodiversity to 'facilitate cooperation and coordination among the members of ASEAN, and with relevant national governments, regional and international organizations, on the conservation and sustainable use of biological diversity and the fair and equitable sharing of benefits arising from the use of such biodiversity in the ASEAN region' (ASEAN, 2005c: art. 2).

#### **5.3.3.2 Biodiversity Conservation Corridors Initiative (2005)**

The Biodiversity Conservation Corridors Initiative (BCI) is the flagship component of the GMS Core Environment Program. It is executed by the ADB and is part of a regional technical assistance program for promoting the establishment of sound environmental management systems and institutions (ADB, 2007b: 1).

Under the BCI, GMS countries aim to establish by 2015 priority biodiversity conservation landscapes and corridors for maintaining the quality of ecosystems, ensuring the sustainable use of shared natural resources and improving the livelihoods of people.<sup>11</sup>

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<sup>11</sup> Implementation of the BCI will take place in three phases:



Pilot sites have been identified by GMS governments with support from non-governmental organization (NGO) partners based on the following criteria:

- Falling within the GMS economic corridors or their zones of influence;
- Reducing ecosystem fragmentation by linking two or more protected areas;
- Areas of international biodiversity importance;
- Areas of high poverty incidence and population growth;
- Being of a transboundary nature; and
- Having institutional (state and non-state) capacity on the ground that is active in implementing one or more projects (ADB, 2007b: 2–3).

These pilot sites are located in the following areas:

- Cardamom Mountains, Cambodia;
- Eastern Plains, Mondulhiri, Cambodia;
- Xishuangbanna, Yunnan, PRC;
- Xe Pian–Dong Hua Sao–Dong Ampham, Lao PDR;
- Tenasserim–Western Forest Complex, Thailand;
- Ngoc Linh–Xe Sap, Vietnam (ADB, 2007b: 4).

A map of the biodiversity conservation landscapes and BCI pilot sites can be found in Annex C.

Note that these sites are located near several border points under the Cross Border Transport Agreement. There is thus potential for environmental, customs and law enforcement authorities, with support from various stakeholders, to work together in the identification and detection of illegally harvested and traded goods. With effective environmental education and targeted incentives among communities surrounding the biodiversity conservation landscapes, community participation may also be maximized.

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Phase I (2006–09): The five GMS countries (Cambodia, the two PRC provinces, Lao PDR, Thailand and Vietnam) will carry out pilot projects in a selected site in one of the nine GMS biodiversity corridor landscapes.

Phase II (2009–12): The methodology and framework of action developed in Phase I will be scaled up in the pilot sites and applied to other corridors in the nine GMS biodiversity landscapes.

Phase III (2012–16): All nine GMS biodiversity landscapes and the priority corridors in them will be consolidated in terms of investments and the approach and achievements will be evaluated to determine if the goals were achieved.

## 6. Roadmap for an ASEAN Community 2009–2015 (2009)

As part of the goal to establish an ASEAN Community by 2015, the heads of government of ASEAN states adopted the Cha-am Hua Hin Declaration on the Roadmap for the ASEAN Community 2009–2015 (Roadmap). The Roadmap adopts the various blueprints of the three pillars of the ASEAN Community, namely, a political-security community, an economic community and a sociocultural community. In addition, it also adopts the Initiative for ASEAN Integration (IAI) Work Plan 2 (2009–2015) (ASEAN, 2009a).

Environmental considerations play a prominent role in the Roadmap. Among the policy directions under the ASEAN Economic Community (AEC) Blueprint and the related portions of the IAI Work Plan that have impacts on efforts to combat the illegal wildlife and timber trade within the GMS are the following:

1. *Enhance intra- and inter-ASEAN trade and long-term competitiveness of ASEAN's food, agriculture and forestry products/commodities.* One of its mandated actions is to develop a regional framework on a phased approach to forest certification by 2015 (ASEAN, 2009a: AEC, A.7, 38 [x]).
2. *Promote cooperation, joint approaches and technology transfer among ASEAN Member Countries and international, regional organizations private sector.* Actions mandated include: (a) developing strategies/positions on issues of related interest to ASEAN with international organizations such as WTO, the Food and Agriculture Organization of the UN, the World Organization for Animal Health, the International Plant Protection Convention, CODEX, CITES and dialogue partners; and (b) strengthening efforts to combat illegal logging and its associated trade and illegal fishing (ASEAN, 2009a: AEC, A.7, 39 [iv] & [v]).
3. *Meeting the AEC challenge will require Cambodia, Lao PDR, Myanmar and Vietnam (CLMV) to develop policy to enhance economic growth, strengthen economic competitiveness, increase domestic and foreign direct investments, and expand private sector enterprises while meeting their public goals.* Among the Roadmap's mandated actions is to build/strengthen capacity of government officials to develop/implement economic and social policies that would mitigate the impact of economic integration. This is a mandate for states to ensure that impacts of trade facilitation measures, which are part of the economic integration process, on the illegal wildlife and timber trade are mitigated (ASEAN, 2009a: AEC, C.2, 63 [i] & [iv]).

Under the ASEAN Socio-Cultural Community (ASCC) Blueprint, the following strategic objectives are directed at addressing challenges to the environment and biodiversity, including illegal wildlife and timber trade:

1. *Effectively address global environmental issues without impinging on member states' competitiveness; social and economic development based on the principle of equity, flexibility, effectiveness and common but differentiated responsibility; or respective capabilities, as well as reflecting different social and economic conditions.* For this purpose, among the mandated actions is the requirement to adopt a holistic approach in fostering regional cooperation on environmental issues, with the participation of all relevant stakeholders including business academics, NGOs and civil society organizations (ASEAN, 2009a: ASCC, D.1, 31 [iv]).



2. *Establish a clean and green ASEAN, rich in cultural traditions where the values and practices of the people are in accordance with the rhythm and harmony of nature, with citizens who are environmentally literate, imbued with the environmental ethic, and willing to and capable of ensuring the sustainable development of the region through environmental education and public participation efforts.* The mandated actions focus on environmental education, raising public awareness and community participation in environmental initiatives (ASEAN, 2009a: ASCC, D.3, 33).
3. *Promote feasible efforts to harmonize on a step-by-step basis environmental policies and databases, taking into account the national circumstances of member states, in order to support the integration of the environmental, social and economic goals of the region.* The mandate to harmonize environmental policies is compatible with the nature of conservation needs within the GMS. Since ecoregions cross international boundaries, the harmonization of policies in this area will go a long way in addressing the subregion's current challenges (ASEAN, 2009a: ASCC, D.6, 36).
4. *Ensure ASEAN's rich biological diversity is conserved and sustainably managed toward enhancing social, economic and environmental wellbeing.* The mandated actions include collaboration among stakeholders; the coordinated sustainable management of protected areas; and the establishment of regional networks to promote capacity building, community participation and cooperative regional enforcement of conservation laws. Some of the mandated actions are continuations and increased effectiveness of existing measures, such as the ASEAN Heritage Parks and ASEAN-WEN (ASEAN, 2009a: ASCC, D.7 [38]).
5. *Promote the implementation of sustainable management of forest resources in the ASEAN region and eradicate unsustainable practices, including combatting illegal logging and its associated trade through, among other things: capacity building, technology transfer, enhancing public awareness, and strengthening law enforcement and governance* (ASEAN, 2009a: ASCC, D.11, 41).

The IAI Work Plan 2 (2009–2015), on the other hand, focuses on building the capacity of CLMV. Among the actions directed at illegal wildlife and timber trade are the following:

1. Conduct training by 2011 on Criteria and Indicators for Forest Certification for each CLMV country (ASEAN, 2009a: IAI (AEC), A.7 [vi]).
2. Organize workshops on strengthening efforts to combat illegal logging and its associated trade for the CLMV countries (ASEAN, 2009a: IAI (AEC), A.7 [x]).
3. Provide additional support by 2012 to CLMV in the implementation of the ASEAN Environmental Education Action Plan (2008–2102) addressing issues of particular concern to CLMV (ASEAN, 2009a: IAI (ASCC), D.3 [i]).
4. Provide support to CLMV for producing state of the environment reports (ASEAN, 2009a, IAI (ASCC), D.6 [i]).
5. Provide support to encourage more natural conservation areas, including listing in the ASEAN Heritage Parks Programs and World Heritage Sites (ASEAN, 2009a: IAI (ASCC), D.8 [i]).
6. The ASEAN Center for Biodiversity to provide additional support in all its activities to the CLMV countries with regard to sustainable management of biodiversity of the region (ASEAN, 2009a: IAI (ASCC), D.8 [ii]).
7. Strengthen biodiversity conservation and natural resources protection through the establishment of transboundary protected areas among CLMV countries (ASEAN, 2009a: IAI (ASCC), D.8 [iii]).

8. Promote capacity building and strengthen joint efforts to combat illegal logging and its associated trade (ASEAN, 2009a: IAI (ASCC), D.11 [i]).
9. Promote information sharing on rearing and breeding of Wild Fauna and Flora (ASEAN, 2009a, IAI (ASCC), D.11 [iii]).
10. Promote exchange of experience and best practice on forest law enforcement and governance in the respective countries and strengthen activities to implement commitments to the CITES and the ASEAN-WEN (ASEAN, 2009a: IAI (ASCC), D.11 [iv]).
11. Provide assistance to CLMV countries in implementing the ASEAN criteria and indicators for sustainable management of tropical forest (ASEAN, 2009a: IAI (ASCC), D.11 [v]).
12. Provide assistance to CLMV countries to implement the GMS Program on Reforestation (ASEAN, 2009a: IAI (ASCC), D.11 [vi]).

The Roadmap and current initiatives of ASEAN, the GMS and individual countries of the GMS indicate that efforts are being made to address the illegal wildlife and timber trade on all fronts within the ASEAN region. The challenge, however, is in ensuring that these initiatives taken together are implemented effectively and mitigate the adverse effects of development programs, such as those related to trade, and the economic integration of the ASEAN region.

## 7. Conclusion and recommendations

The geographical location of the ecoregions within the GMS, the conservation activities conducted by each country, their state of governance, and their varying levels of development determine the impact of trade facilitation measures on wildlife and timber trade within the GMS. Thus, in considering the effect of these measures on such trade and addressing major challenges, it is recommended that policymakers should do the following:

1. *Identify existing constraints, whether inherent or institutional, that hamper efforts to address the unsustainable harvesting of wildlife and timber and their attendant trade:*

Based on the discussion above, the major constraints that affect efforts to address such unsustainable harvesting and trade may be summarized as follows:

- ecoregions that cross international borders: While some ecoregions cross international borders, conservation activities are mostly limited within state borders and to randomly selected areas within an ecoregion. This fails to take into account the symbiotic relationship among the various species within such ecoregions and results in laws and policies that do not achieve their conservation goals;
- weak penal laws and economic incentives to discourage illegal trade: This includes varying sanctions among the GMS states that allow illegal traders to pick and choose the states with weaker penal laws;
- weak enforcement capability arising from weak governance;
- porous borders along adjoining states that allow easy access for smuggling activities; and
- seemingly overlapping and uncoordinated efforts at the national, subregional and regional level to combat illegal wildlife and timber trade.

2. *Determine actions necessary to address these constraints to mitigate or neutralize the adverse effects of trade facilitation measures:*

As trade facilitation measures are being put in place and implemented, GMS states may consider the following actions to ensure that the opportunities offered by these measures to illegal traders of wildlife and timber are mitigated or neutralized:

- rationalize all measures at the regional, subregional and national levels related to biodiversity conservation and wildlife and forest law enforcement to identify overlaps and gaps;
- after rationalizing these measures, assess their effectiveness in combatting illegal wildlife and timber trade, both in their application and enforcement, to determine what further actions at various levels are required to address overlaps and gaps;
- assess how current negotiations on the proposed WTO trade facilitation agreement in the Doha Development Round can be managed collectively by the GMS states to ensure that the final draft leave room for the effective regulation of wildlife and timber trade;
- coordinate with customs authorities in assessing the vulnerabilities of the various trade facilitation agreements, particularly the Cross Border Transport Agreement, to exploitation by illegal wildlife and timber traders. The GMS countries may look at securing the assistance of the World Customs Organization Regional Intelligence Liaison Office for Asia and the Pacific for this purpose. This office serves as the focal point of intelligence analysis and liaison for enforcement cooperation with members customs administration in Asia and the Pacific region (RILO A/P, n.d.);
- assess whether the identified border checkpoints under the Cross Border Transport Agreement are located in areas where smuggling is prevalent and whether these are equipped to deal with such smuggling activities;
- negotiate a new protocol to the Cross Border Transport Agreement dealing with the transport of wildlife and timber that imposes stricter requirements for transit through and entry to neighbouring states;
- identify areas of cooperation between the biodiversity conservation landscapes and border checkpoints along the economic corridors of the GMS;
- consider providing incentives to change behaviour in the trade in wildlife and timber, such as through a scheme for payment for economic services; and
- harness existing international initiatives, such as:
  - a. the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan of the European Union (EU). For illegally traded timber to the EU, timber exporting countries may enter into voluntary partnership agreements with the EU to regulate their timber trade to the EU through the introduction of systems for effective sustainable forest management, tracking forest products and timber licensing mechanisms (EFI, 2008). GMS countries should study the FLEGT system and assess whether incorporating it into efforts to conserve their forest resources will strengthen these efforts. Vietnam has secured the assistance of the European

- Commission in this regard and is in the process of applying FLEGT mechanisms in its forest regulation (VOV News, 2010); and
- b. the International Tropical Timber Organization (ITTO)–CITES Program for Implementing CITES Listings of Tropical Timber Species. The program aims to ensure that international trade in CITES listed timber species is consistent with their sustainable management and conservation. Indonesia and Malaysia are currently implementing projects under the program (CITES, n.d.). GMS countries should also consider how the assistance provided by this program could ensure effective compliance with their respective obligations under CITES with respect to timber products.

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## Annex A: Cross Border Transport Agreement GMS cross border points

KH = Cambodia; LAO = Lao PDR; MYA = Myanmar; T = Thailand; VN = Vietnam

1. North–South Economic Corridor:
  - a. Route: Kunming–Yuxi–Yuanjiang–Mohei–Simao–Xiaomenyang–Mohan (PRC)–Boten–Nouayxay (LAO)–Chiang Khong–Chiang Rai–Tak–Bangkok (T)
    - (i) Border crossing: Mohan (PRC)–Boten (LAO)
    - (ii) Border crossing: Houayxay (LAO)–Chiang Khong (T)
  - b. Route: Kengtung–Tachilek (MYA)–Mae Sai–Chiang Rai–Tak–Bangkok (T)
    - (i) Border crossing: Tachilek (MYA)–Mae Sai (T)
  - c. Kunming–Mile–Yinshao–Kaiyuan–Mengzi–Hekou (PRC)–Lao Cai–Hanoi–Haiphong (VN)
    - (i) Border crossing: Hekou (PRC)–Lao Cai (VN)
2. East–West Economic Corridor:
  - a. Route: Mawlamyine–Myawaddy (MYA)–Mae Sot–Phitsanulok–Khon Kaen–Kalasin–Mukdahan (T)–Savannkhet–Dansavanh (LAO)–Lao Bao–Dong Ha–Hue–Da Nang (VN)
    - (i) Border crossing: Myawaddy (MYA)–Mae Sot (T)
    - (ii) Border crossing: Mukdahan (T)–Savannkhet (LAO)
3. Southern Economic Corridor
  - a. Route: Bangkok–Kabin Buri–Sra Kaeo–Aranyaprathet or Bangkok–Laem Chabang–Phanom–Sarakhm–Kabin Buri–Sra Kaeo–Aranyaprathet (T)–Popet–Sisophon–Pursat–Phnom Penh–Neak Loueng–Bavet (KH)–Moc Bai–Ho Chi Minh City–Vung Tau (VN)
    - (i) Border crossing: Aranyaprathet (T)–Poipet (KH)
    - (ii) Border crossing: Bavet (KH)–Moc Bai (VN)
4. Other corridors/routes/border crossings:
  - a. Route: Kunmoing–Chuxiong–Dali–Baoshan–Ruili (PRC)–Muse–Lashio (MYA)
    - (i) Border crossing: Ruili (PRC)–Muse (MYA)
  - b. Route: Vientiane–Ban Lao–Thakhek–Seno–Pakse (LAO)–LAO/KH border–Stung Treng–Kratie–Phnom Penh–Sihanoukville (KH)
    - (i) Border crossing: Veunekham (LAO)–Dong Kralor (KH) border
  - c. Route: Nateuy–Oudomxai–Pakmong–Louang Phrabang–Vientiane–Thanaleng (LAO)–Nong Khai–Udon Thani–Khon Kaen–Bangkok (T)
    - (i) Border crossing: Thanaleng (LAO)–Nong Khai (T)
  - d. Route: Vientiane–Bolikhamsay (LAO)–Ha Tinh (VN)
    - (i) Border crossing: Nam Phao (LAO)–Cau Treo (VN)
  - e. Route: Champassak (LAO)–Ubon Ratchathani (T)
    - (i) Border crossing: Wang Tao (LAO)–Chong Mek (T)

## Annex B: Map of GMS cross border points



Source: ADB presentation, December 2006

## Annex C: Pilot sites and biodiversity conservation landscapes in the GMS



Source: ADB (2008)