



UNODC

United Nations Office on Drugs and Crime

Transnational Organized Crime in East Asia and the Pacific

A Threat Assessment



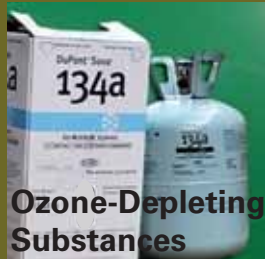
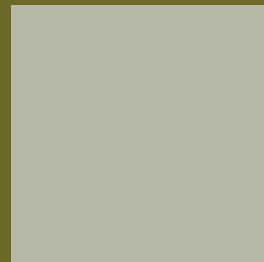
Counterfeit goods



Methamphetamine



E-waste



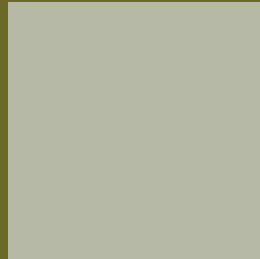
**Ozone-Depleting
Substances**



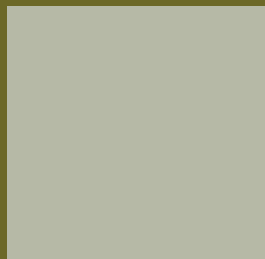
**Illegal wood
products**



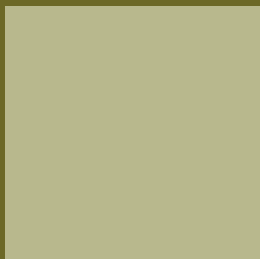
Heroin



**Trafficking in
persons**



**Fraudulent
medicines**



Illegal wildlife



**Migrant
smuggling**



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Since there is some scientific and legal ambiguity about the distinctions between “drug use”, “drug misuse” and “drug abuse”, the neutral terms “drug use” and “drug consumption” are used in this report.

References to dollars (\$) are to United States dollars, unless otherwise stated.

All references to “tons” are to metric tons (also represented at “mt”), unless otherwise stated.

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Abbreviations

AA	Acetic anhydride (precursor for manufacture of heroin)
ACC	Australian Crime Commission
ACTA	Anti-Counterfeiting Trade Agreement
ADB	Asian Development Bank
ADEC	Asia-Pacific Operational Drug Enforcement Conference
AFP	Australian Federal Police
AML/CFT	Anti Money-Laundering / Counter Financing of Terrorism
APG	Asia-Pacific Group on Money Laundering
ARCM	Asian Research Center on Migration
ARQ	Annual Reports Questionnaire
ASEAN	Association of Southeast Asian Nations.
ATS	Amphetamine-type Stimulants
BMI	Business Monitor International
bn	Billions
CBSA	Canada Border Services Agency
CCDAC	Central Committee for Drug Abuse Control of Myanmar
CFCs	Chloroflourocarbons
CITES	Convention on International Trade in Endangered Species
COMMIT	Coordinated Mekong Ministerial Initiative Against Trafficking
CRTs	Cathode Ray Tubes
DAINAP	Drug Abuse Information Network for Asia and the Pacific
DIAC	Australian Department of Immigration and Citizenship
EC	European Commission
ECPAT	End Child Prostitution, Child Pornography and Trafficking of Children for Sexual Purposes
ETIS	Elephant Trade Information System
EU	European Union
e-waste	Electrical and electronic waste
FAOSTAT	Food and Agriculture Organization Statistics
FATF	Financial Action Task Force
GASIM	Joint Analysis and Strategy Centre for Illegal Migration
GMS	Greater Mekong Subregion
HCFCs	Hydrochloroflourocarbons
HIV	Human immunodeficiency virus
HSTC	Human Smuggling and Trafficking Center
IDEC	International Drug Enforcement Committee (US supported)
IMA	Irregular Maritime Arrivals
INCB	International Narcotics Control Board
INSEE	Institut National de la Statistique et des Études Économiques
INTERPOL	International Criminal Police Organization
IOM	International Organization for Migration
IPR	Intellectual property rights
ISPs	Internet Service Providers
ITRI	Industrial Technology Research Institute
LTTE	Liberation Tigers of Tamil Eelam (Tamil Tigers)
Medsafe	New Zealand Medicines and Medical Safety Authority
mt	Metric ton
NNCC	National Narcotics Commission of China
OCO	Oceania Customs Organization
ODS	Ozone Depleting Substances

OECD	Organization for Economic Cooperation and Development
PDEA	Philippine Drug Enforcement Agency
PIDC	Pacific Immigration Directors' Conference
PSI	Pharmaceutical Safety Institute
RCMP	Royal Canadian Mounted Police
RIIA	Royal Institute of International Affairs, UK
RILO-AP	Regional Intelligence Liaison Office – Asia Pacific
RFID	Radio frequency identification
RMP	Royal Malaysia Police
RWE	Round Wood Equivalent
SACENDU	South African Community Epidemiology Network on Drug Use
SMART	Synthetics Monitoring: Analyses, Reporting and Trends
TIP	Trafficking in Persons
TOC	Transnational Organized Crime
TOCTA EAP	TOC Threat Assessment in East Asia Pacific
UKBA	United Kingdom Border Agency
UNCAC	United Nations Convention Against Corruption
UNCOMTRADE	United Nations Commodity Trade Statistics Database
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNHCR	United Nations High Commissioner for Refugees
UNIAP	United Nations Inter-Agency Project on Human Trafficking
USCBP	United States Customs and Border Protection
VRS-MSRC	Voluntary Reporting System on Migrant Smuggling and Related Conduct
WCO	World Customs Organization
WEEE	Waste Electrical and Electronic Equipment
WHO	World Health Organization
WWF	World Wildlife Fund

Executive Summary

East Asia and the Pacific have experienced rapid economic and social changes during the past few decades and faced the considerable regulation challenges these changes create for public authorities. This report takes a look at the manner in which criminal enterprises have developed alongside legitimate commerce in recent years. Drawing on official statistics, academic studies, and interviews with law enforcement officials, it attempts to outline something about the mechanics of illicit trade: the how, where, when, who, and why of selected contraband markets affecting the region. It also endeavours to give the best reading of the available data on the size of these markets. Though the list of contraband markets discussed is not comprehensive and it is impossible to quantify the value of these markets with any precision, these estimates are offered to prompt public debate on areas of great public policy significance.

The mechanics of trafficking are discussed for a non-exhaustive list of 12 illicit flows, which themselves are organized under four headings:

1. Human trafficking and smuggling of migrants
2. Illicit drugs (heroin and methamphetamine)
3. Resources (wildlife, wood products) and pollution crime (e-waste, ozone-depleting substances)
4. Products (counterfeit goods, fraudulent medicines)

Human trafficking and smuggling of migrants

Four of the 12 illicit flows reviewed involve human beings. The first two concern movement between the countries of the region, one for general labour and one for sexual exploitation. The third concerns

the smuggling of migrants from the region to the rich countries of the West, and the last focuses on migrants smuggled through the region from the poor and conflicted countries of South and Southwest Asia.

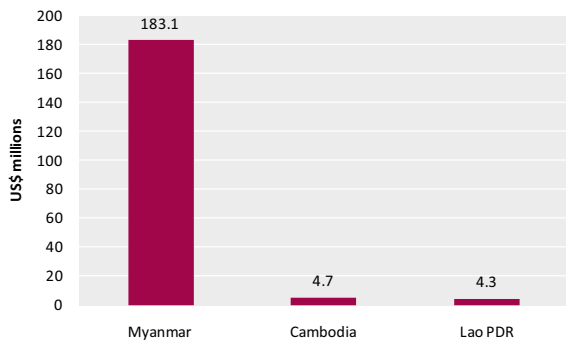
1. Smuggling of migrants and labour trafficking within the Greater Mekong Sub-Region

While the crimes of human trafficking and the smuggling of migrants are distinct, in the Greater Mekong Sub-Region (GMS), they are closely interlinked. Away from their home communities and in their destination countries illegally, smuggled migrants have little basis to assert their rights as workers, and what begins as a voluntary journey towards a better life can descend into exploitation. Thailand is the regional labour magnet, and Myanmar in particular has contributed significantly to its labour pool. While formal migration channels do exist, many migrant labourers prefer to enter Thailand irregularly, this is because complying with the legal channels can be expensive and time-consuming. As a result, many migrants turn to smugglers to facilitate their entry and help them find work. Many smugglers were irregular migrants themselves, and most rely on word-of-mouth to promote their services. For a fee, smugglers help the migrants cross both official and unofficial borders, either on foot, by vehicle or boat. The smugglers make use of relationships they have built with Thai employers and brokers to link migrants with jobs.

The majority of irregular migrants get what they came for: employment at better wages than they could have received at home. But sometimes their vulnerability is exploited and they are forced to work without pay, under terrible conditions. While all areas of employment are vulnerable to exploitation, the fishing and seafood processing industries have garnered much recent attention.

UNODC has estimated that just over half a million migrants are smuggled into Thailand annually, with the vast majority coming from Myanmar. The amount paid for smuggling services varies according to the required services. Migrants from Myanmar pay the highest fees, while migrants from Lao PDR and Cambodia pay considerably less. It appears that around **US\$192 million** is generated on an annual basis by smuggling migrants from these three countries into Thailand. Calculating the share of these migrants who are subsequently trafficked is challenging, and is estimated at around 26,400 victims per year, or around 5% of the smuggled migrants. The amount of labour stolen from these victims averages US\$1,260 per year, resulting in a sum of **US\$33 million** per year generated for their exploiters.

Breakdown of income generated by smuggling migrants into Thailand annually



Source: UNODC estimate

2. Trafficking of women and girls for sexual exploitation within the Greater Mekong Sub-region

The sex markets of the Greater Mekong Sub-region are based on both high levels of sex tourism and strong domestic demand. Sex tourism from the West is the best documented, but Asian sex tourists appear to be more numerous. The illicit market in Thailand is probably the best known internationally, but markets in other countries, such as Cambodia, are expanding. If only a small minority of the sex workers are trafficked, there are still a large number of victims, given the sheer size of the industry. Thailand alone contains as many as 250,000 sex workers, according to Ministry of Health estimates.

Many of the victims are irregular migrants from the poorer countries who fall into sex work with varying degrees of volition. Traffickers control migrant sex

workers through debt bondage accumulated from the cost of smuggling. Remarkably, though, it appears a small number of sex workers in Cambodia are trafficked from the relatively affluent Viet Nam, a result of a longstanding association between sex work and Cambodia’s ethnic Vietnamese minority. Both sex tourists and local consumers provide demand for underage victims, and this may be one of the driving forces behind the trafficking.

Given the gaps in the data, the estimates of the number of victims of trafficking in Thailand from neighbouring countries (approximately 3,750) and in Cambodia (approximately 275) should be considered tentative, and demonstrative only of the order of magnitude of the problem. The income generated by these 4,025 foreign victims of trafficking in Cambodia and Thailand is approximately US\$45,000 per victim per year, or about **US\$181 million** in gross revenues for their traffickers.

3. Migrant smuggling from East and Southeast Asia to the United States and the European Union

International labour migration is a longstanding tradition for many East Asian populations, of whom the Chinese are the most numerous. The Vietnamese diaspora is also extensive, and flows from both these countries appear to have increased since the 1980s. Most of this migration is legal, but those who choose to migrate illegally are highly likely to use smugglers, due to the distances involved and language difficulties. The main destinations for Chinese migrants, who are mostly from the more affluent, eastern provinces of China, are the United States, France, Germany, Italy, Spain and the United Kingdom. The majority of Vietnamese smuggled migrants are from the northern provinces, and tend to choose the United States, United Kingdom, France and Germany as preferred destinations.

While sea routes are still used, today most smuggled Chinese and Vietnamese migrants fly as close as possible to their destinations, landing in countries without visa requirements or where entry controls are weak, and then move clandestinely the rest of the way overland. Many use routes through Central America to reach the US-Mexico border. European authorities report that the majority of smuggled Chinese nationals enter by air, and use Eastern Europe as the transit region of choice, with

a combination of genuine and fraudulent documentation. Transit through Africa is growing. Visa and marriage fraud is also popular with Chinese smugglers.

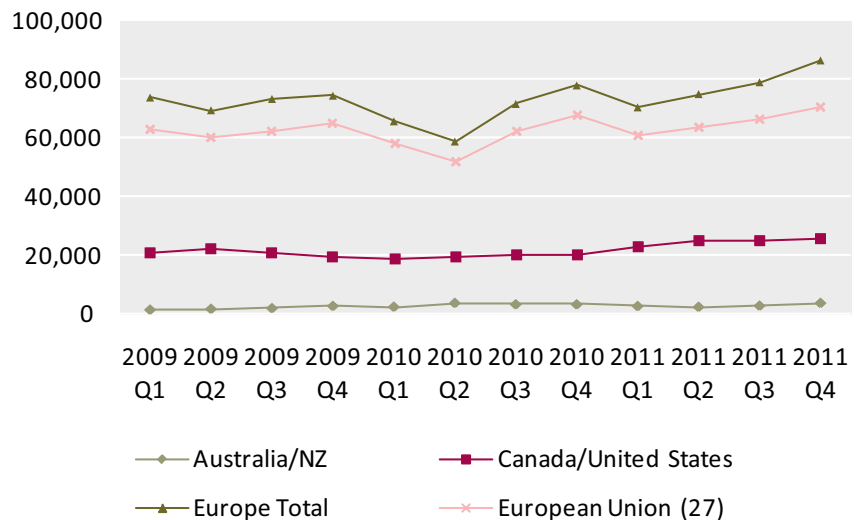
Chinese and Vietnamese smuggling networks are known to outsource travel through transit countries, as well as entry into destination countries, to locally-based networks, and occasionally there is collusion between Chinese and Vietnamese migrant smuggling networks. Chinese networks are male-dominated, but women are also involved. Less is known about Vietnamese smuggling networks, although they are well-established throughout Europe.

While not all irregular Chinese and Vietnamese migrants are smuggled, most are. It is estimated that approximately 12,000 Chinese irregular migrants enter the US every year, each paying around US\$50,000 for smuggling services. This would generate up to **US\$600 million** a year for smugglers. The number of Vietnamese smuggled into the US is much lower, likely fewer than 1,000 individuals. If they pay the same fees as the Chinese, this would result in payments to smugglers being worth **US\$50 million** a year. Smuggling fees for Chinese irregular migrants wishing to enter the European Union are lower, averaging around US\$17,000. UNODC estimates that up to 36,000 Chinese irregular migrants use smuggling services to reach the EU on an annual basis, which would generate up to **US\$600 million** a year. Roughly half as many Vietnamese irregular migrants are detected as Chinese in the EU, suggesting a flow of about 18,000 per year. Again, if paying the same price as the Chinese for smuggling services, this would provide an income of **US\$300 million** for smugglers each year.

4. Migrant smuggling from South and West Asia through Southeast Asia to Australia and Canada

The dynamics behind the smuggling of migrants from West and South Asia are complex, as a large proportion of these smuggled migrants are either

Quarterly asylum claims submitted in selected industrialized regions, 2009 – 2011



Source: UNHCR 2012

refugees or intend to claim asylum upon reaching their destination. The focus of this chapter is on the smuggling of migrants from these regions, through Southeast Asia, to enter Australia or Canada by sea. Both these countries host large diaspora communities and this, along with the strong social supports they offer, makes them attractive destination countries for asylum seekers. Most of these smuggled migrants are young, single males, many of who have been sent by their families to put down new roots so that they can follow.

Most are smuggled by air from their home countries to transit countries from which they continue onward. Once pooled in the departure location, many of the migrants wait weeks or months to board the boats, which are often in poor condition; several have sunk before reaching Australian territory. Indonesia is the main departure country for smuggled migrants hoping to reach Australia by boat, given its proximity to the territories of Christmas Island and Ashmore Reef. While Canada is a secondary destination for asylum seekers from South and West Asia, it is the destination of choice for those from Sri Lanka. Most smuggled migrants reach Canada by air, but boat arrivals have increased in recent years, including notable cases in 2009-2011.

Most of the migrant smuggling networks are small or medium-sized, involving a range of intermediaries located throughout the departure, transit and destination countries. Most have a hierarchical structure, many share ethnic backgrounds with the

migrants. They may outsource certain services in transit countries to locals in those countries. Female smugglers are preferred, as they attract less attention from law enforcement. The smuggling networks involved in bringing migrants to Canada from Sri Lanka are closely linked to the Liberation Tigers of Tamil Eelam (LTTE).

There are an average of 6,000 smuggled migrants who attempt to reach Australia by sea every year, most of which pay around US\$14,000 for smuggling services. This generates an income for smugglers of **US\$85 million** annually. If we take the 492 smuggled migrants that arrived in Canada on the *MV Sun Sea* in 2010 as an average for annual arrivals, and multiply by the reported US\$25,000 fee, these operations would generate **US\$12.3 million** a year for the smugglers.

Drug trafficking

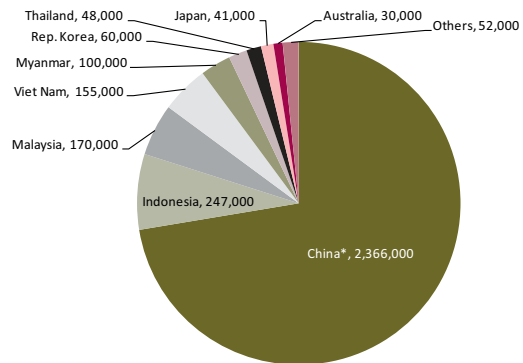
The production and use of opiates has a long history in the region, but the main opiate problem in the 21st century involves the more refined form of the drug: heroin. In addition, methamphetamine has been a threat in parts of East Asia for decades (in the form of *yaba* tablets), but crystal methamphetamine has recently grown greatly in popularity. Virtually every country in the region has some crystal methamphetamine users, and some populations consume at very high levels.

5. Trafficking of opiates from Myanmar and Afghanistan into East Asia and the Pacific

Heroin consumption is rising in the region, with an estimated 3.3 million users at present. Today, most of the regional heroin production is confined to politically-contested parts of Myanmar. Almost all of the heroin produced in Southeast Asia is consumed in East Asia and the Pacific. It is rarely encountered outside the region.

Since the majority of regional heroin users reside in China, the most significant flow of heroin proceeds directly across the border between Myanmar's Shan State and the Chinese province of Yunnan. Most of this is trafficked across the border by individual couriers, many from ethnic groups that straddle the border. From China, a significant amount of heroin is re-exported to the rest of the region,

National estimates of the number of heroin users in 2010



Source: UNODC estimates

* Including Taiwan (Province of China), Hong Kong (China) and Macao (China)

predominantly through Yunnan's capital, Kunming. The contraband traffic between China and Myanmar flows both ways, as China is a major producer of the precursor chemicals needed to produce heroin.

Since heroin from Myanmar is no longer sufficient to meet regional demand, large volumes are imported from Afghanistan. The trafficking of Afghan heroin into the region is more complicated, as the drug travels by land, sea and air through a variety of transit countries. The Xianjiang Uyghur Autonomous region is the main distribution hub for Afghan heroin crossing into western China, while Guangzhou is the major distribution hub for Afghan heroin nationally and for export into Southeast Asia. As Afghan heroin has become more important to local markets, Nigerian and Pakistani groups have entered the market. Malaysia is frequently used as a hub to redistribute the drug to the rest of the region. International drug syndicates have recruited Cambodian, Indonesia and Thai nationals to smuggle the heroin, mostly by air.

There is a lack of reliable data on the prevalence of heroin use in the region, and little is known about how much users consume. Based on the best reading of the available data, regional consumption is estimated at 65 tons of pure heroin in 2011. Available data on prices and purity suggest a retail sales volume of about **US\$16.3 billion** in 2011.

6. Trafficking of methamphetamines from Myanmar and China to the region

Consumption of pill-form methamphetamine ("yaba") remains very popular in Southeast Asia, particularly Thailand. Much of the world's *yaba* is

produced in Myanmar's Shan State, as well as in China. Crystal methamphetamine, a more potent and addictive form of the drug, has spread to every country in the region. China is probably the largest producer, but large labs have also been detected in Indonesia and the Philippines. Use of crystal meth in Oceania and the Greater Mekong Sub-region is the highest in the world, and in parts of China, methamphetamine has begun to displace heroin as the most problematic drug of abuse. Increasing methamphetamine use is also of concern in the Pacific Islands, which do not have the resources to combat the problem. Many of the Pacific Islands are also used as transshipment hubs, but production has been noted in Fiji, Guam and French Polynesia.

China and Myanmar stand out as producers for export. In Myanmar, methamphetamine production is strongly associated with non-state armed groups, which are actively participating in the manufacture and trans-border smuggling of the drug. As Myanmar has no domestic pharmaceuticals industry, all the precursor chemicals required are diverted from neighbouring countries. In China, most production is consumed domestically, but both Japan and the Republic of Korea say that most of their methamphetamine comes from China.

A wide range of players are involved in the domestic and transnational methamphetamine markets, including professional criminals, high-ranking officials and military personnel in several countries. Ethnic Chinese networks have been complicit in methamphetamine markets inside Myanmar, as well as in Indonesia, Malaysia and the Philippines. Nigerian and Iranian criminal networks also feature

prominently in methamphetamine markets in East Asia and the Pacific.

The *yaba* market is largely confined to the Greater Mekong Sub-region. Based on seizure and survey data, an estimated 1.4 billion *yaba* pills are consumed annually. Using local prices, this market generates US\$8.5 billion each year. Calculating volume and value of the crystal methamphetamine market is trickier, given the large numbers of countries producing and consuming the drug. The estimated number of users in East Asia and the Pacific is around five million, with China and the Philippines accounting for much of this total. Based on street prices in the region, the crystal methamphetamine market is worth US\$6.5 billion. Taking *yaba* and crystal together, the methamphetamine market in East Asia and the Pacific generated around **US\$15 billion** in 2010.

Resources

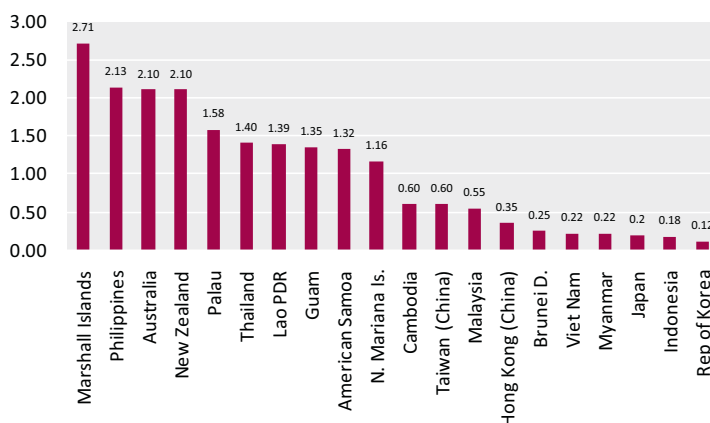
Resource-related crimes include those related to both extractive industries, such as the illegal harvesting of wildlife and timber, and other crimes that have a negative impact on the environment, such as the dumping of e-waste and the trade in ozone-depleting substances. In all cases, the threat goes beyond borders, jeopardizing the global environmental heritage. These are therefore crimes of inherent international significance, though they are frequently dealt with lightly under local legislation.

7. The illegal wildlife trade in East Asia and the Pacific

In East Asia, population growth and burgeoning affluence have led to rising demand for exotic and luxury products, including wildlife products. China is both the region's largest economy and the largest consumer market for wildlife, imported for food, traditional medicinal ingredients, the pet trade, and exotic décor. A wide range of animal and plant products are imported, including those derived from protected species of bear, pangolin, reptiles, turtles, sharks, corals, aquarium fish, and other marine wildlife.

Each of these products has a different trading chain, which may include domestic and international specialists

Share of the adult population that used methamphetamine in 2010



Source: UNODC Delta Database

involved in the storing, handling, transporting, manufacturing, marketing and retailing of wildlife. A number of techniques can be used to facilitate import, including the use of fraudulent paperwork and the mixing of protected species and lookalike species. Wildlife may also be “laundered” through exotic farms, zoos, and greenhouses – species harvested from the wild may be passed off as captive-bred.

Across Southeast Asia, illegal wildlife is often openly sold in otherwise legal market contexts. Prominent markets exist in Indonesia and the Philippines, while international border crossings between China and Thailand also function as wildlife markets. The growth of internet commerce has facilitated illicit trade in wildlife products.

Given the number of species involved, it is almost impossible to come up with a clear estimate of the volume or value of the wildlife traded. It is apparent, however, that the trade in lesser-known animals such as pangolins is far greater in scale than that of large, emblematic species like tigers or rhinos. The largest black market in wildlife products in the region appears to be that of marine wildlife, which is estimated to generate US\$850 million per year. In total, the regional value for the illicit wildlife trade, which includes wildlife that is traded clandestinely or deceptively, is conservatively estimated at **US\$2.5 billion** a year (excluding illegal timber and off-shore fishing).

8. Illicit trade in wood-based products from the region to the world

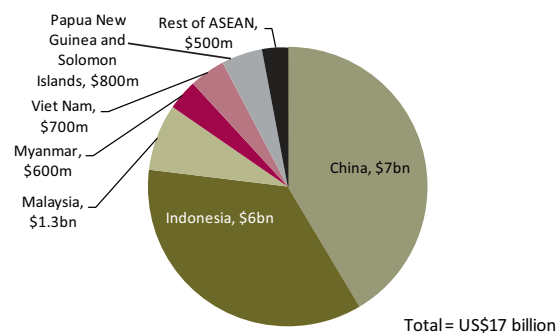
The majority of the illegal trade in wood-based products is carried out in parallel with the legal market, by formal business enterprises operating through fraudulent methods. The illegal trade in wood-based products differs significantly from some other forms of trafficking in illicit goods, as consumers remain largely unaware of the illegal origins of what they are buying.

Illegal wood-based products originate largely in Southeast Asia, mainly Indonesia and Malaysia. Some move directly to consumer countries, while others are processed within the region, mainly in China and Viet Nam, before being exported. Illegal logging is rarely done through shadowy chainsaw gangs. Most often, the logging is conducted by companies with a public face, often with

international shareholders. The logging becomes illegal when the permits are acquired through bribery, or where protected species are involved, or where the harvesting takes place outside agreed concessions. The production and trade of illegal pulp and paper has also been allegedly associated with a wide range of illegalities.

Official corruption plays a central role in the supply of illegal wood-based products from East Asia and the Pacific to consumer markets. As a result, very little illicit wood or wood-based products are seized. Based on official bilateral trade flow statistics, it is estimated that the value of illegal trade from and within the region in wood-based products is around **US\$17 billion**. This suggests that 30-40% of the

Exports of illegal wood-based products within and from East Asia and the Pacific



Source: UNODC estimates

total quantity and export value of wood-based products exported from the region in 2010 derived from illegal sources.

9. Illicit trade in electrical and electronic waste (e-waste) from the world to the region

Electrical and electronic waste is the fastest growing waste stream in the world, a consequence of rapid turnover of electronic devices, particularly in the European Union, Japan and the United States. E-waste is often diverted to the black market to avoid the costs associated with legitimate recycling. Additional revenues are gained through the recovery, mostly by environmentally-unsound means, of valuable metals from electronic components. The informal recycling of illicit e-waste poses a serious threat to public health, as plastic is burned, lead leaches out into soil, and other toxins are released into the environment.

China is the main dumping ground for e-waste in the region, while Indonesia, Thailand and Viet Nam are secondary centres for the trade. Hong Kong (China) and northern Viet Nam are key transit hubs for e-waste shipments. The most common smuggling methods include concealment and mis-declaration. In China, most of the e-waste ends up in Guangdong, where it enters the informal recycling sector. The products recovered from the recycling process are sold to the manufacturing sector through broker networks and waste traders.

Approximately eight million tons of e-waste are smuggled into China every year. For the region, this value could be rounded to ten million tons a year. At a value of around US\$375 per ton, this market is worth **US\$3.75 billion** in East Asia.

10. Illicit trade in ozone-depleting substances (ODS) from East Asia to the world

Ozone-depleting substances are principally CFCs and HCFCs, which are mainly used for refrigeration and air-conditioning. The manufacture of these products is being gradually phased out under the Montreal Protocol (1987). The Protocol sets out differing phase-out schedules between developed and developing countries, opening the door to the emergence of a black market in ODS. The illegal trade involves brokers diverting ODS produced in countries with longer phase-out schedules onto markets where ODS are more strictly regulated but where demand remains steady. A licensing system was put in place by the Montreal Protocol, which has been useful in identifying companies that are trying to import ODS without a license, but this system does not capture mislabelled imports.

Production and consumption of ODS still occurs in East Asia and the Pacific. China is the single largest source of contraband ODS, while Indonesia, the Philippines and Thailand (as well as the Middle East) have been the main destinations since 2005. Most seizures that have occurred have involved consignments of ODS packaged in disposable cylinders. Most importers of illicit ODS have legitimate refrigeration businesses. It is estimated that 3,660 tons of illegal ODS flow from and within East Asia on an annual basis, worth an estimated **US\$67.7 million** per year.

Counterfeit goods

The trade in counterfeit goods is often perceived as a “soft” form of crime, but can have dangerous consequences for public health and safety. Fraudulent medicines in particular pose a threat to public health, and their use can foster the growth of treatment-resistant pathogens.

11. Counterfeit consumer goods from East Asia to the United States and the European Union

China has become the world’s workshop, producing a significant share of the world’s manufactured goods. It also produces a large share of the counterfeits: according to the World Customs Organization, 75% of the counterfeit products seized worldwide from 2008 to 2010 were manufactured in East Asia, primarily China.

While dedicated counterfeit factories have been detected in large numbers, production is often decentralized, making use of networks of specialists. The key players in counterfeit markets are brokers and logisticians who connect supply and demand. Following production, the counterfeit goods are concealed, frequently through false customs declarations or disguised with lesser-known logos. Circuitous routes are used to transport the goods, often through free-trade zones. The primary modes of transport are through direct post to the consumer, or through containerized shipment of larger volumes. In both the US and the EU, maritime shipments comprise the bulk of the value of counterfeits seized. Upon arrival at the destination, ethnic networks are often important for receipt and distribution of the goods. Expatriates from South Asia, East Asia and West Africa are particularly key, notably in street distribution.

The OECD has concluded that counterfeiting accounts for around 2% of world trade. Applying this rate to the value of goods imported from East Asia to the US and the EU in 2010 suggests a flow worth some **US\$24.4 billion**.

12. Fraudulent essential medicines from East Asia to Southeast Asia and Africa

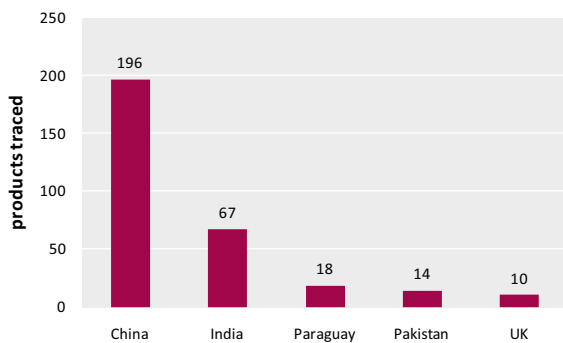
Forensic testing has shown that the prevalence of fraudulent medicines is much higher in poor

countries than in rich ones, with some of the highest rates being detected in Africa and Southeast Asia. For example, a recent literature review suggests that between one-third and nine-tenths of the anti-malarial medications tested in Southeast Asia in recent years were found to be false. Similarly, between 12% and 82% of anti-malarial drugs tested in Africa have failed chemical assay analysis. The low value of these pharmaceutical markets suggests that trafficking in fraudulent medicines is a crime of opportunism.

At present, the largest sources of fraudulent medicines appear to be India and China, with China being the departure point of nearly 60% of the counterfeit medical products seized worldwide between 2008 and 2010. The World Health Organization reports that the manufacturing of fraudulent medicines is often a small-scale cottage industry, but mainstream pharmaceutical companies can also produce fraudulent medicines. The fraud can be introduced at any point in the supply chain, often without the knowledge of the other participants. It is not uncommon for counterfeit ingredients to be sent from China to Southeast Asia for production and packaging. As law enforcement and regulatory pressure has increased within China, key aspects of production may be moving elsewhere, to the Democratic People's Republic of Korea, Myanmar and Viet Nam. Once the product is finished, it may cross many borders before being consumed. As with counterfeit goods, the free-trade zones of the Middle East have emerged as key transshipment points.

Based on a series of forensic studies, an average of 47% of the anti-malarial medicines tested in Southeast Asia was found to be fraudulent. If this rate of fraud were applied to regional pharmaceutical sales, which amounted to US\$8 billion in 2010, around US\$4 billion in fraudulent drugs were sold

Top five origins of counterfeit medicines detected



Source: Pharmaceutical Security Institute 2010

that year. Figures for Africa are similar, and if 60% of these drugs originated in China, this suggests a combined flow to these two regions of about **US\$5 billion** in 2010.

Conclusion

Based on an analysis of these flows, the study concludes with 48 recommendations on how the problems can be addressed, summarized under four imperatives:

- 1) Understand the problem
- 2) Establish a normative framework
- 3) Build technical capacity
- 4) Expand regional partnerships

This report represents our best effort to understand TOC in the region and aims to contribute to policy and programme development. It is vital to integrate national responses into international strategies in order to effectively combat TOC in the region. The United Nations Convention against Transnational Organized Crime and its Protocols, and the Convention against Corruption, provide useful platforms for the establishment of a normative framework to guide efforts towards capacity building and expanding regional partnerships.

Introduction:

Fighting Transnational Organized Crime

This report is one of a series of transnational organized crime threat assessments UNODC has carried out in the framework of its regional programme approach. Like the rest of the world, East Asia and the Pacific has experienced rapid economic and social change during the past few decades and faces considerable regulatory challenges posed by this change. This report reviews the manner in which criminal enterprises have developed alongside legitimate commerce in recent years. Drawing on official statistics, academic studies, and interviews with law enforcement officials, it attempts to outline the mechanics of trade: the how, where, when, who, and why of the contraband markets affecting the region. It also endeavours to give the best reading of the available data on the size of selected markets. Though the list of contraband markets discussed is not comprehensive and it is impossible to quantify the value of these markets with any precision, these estimates are offered to prompt public debate on areas of great public policy significance.

The structure of this threat assessment

This threat assessment profiles transnational organized crime in the East Asia - Pacific (EAP) region, covering the following contraband flows:

People

- Smuggling of migrants and labour trafficking within the Greater Mekong Sub-Region
- Trafficking of women and girls for sexual exploitation within the Greater Mekong Sub-Region
- Migrant smuggling from East and Southeast Asia to the United States and the European Union
- Migrant smuggling from South and West Asia through Southeast Asia to Australia and Canada

Drugs

- Trafficking of opiates from Myanmar and Afghanistan into East Asia and the Pacific
- Trafficking of methamphetamines from Myanmar and China to the region

Environment

- The illegal wildlife trade in East Asia and the Pacific
- Illicit trade in wood-based products from the region to the world
- Illicit trade in electrical and electronic waste (e-waste) from the world to the region
- Illicit trade in ozone-depleting substances (ODS) from East Asia to the world

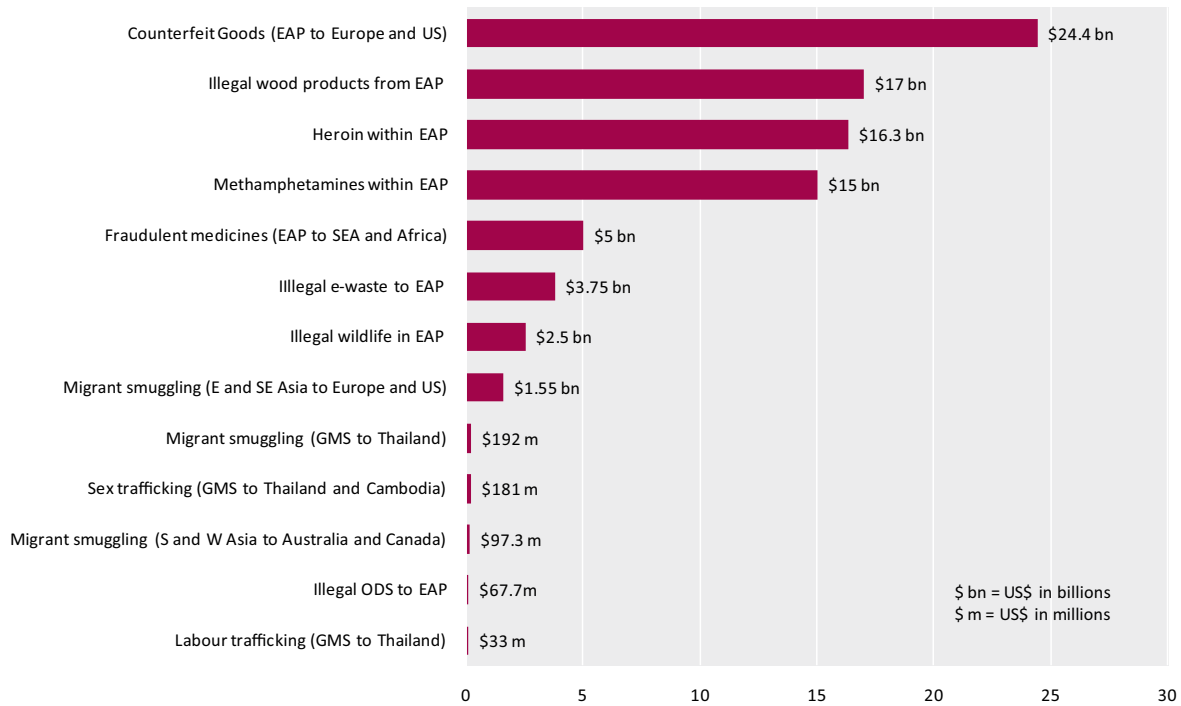
Goods

- Counterfeit consumer goods from East Asia to the United States and the European Union
- Fraudulent essential medicines from East Asia to Southeast Asia and Africa

The discussion includes estimates of the revenues generated in selected illicit markets in East Asia and the Pacific, which, taken together, have a combined annual income of nearly **US\$ 90 billion**. This corresponds to twice the GDP of Myanmar, eight times that of Cambodia, and 13 times that of Lao PDR. The graph below depicts the flow values that have been calculated on the basis of the information available.

Criminal organizations still profit significantly through the trafficking of **illicit drugs**, in the form of heroin and ATS, but these account for only one-third of the total value of illicit flows reviewed in East Asia and Pacific. Another one-third of the value is represented by counterfeit goods and fraudulent medicines. The second largest illicit flow in the region is the trafficking of wood and wood

Transnational Organized Crime Flows in East Asia and the Pacific discussed in this report



products. These illicit markets are diverse, dynamic, and innovative. The high degree of concentration on illicit drugs in the region should be broadened.

The value of the flows should not be the sole basis for prioritization in combating transnational organized crime. In terms of the dollar value, for example, **human trafficking and migrant smuggling** are quite small, but the damage done to the victims is immense. Human trafficking and migrant smuggling are still a high profit-low risk crimes where conviction rates are far too low. Efforts to solve these problems must be embedded in a wider migration and development policy framework. The region needs a coordinated policy for law enforcement action against migrant smuggling. Uncoordinated law enforcement measures may simply divert routes elsewhere and increase the demand for high-risk smuggling services.

The trade of **counterfeit goods** is often perceived as a “soft” form of crime, a matter of violating trade regulations seen by many as unfair. This trade can, however, produce some very concrete negative outcomes for the region and the world, including:

- the circulation of dangerous goods for sale;
- the perpetuation of exploitative working conditions;
- the loss of government revenues;

- the promotion of corruption;
- in the case of fraudulent medicine, the cultivation of treatment-resistant microbial strains of disease.

As the largest value contraband flow reviewed, the counterfeit goods market deserves renewed attention from the region.

This report also illustrates that **environmental crimes** are among the most serious and profitable forms of transnational organized crime in East Asia and the Pacific. Many countries in the region are richer in natural resources than they are in their capacity to protect them. Growing local demand, as well as growing export markets, have placed great strain on resources unique to the region. Criminal opportunists have placed the global environmental heritage in jeopardy.

The response

Leaders of the Association of Southeast Asian Nations (ASEAN), at the 12th ASEAN Summit in 2007, reiterated their commitment to establish an ASEAN Economic Community (AEC) by the year 2015. The AEC will create a single regional common market of more than 600 million persons and will facilitate the free flow of goods, services, investment, capital and labour.

However, regional integration under the AEC will doubtless also make possible the increased mobility of illicit goods, including drugs, illicit wildlife and timber, and counterfeit products. The ASEAN region continues to be one of the most rapidly developing parts of the planet. And while the AEC will bring positive and welcome changes and provide the region with an unrivaled access to knowledge and the power to communicate, it will simultaneously provide opportunities for transnational organized crime to expand.

Already, several ASEAN governments have given priority to upgrading cross-border infrastructure links, in particular the Singapore-Kunming Rail Link as well as a number of road networks that include the North-South corridor from southern China through Myanmar, Thailand and Lao PDR to Viet Nam; the East-West corridor linking Myanmar, Thailand, Lao PDR and Viet Nam; and the South-South corridor linking proposed and existing deep sea ports in Cambodia, Thailand and Myanmar. Under the AEC, trade and customs procedures along these routes will be harmonized, standardized and simplified.

It is inevitable that organized criminal groups will utilize the improved transportation connections and take advantage of the streamlined border controls to smuggle illicit goods throughout the region and beyond.

The nations of East Asia and the Pacific have expressed their resolve to oppose transnational organized crime.

Success in reducing the threat posed by TOC to human security will require more than political will alone, however. It will require concrete action. The action needed can be expressed under four imperatives:

1. Understand the problem

In order to adequately protect societies from these threats, we have to first measure the ability of transnational organized crime to undermine political and social stability and economic development. We need to understand the nature and dimensions of the threat, and this is no easy task. Information on organized crime is often limited to anecdotes and case studies. There are very few global data sets on organized crime topics. None are comprehensive. The topic is sensitive. In addition, international data-sharing has been slow to develop – particularly

when it comes to estimating the size of the problem among markets that are extremely dynamic. The information that does exist is often out-of-date and frequently contradictory. Any assessment is likely to be controversial.

This report therefore represents the best assessment of the available data. The analysis, however, can only be as strong as the information on which it is based. This publication is offered in part to precipitate the collection and sharing of better data on organized crime topics.

2. Establish the normative framework

International norms and conventions are required to set the stage for a response. During the past decade, the Convention against Transnational Organized Crime and the Convention against Corruption have delivered this framework, and it is increasingly being used to set the legislative and regulatory basis at country level for countering these problems. This must continue and expanded to create a consensus, across society, that crime and corruption will be resisted by both civil society and national authorities.

3. Build technical capacity

Countries must equip themselves to respond. This response needs to come at both the “upstream” and “downstream” levels. At the upstream level, national security strategies need to incorporate an assessment of the threats posed by transnational organized crime. This assessment may place crime on the priority list of national security threats.

Most of the efforts to counter transnational organized crime are already focused downstream, at the tactical or technical level. This must continue, in order to ensure that law enforcement, prosecutors and the judicial establishment are trained and equipped to meet the challenge. Specific recommendations on how technical capacity can be built are included in the conclusion of this report.

4. Expand regional partnerships

In our globalizing world, none of the former three will succeed if we do not have a fourth – the response beyond borders. At present, most contraband flows begin on one continent and end on another. Often the activities are cycled through a third continent. Globalization permits trafficking groups to operate seamlessly across borders. High-volume, cross-border flows of people, money and commodities create

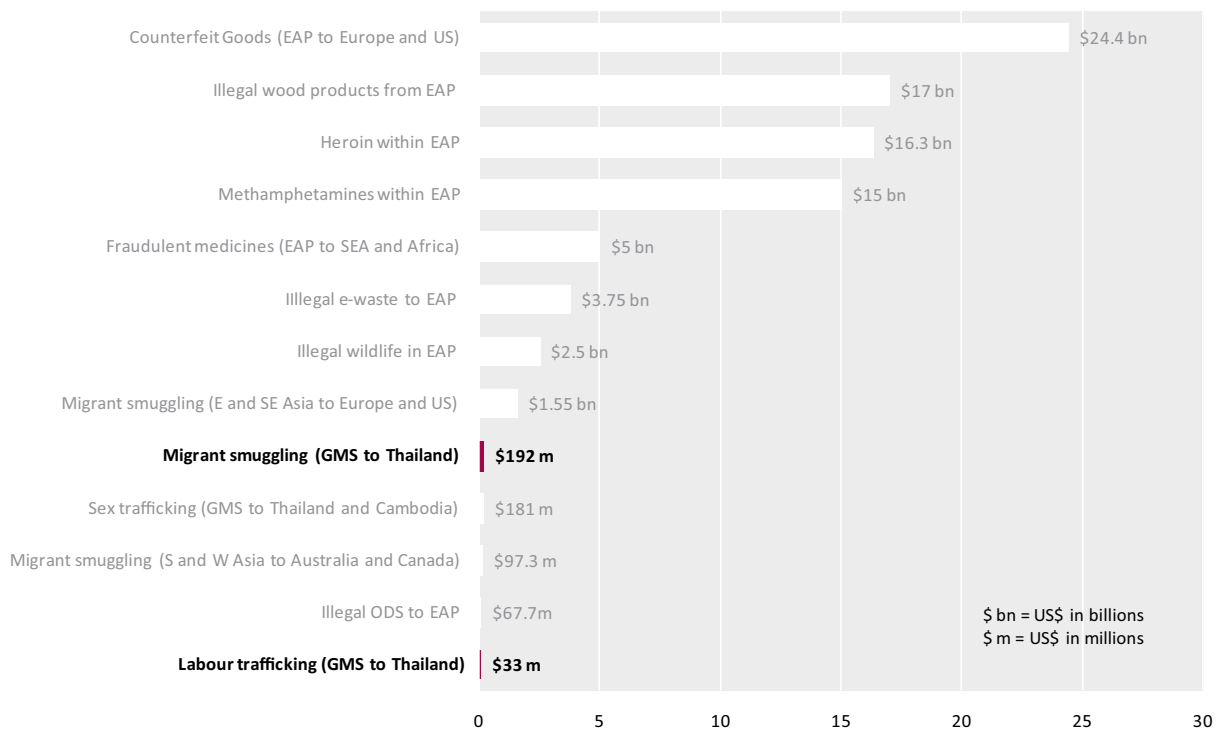
greater opportunities for criminals to make money. There are simply more people and situations to exploit.

For this reason, only interventions that are made at the scale of the problem – at a regional or global level – are likely to have any chance of succeeding. Unfortunately, law enforcement is inherently national in character.

It is therefore necessary to integrate national responses into international strategies. This can be done by promoting partnerships across borders and developing international networks that champion ‘transnational organized justice.’ This includes promoting regional collaborative efforts on border control, mutual legal assistance, extradition and similar efforts that require a vision that transcends national boundaries. This will help minimize the growth of “safe havens” for transnational organized crime. As has been stated repeatedly: *“It takes a network to defeat a network.”*

Chapter 1

Smuggling of migrants and labour trafficking within the Greater Mekong Sub-Region



NATURE OF THE THREAT

Human trafficking:	
1. Slave-like conditions: human beings treated as disposable commodities – immense – often hideous – emotional, psychological and physical damage done to victims.	2. Forms of control: sexual exploitation; domestic servitude; forced marriage; forced labour (especially in construction and fishing industry); debt bondage; imprisonment; violence and torture; child begging.
Migrant smuggling:	
1. Deadly risks and loss of human life – smuggled migrants are exposed to deadly risks, including loss of life, en route to destination. Thousands of migrants die each year during the process of illegal migration.	2. Human rights abuses – irregular status of migrants creates vulnerabilities to discrimination, exploitation, and trafficking in persons. Smuggled migrants often end up with dangerous jobs. They are often excluded from health, education and other social welfare provisions.
3. Economic impact – the illegal economy creates unfair competition, and undermines wages and social protection, loss of legitimate tax revenue for governments.	4. Threat to state security – migrant smuggling is a high-profit / low-risk crime. It empowers criminals and undermines state security due to links with organized crime, violence, and corruption. People cross borders without the host states’ consent and knowledge.
5. Corruption – fuels corruption among public officials.	6. Cost of law enforcement – costs to the state to improve border security measures, conduct search and rescue operations (e.g. with maritime smuggling), and provide protection and assistance.

This chapter deals with two areas of crime usually regarded as distinct: the trafficking of labourers and the smuggling of migrants. In common parlance, the words “trafficking” and “smuggling” are often interchanged, but they are different processes. For this reason, when the international community designed the UN convention on transnational organized crime, the need to prohibit two independent offences was recognized. “Trafficking” defines conscious acts that lead to and create situations in which people are forced to work against their will, while “smuggling” is the act of assisting irregular migration, motivated by material or financial gain.

Within the Greater Mekong Subregion, however, the two offences are closely interlinked. Away from their home communities and in their ‘host’ country illegally, smuggled migrants have little basis for asserting their rights as workers, including the basic right to be paid for their labour. Moreover, what begins as a voluntary search for a better life can often descend into exploitation and slavery.

In recent years, East and Southeast Asian economic growth has pulled millions out of poverty. However, in some cases, labour conditions can be harsh. What might be deemed “exploitation” in some countries would be considered decent employment in other parts of this region. Nonetheless, there are basic standards, lines that should not be crossed, and although most migrant labourers return to their families enriched, others are subjected to treatment that violates basic human rights.

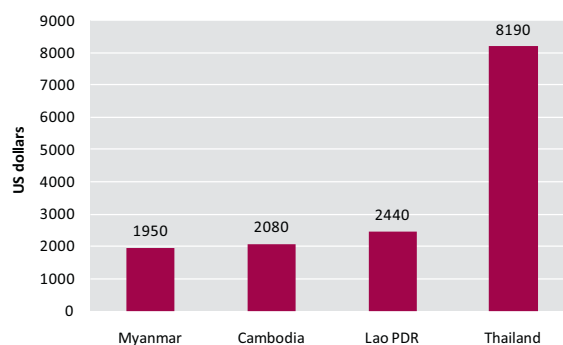
1. What is the nature of the market?

Thailand is a magnet for regional labour. Classed as an upper middle-income country, it has produced sustained economic growth for more than two decades. Rapid growth has come more recently for Cambodia, Lao PDR, and Myanmar, but they remain among the 50 least-developed countries in the world. Since the early 1990s, millions of workers from the region have migrated to Thailand, finding work in the lightly-regulated fishing, seafood, agriculture, construction, and service industries. Both men and women migrate, in roughly equal numbers.

Myanmar, in particular, has contributed significantly to the pool of migrant labourers (see Figure 2). The

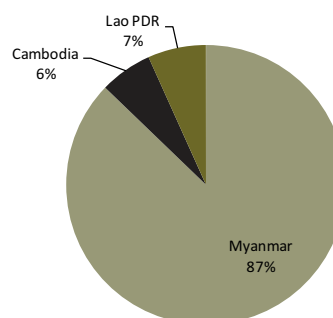
country has suffered from decades of economic stagnation due to conflict, centralized economic control, and sanctions against the government. Conflict has also directly displaced a great number of people. Recent migration registration data indicates that most migrants in Thailand are nationals of Myanmar.

Figure 1: GNI per capita in 2010



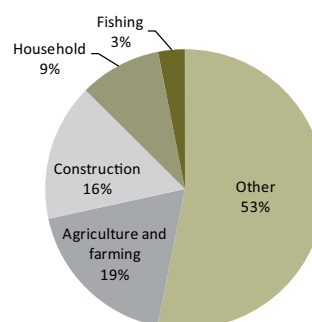
Source: The World Bank 2012

Figure 2: Breakdown of registered migrant workers in Thailand from Cambodia, Lao PDR and Myanmar (2010)



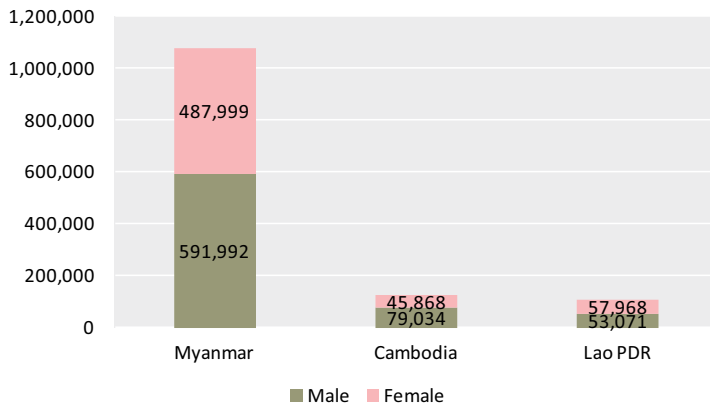
Source: Office of Foreign Workers Administration, Department of Employment, Ministry of Labour, Thailand

Figure 3: Areas of employment of registered migrant workers in Thailand from Cambodia, Lao PDR and Myanmar (2010)



Source: Office of Foreign Workers Administration, Department of Employment, Ministry of Labour, Thailand

Figure 4: Thailand: Migrants registered in 2009 by gender and nationality



Source: Office of Foreign Workers Administration, Department of Employment, Ministry of Labour, Thailand

The desire to migrate is not just about economics. Among young Lao, for example, a period of migrant labour is seen as a kind of rite of passage.¹ For Lao, Thailand is a natural destination because of cultural, social, and linguistic similarities. Thai media, ubiquitous in Southeast Asia, portrays an exciting and modern lifestyle, in stark contrast to the boredom and monotony of rural life. Returning migrants often flaunt the sophistication and wealth associated with having worked in a relatively rich society, and longer-term emigrant communities provide social networks for those looking to spend time abroad.

Too often, unfortunately, high expectations are met with disappointment. Migrants can find themselves indebted and in jobs that do not match what recruiters had promised. In extreme cases, they may be trafficked, unpaid or deprived of their freedom. Their vulnerability to exploitation is rooted in their irregular status.

The exact figure is unknown, but irregular migrants undoubtedly represent a significant percentage of the Thai labour pool. A 2009 registration process resulted in 1.3 million applications for regularization, and one which was offered 18 months later brought in another million applicants. Nevertheless, many irregular migrants remain unregistered, deterred by a number of reasons (e.g., not being of labour force age, burdensome procedures and fees associated with the process, inability to verify nationality).

¹ UNFPA GMS 2011

Although formal recruitment channels exist, they are relatively new and most migrants still prefer to enter Thailand irregularly for several reasons. This is because complying with the law:

- takes time, typically delaying earnings by some three to six months;
- is expensive, costing the equivalent of four to five months' wages;² and
- is restrictive, because work permits are valid for just two years and can only be extended once, after which the migrant must wait three years before re-applying.

In addition, formal migration also does not necessarily guarantee better legal protection or higher net earnings for migrants. The high costs of formal recruitment can place workers in debt bondage to their employer or recruiter.³ Although contracts provide migrants with legal protection, few understand their rights well enough to assert them. Just like smugglers, formal recruiters can unwittingly channel workers to employers who exploit them. Smuggling, in contrast, is immediate and relatively cheap, with the cost as low as one-fifth of the costs of a work permit. Smugglers often act as employment agents, transporting workers to waiting jobs. Employers may even prefer recruiting irregular workers, who are more flexible and allow tax avoidance. They may therefore contract smugglers to supply them. Employers are also required to pay fees to participate in formal recruitment. As a result, it is estimated that regular migrants meet just 7% of Thailand's total demand for migrant workers.⁴

Smuggled migrants are at greater risk of deportation. In 2010, Thai authorities arrested over half a million nationals from Cambodia, Lao PDR, and Myanmar for immigration-related offenses, including illegal entry (see Figure 5).⁵

Nevertheless, the majority of these irregular migrants get what they came for: employment at better wages than they would have received at home. They are usually paid promptly and they are allowed to stop

² Martin 2009

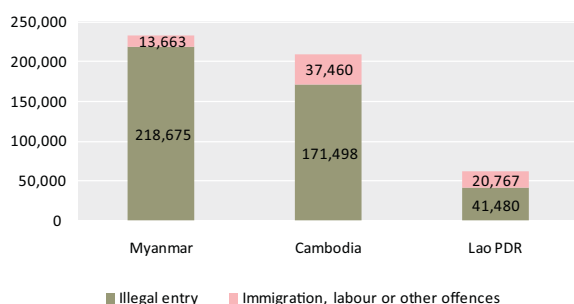
³ Martin 2009

⁴ Chantavanich 2008

⁵ RTP 2011

working when it is no longer in their self-interest to do so.

Figure 5: Arrests in Thailand of migrants from Cambodia, Lao PDR and Myanmar during 2010



Source: Royal Thai Police, 2011

But in some cases, the vulnerability of irregular migrants is exploited. Promised pay may not materialize, and filed complaints may be met with a visit from the immigration police. In some cases, workers can be kept captive for years, working only for their food and accommodation. An example that has received a lot of attention recently is the fishing trade.⁶ Offshore vessels can become prisons, as workers have no one to turn to and no prospects for escape.

Thus, although most men and women who migrate – either independently or facilitated by smugglers – significantly improve their lives by doing so, others cross into Thailand only to find that they have lost control of their lives and end up in exploitative situations.⁷ Research with Cambodian deportees found that just under a quarter of those questioned experienced some degree of exploitation, regardless of the field – agriculture, construction, factory work, and services. The level of reported exploitation in the fishing industry was higher, with approximately one-third of migrants reporting abuse. Most of the fishermen from Cambodia and Myanmar in Thailand are undocumented, and their exploitation can last for years, working 18 to 20 hours per day, seven days a week.⁸ Of 49 trafficked seamen interviewed in 2009, almost one-fifth were 18 or younger.⁹

Seafood processing is another area where trafficking has been reported. In 2006, police found approximately 800 imprisoned men, women, and children from Myanmar working under extreme conditions in Samut Sakhon province, one of the largest seafood processing industrial areas in Thailand. Sixty-six migrants were classified as trafficked persons by the Thai Government. Subsequent police raids in Samut Sakhon revealed additional Myanmar migrants working under harsh and exploitative conditions.¹⁰ One 2011 survey of over 400 migrants found that 34% had been trafficked.¹¹

The Thai government has devoted considerable resources to addressing irregular migration, but managing migration is challenging for even the wealthiest countries. The sheer scale of the problem is daunting, and the pull of a growing economy, seemingly irresistible. Considerable investment of effort must therefore continue to be devoted to reduce the risk of abuses.

2. How are the smuggling and trafficking conducted?

Smugglers have become a critical part of the mass migrant movement. They make it possible to evade the Thai border officers, and also act as job brokers. Their importance is demonstrated by the fact that most migrants make use of smugglers.¹²

The migrants can be broken into two categories. First are those from neighbouring rural areas who simply cross the border to take advantage of seasonal agricultural work and may employ the assistance of smugglers for transport and to avoid patrols by Thai border guards.¹³ The second category are the longer-term migrants, who move all over the country and work in a broad range of sectors, including the construction, food processing, manufacturing, domestic and fishing sectors. These migrants actively seek out the services of smugglers for assistance in job placement or are recruited by someone they know.

Ironically, regional development and integration is making migrant smuggling easier. New road networks are making Thailand more accessible than

⁶ See for example IOM 2011a.

⁷ Pearson and Punpuing 2006: p. xvii.

⁸ IOM 2011a: p. 11.

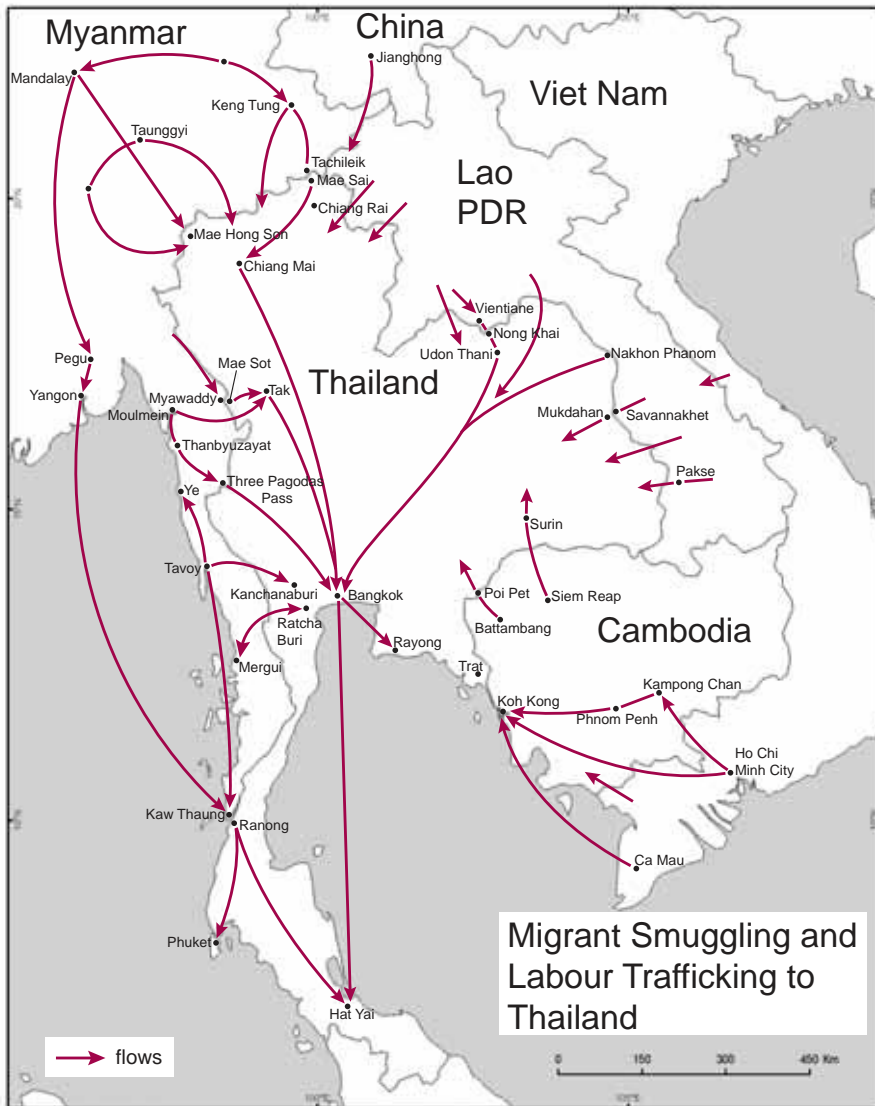
⁹ UNIAP 2009

¹⁰ IOM 2009

¹¹ UNIAP 2011: p. 4.

¹² UNIAP 2010; UNODC EAP 2010a

¹³ Hardman 2011



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: Wong and Rigg 2011: p.13; UNODC sources

rainy season, the short trip is made by boat. In addition, the provinces in the southern region are accessible by sea, and they attract large numbers of smuggled migrants. For example, it is estimated that some 40% of smuggling into Ranong, a province in the south, is facilitated by boat.¹⁶

The registration process conducted by the Thai government in 2009 provides a unique insight into the scale of irregular migration.¹⁷ Figure 6 (next page) shows that the locations of the registered migrants from neighbouring countries are spread relatively evenly across Thailand.

Migrants working in the northern and southern regions of Thailand are primarily from Myanmar. Samut Sakhon Province is among the largest seafood processing industrial areas in Thailand, and it is among the top four coastal provinces in attracting migrant workers,

largely from Myanmar.¹⁸

ever before for rural communities in neighbouring countries.¹⁴ Based on UNODC border surveys from the Southeast Asian region, it is estimated that one-third of the irregular migrants simply proceed along the major roads and cross at the official checkpoints. Throughout the Greater Mekong Subregion, official borders can be crossed easily with migrants led by smugglers on foot, by motorbike, vehicle or boat.¹⁵

The other two-thirds of the migrants take advantage of the many informal crossing points. During the dry season, for example, migrants can wade across the Mae Sai River near Tachilek or the Moei River near the Friendship Bridge that connects Mae Sot in Thailand and Myawaddy in Myanmar. In the

Not every smuggled migrant remains in Thailand. For example, ethnic Rohingya Muslims from Myanmar use the services of smugglers to enter Thailand by sea, but many are en route to Malaysia in search of work within established Rohingya communities in Kuala Lumpur and Penang.¹⁹ As their citizenship is not formally recognized by the Myanmar government, the Rohingyas are “stateless”.

In some cases, the migrants seek out the smugglers, while in others, the smugglers actively recruit the

¹⁴ UNODC unpublished report on infrastructure, Bangkok.

¹⁵ UNODC EAP 2010a

¹⁶ UNIAP 2010; UNODC EAP 2010a

¹⁷ IOM 2011

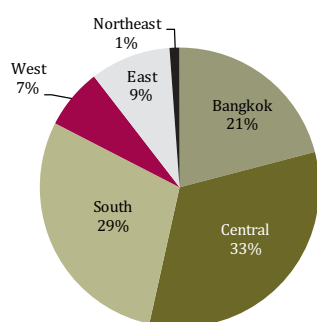
¹⁸ UNIAP 2010

¹⁹ HRW 2009

migrants. Some migrants cross the border on their own, using a genuine passport or border pass, but then work illegally using the help of a smuggler who acts as a placement agent for the employer.²⁰ Most migrants, however, travel in small groups of four or five people from the same village, and cross without documentation.²¹

Research in Cambodia has found that women tend to migrate with family members and sometimes join small groups of other migrants to reach and cross the border, thereby minimizing the role of smugglers. Men are more likely to migrate with groups of friends and join larger groups of migrants to cross into Thailand. They tend to use at least one smuggler in the process.²²

Figure 6: Location of registered migrants from Cambodia, Lao PDR, and Myanmar in Thailand



Source: Office of Foreign Workers Administration, Department of Employment, Ministry of Labour, Thailand, 2010

Corruption is encountered throughout the process of migrating and working illegally. Bribes may be required at border crossings, along major transportation corridors, and anywhere police are encountered. To avoid arrest, migrants have reported paying bribes of between US\$6.50 and US\$260.²³ Police may collect payments from employers on a monthly, per head basis.²⁴ Some police moonlight as smugglers themselves (see Box).²⁵

²⁰ Chantavanich 2008

²¹ Chantavanich 2008

²² UNIAP 2010a

²³ HRW 2010c

²⁴ HRW 2010c

²⁵ Pearson and Punpuing 2006

Police involvement in the recruitment of smuggled migrants

Quote from a 19-year-old male Karen (Myanmar) manufacturing worker:

I told my uncle that I wanted to try working in Bangkok so he said that I could go and he would pay for my recruitment fee and ride which was 6,000 Baht (US\$150). I was able to get from Tah Song Yan [in Thailand near the Burmese border] to Bangkok by riding in a pick-up truck that belonged to a police officer. He was a Thai police officer who was also a recruiting agent. He was not in uniform that day, but he was the one who drove the pick-up truck to take us to Bangkok. There were two other migrants in the car as well. We were squished in the backseat and whenever we came to a police check point, the police officer had us lay on top of each other and he put a black blanket over us. We ran into many police checkpoints and were required to hide like this many times – this made the trip very difficult.²⁶

The risks of being trafficked actually increase when smugglers are used. Research among Cambodian deportees from Thailand shows that Cambodian men are almost twice as likely to be cheated or trafficked as Cambodian women. This is largely because men are more likely to employ smugglers than women, and the risk of being trafficked increases with every intermediary involved.²⁷ Women are also more likely to travel in groups with family members, as this provides greater protection. Smuggled migrants from Cambodia and Myanmar are particularly vulnerable to trafficking because they often do not speak or understand Thai.

3. Who are the smugglers and who are the traffickers?

Most smugglers do more than just help people get across borders. They are essentially brokers, connecting supply and demand and making money from everyone involved in the irregular labour market. They can charge both migrants and employers, and steer the new migrants into selected

²⁶ Pearson and Punpuing 2006: pp. 72 -73.

²⁷ UNIAP 2010a

accommodation and other services with which they are connected. They are usually not linked to other organized crime activities. Some were, or are still, irregular migrants themselves, capitalizing on the experience they have acquired over the years.

The vast majority of migrants are smuggled by someone they know through personal or community connections, so social networks are key to linking the migrants and the smugglers. Smugglers who act as recruiters understand the situation in Thailand, and they have built relationships with Thai employers, brokers, and police.

The process of linking migrants with jobs often involves both smugglers from sending countries as well as within Thailand. In Lao PDR, for example, Lao smugglers bring migrants from villages to the border and then hand them over to Thai smugglers, who arrange for onward transport, accommodation, and job placement. Some smugglers also offer information about living and working conditions in Thailand, inexpensive accommodation, and remittance assistance.

Most smugglers rely on their reputations being spread by word of mouth. Reliability and speed in securing paid employment are the key requirements for the successful smuggler.²⁸ Once the decision is made to migrate, prospective migrants want to depart as soon as possible. Fast and reliable smugglers can organize movement in two to three days.

Most smuggled migrants use a combination of cash savings and loans from relatives or friends to migrate to Thailand while others pay the full one-off service fee upfront in cash solely from their savings, thereby not incurring debts. A less common option is for migrants to take advance loans from smugglers or become bonded labourers to their employers for a fixed period of time.²⁹ This opens up opportunities for abuse and trafficking.

²⁸ Chantavanich 2008

²⁹ Debt bondage or bonded labour is when labour is demanded as a means of repayment for a loan.

4. How big are the flows?

Migrant Smuggling

To determine the number of migrants smuggled, the best source of data is the migrant registration details gathered during the registration drives in 2009 and 2011. By the end of December 2009, 1,315,932 migrant workers from Cambodia, Lao PDR, and Myanmar were registered.³⁰ In mid-2011, an additional 996,278 migrant workers (as well as 165,980 employers) were registered. Although it is possible that some irregular migrants present in the country during the first drive failed to register until the second drive, many were likely new migrants who entered the country during the 18 month gap between the two periods.

If these premises are correct, almost one million new irregular migrants entered the country in 18 months, or over 660,000 per year. The reality is likely to be slightly more complicated. As indicated previously, registration can be burdensome, and it is likely that many workers did not take advantage of either registration drive. This would mean that more than one million irregular migrants could have entered the country during the 18 month period and simply refused to register. On the other hand, those who did register in the first round would be compelled to re-register if they changed employers during the 18 months, because registration is employer specific. These migrants would be counted under both registration drives.

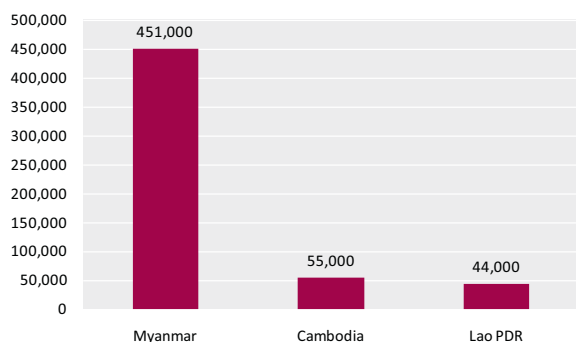
Despite all this, the bottom line is that approximately one million irregular migrants were documented during each of these drives. Given these countervailing uncertainties, the seasonal nature of agricultural work, and in the absence of any comprehensive survey of the irregular migrant population in Thailand, it is reasonable to estimate a combined annual inflow of 660,000 new irregular migrants from these three countries. Field research conducted by UNODC concluded that 83% of irregular migrants from Cambodia and Myanmar are smuggled migrants.³¹ This indicates

³⁰ IOM 2011

³¹ UNODC EAP 2010a. This is in keeping with UNIAP research that suggests that approximately 90% of irregular migrants from Myanmar working in Samut Sakhorn province of Thailand used the services of a smuggler (e.g. recruiter or transporter) at some point during the migration process. See also UNIAP 2011.

that about 550,000 migrants are smuggled each year. The registration data suggests that 82% of these were from Myanmar, 10% from Cambodia, and 8% from Lao PDR. This would imply about 450,000 migrants from Myanmar, 55,000 from Cambodia, and 44,000 from Lao PDR enter the country annually (see Figure 7).

Figure 7: Estimated number of migrants smuggled annually into Thailand



Source: UNODC estimate

The amount paid for smuggling services varies according to the services required (see Figure 8). Typically, a safe border crossing and transportation to an employer in Thailand will cost the migrant less than US\$325.³² Most Cambodian smuggled migrants paid fees to smugglers ranging from US\$34 to US\$138, with the majority paying between US\$80 to US\$112.³³ Fees typically cover the cost of crossing the border, food, water, transportation to the Thai employer and on route accommodation. It is estimated that an average profit of US\$10 to US\$30 is made per smuggled migrant. Smugglers who act as recruiters also collect fees from the Thai employers. Typically, the amount ranges from US\$6 to US\$16 (200 and 500 baht) per worker.³⁴

However, there may be gender and national specificities to the fee structures. One sample of Cambodian migrants found that male migrants pay an average of US\$95 while female migrants pay only US\$74.³⁵ Lao migrants paid similar amounts to both Thai and Lao smugglers, ranging from US\$80 to US\$113, covering the cost of

³² Huguét and Punpuing 2005

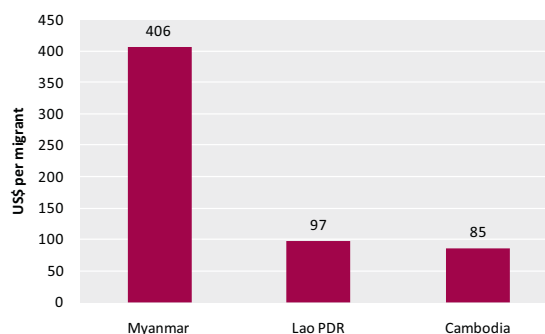
³³ Chantavanich 2008

³⁴ Pearson and Punpuing 2006

³⁵ UNIAP 2010a

accommodation, transport, and job placement. The amount paid by Myanmar nationals also depends on the type of services provided and on the destination. In 2008, research indicated prices of between US\$323 and US\$485 per migrant.³⁶

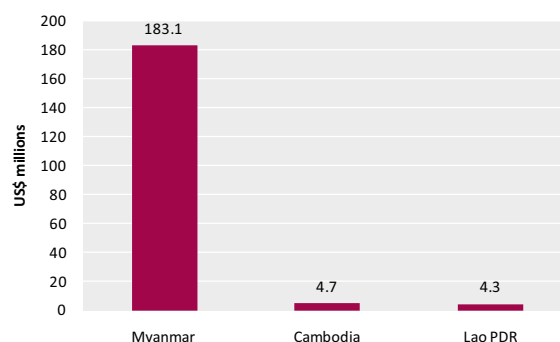
Figure 8: Average price paid for migrant smuggling by country of origin



Source: UNODC estimate

Based on these figures, it appears that **US\$192 million** is generated by smuggling migrants from these three countries into Thailand. Of this revenue, 95% comes from smuggling migrants from Myanmar (see Figure 9).³⁷

Figure 9: Breakdown of income generated by smuggling migrants annually



Source: UNODC estimate

Human Trafficking

Calculating the share of these migrants who were subsequently trafficked is challenging. Research among 400 deportees to Cambodia from Thailand in 2009 found, based on a broad definition of

³⁶ Mon 2008

³⁷ For migrants from Myanmar, this amounts to an average smuggling fee of US\$400 times 450,000 migrants for about US\$180 million. For Lao PDR, the calculation is 55,000 times around US\$100, and for Cambodia 44,000 times US\$85.

exploitation, that nearly a quarter (23%) could be considered victims of trafficking. Only 9.3%, however, met the stricter definitional standard – reporting no payment for work or being completely deprived of their freedom.³⁸

There are many problems with using this figure as an estimate of the annual share of people trafficked.³⁹ Victims may be disproportionately represented among the deportees and self-reporting may be inaccurate. From a larger sample of irregular migrants, Thai immigration authorities concluded that around 4% of nearly 1000 detainees were trafficking victims from Cambodia, Lao PDR and Myanmar.⁴⁰ But even with similar limitations in the methods as above, the number of trafficking cases would still be around 26,400 victims per year.⁴¹

In 2009, the Thai authorities detected 530 trafficking victims, of whom (based on historic data) about one-third are sex trafficking victims.⁴² The remaining 350 represent about 1.3% of 26,400 victims per year. Research conducted into the European market has found that only 3% to

5% of trafficking victims are detected.⁴³ However, given the differences in police capacity and the sheer scale of the migration flow, a 1% detection rate seems realistic.

It would be impossible, in purely dollar terms, to quantify what these victims had taken away from them, but it is possible to calculate what the perpetrator's gained. Research on Cambodian deportees found that in cases deemed to involve trafficking, the average monthly "promised/negotiated" salary was 3,665 baht (US\$120). They were actually paid, on average, 430 baht (\$15) per month. Thus, they were exploited (underpaid) to the tune of US\$105 per month of labour. Approximating the labour stolen would then be US\$105 multiplied by 12 months multiplied by 26,400 victims. This sum equates to just over **US\$33 million** per year.

³⁸ UNIAP 2010a

³⁹ The Government of Thailand considers this figure to be an overestimate of the amount of trafficking for labour migration. It points out that, in 2010, its Immigration Bureau along with officials from the Ministry of Social Development and Human Security, interviewed and screened 371,456 illegal migrants using standardized manual guidelines and identified 56 actual trafficked victims (31 Laotians, 5 Myanmar, 4 Cambodians and 16 others) and 23 potential victims (18 Laotians and 5 Myanmar). According to these figures, the amount of actual/potential trafficked victims from this overall flow would be 0.02%.

⁴⁰ 'From 1 November 2006 to 31 January 2007, the Victim Identification Unit (VIU) of the Immigration Detention Centre (IDC) in Bangkok interviewed 959 detainees to determine if they had been trafficked. [...] From those interviews, it was determined that 37 persons could be considered to have been trafficked – 21 from Myanmar, 12 from Lao People's Democratic Republic and 4 from Cambodia.' See Huguet and Ramangkura 2007.

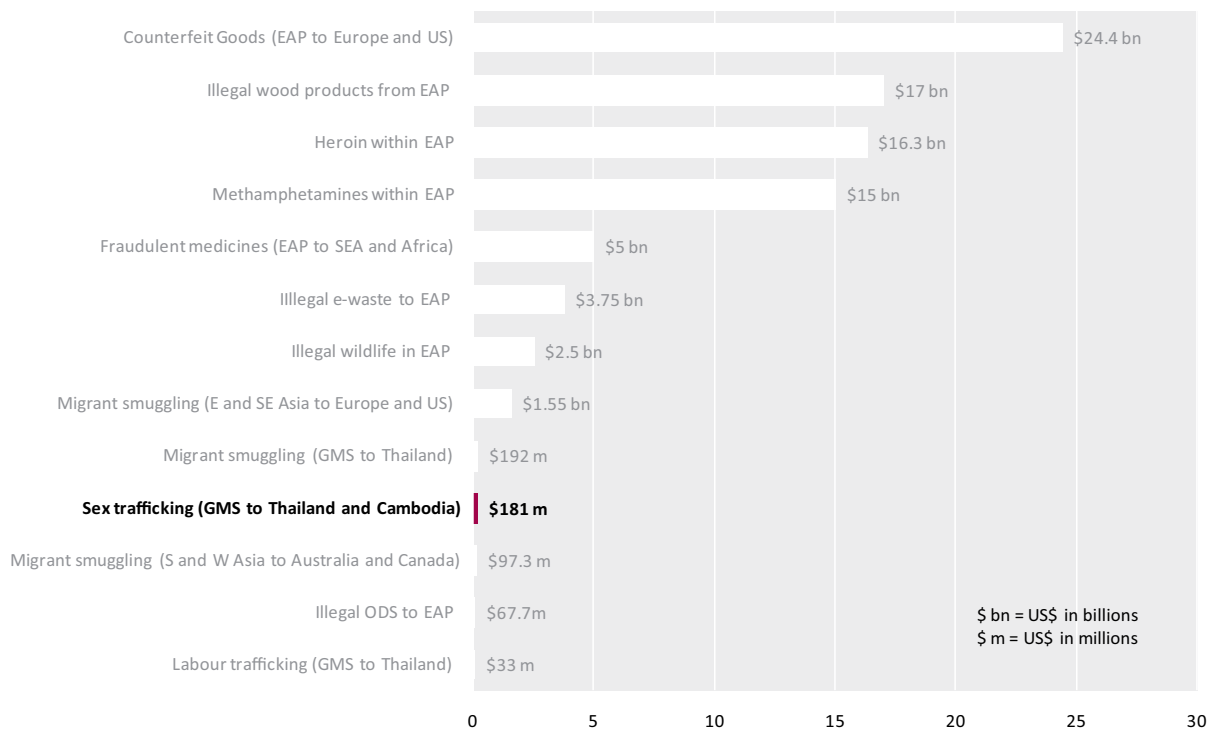
⁴¹ With the assumption that 4% of irregular migrants may be assessed as trafficking victims, that proportion of 4% is applied to the overall the annual estimated flow of 660,000 irregular migrants into Thailand. Although 660,000 irregular migrants have been recorded as registering in recent regularization processes, there are no reliable estimates of the number of irregular migrants who remain 'irregular' in Thailand. Assuming that as many irregular migrants register for 'regularisation' as those who choose to remain 'underground', the figure serves as an indication of the potential numbers of such unregistered irregular migrants in the absence of other reliable data.

⁴² The data for the share of all human trafficking victims in Thailand who are labour trafficking victims comes 2006-2007, as reported in UNODC 2009.

⁴³ This is the figure frequently cited by the Dutch Rapporteur, and considerable resources have been assigned to detecting victims.

Chapter 2

Trafficking of women and girls for sexual exploitation within the Greater Mekong Sub-Region

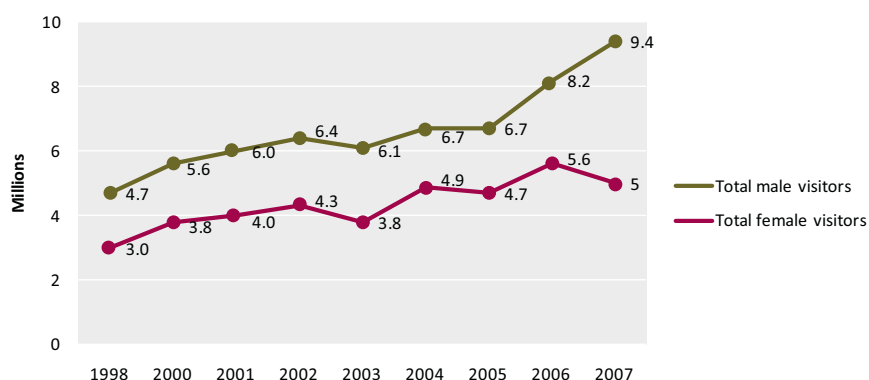


NATURE OF THE THREAT

Human trafficking:	
1. Slave-like conditions: human beings treated as disposable commodities – immense – often hideous – emotional, psychological and physical damage done to victims.	2. Forms of control: sexual exploitation; domestic servitude; forced marriage; forced labour (especially in construction and fishing industry); debt bondage; imprisonment; violence and torture; child begging.

Prostitution is found everywhere, but there is a smaller subset of countries whose markets have the power to attract participants, both clients and sex workers, from neighbouring countries and beyond. When there are not enough sex workers to keep up with demand, those profiting from the trade may import labour by deception and by force.

Figure 1: Total international tourist arrivals to Thailand



Source: Tourism Authority of Thailand 2008a

Foreign demand for sexual services in Thailand can be traced back at least as far as the time of the Viet Nam War, when foreign servicemen fed the expansion of a sex market in Pattaya, formerly a sleepy fishing village. In parallel, the notorious Pat Pong district in Bangkok was developed by foreign investors during the 1950s and 1960s.¹ Thus, on many levels, the sex market in Thailand is an international phenomenon.

1. What is the nature of the market?

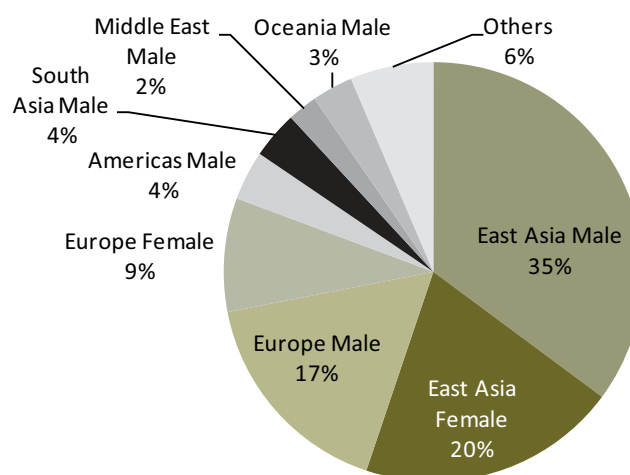
Despite the illegality of prostitution in Thailand, a recent survey in 2009 found that there were some 73,917 sex workers in 16,270 commercial sex establishments, though in 2010 the Ministry of Health estimated that the actual number was probably higher – at

between 150,000 and 250,000.² An ongoing research project estimates that there are around 140,000 sex workers in Thailand. Though the vast majority are female, around 10% are male.³ Given the size of the industry, it is not surprising that a percentage of these workers are victims of trafficking. While 10% of the sex workers found in the survey were men, this chapter focuses on the commercial sexual exploitation of women and girls, due to their special vulnerability to violence and exploitation.

Most of the trafficking victims who are not Thais come from poorer countries in the region, from Cambodia, Lao PDR and Myanmar, migrating irregularly. Like many of their compatriots, they are in search of a better life.

Foreign sex workers are inherently vulnerable, given that both their presence and work status are illegal, and that they are unlikely to speak the local language. They have no official existence, no labour rights, and no one to hear their complaints. Under these conditions, exploitation is to be expected.

Figure 2: International tourist arrivals to Thailand by region and gender in 2007



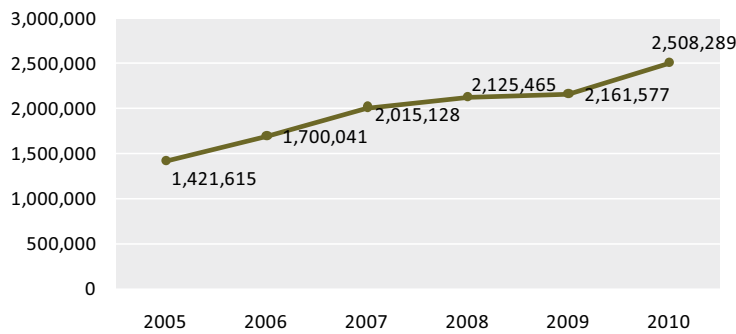
Source: Tourism Authority of Thailand 2008b

¹ Much earlier, in the late 19th Century, brothels were established in Chinatown to cater to the Chinese expatriate population. In the first year prostitutes were registered (1909), 1441 (57%) of the registered prostitutes were Chinese, and 950 (38%) were Thai. See Baffie 2010: pp. 195-203.

² NAPAAC 2010: p. 79.

³ Preliminary estimates on at risk populations presented at Ministry of Public Health (MoPH) Workshop, Richmond Hotel, Nontaburi, 10 January 2012.

Figure 3: Total international tourist arrivals to Cambodia



Source: Cambodia Ministry of Tourism 2011

The trafficking of sex workers from a relatively rich country to a poorer one also occurs. Trafficked Vietnamese women make up a small share of sex workers in Cambodia. However, some of these trafficked women are ethnic Vietnamese from Cambodia. Ethnic Vietnamese make up around 13% of the Cambodian population and a disproportionately large amount of the sex workers. Perhaps because of the association of the Vietnamese with sex work in Cambodia, women and girls are also trafficked from Viet Nam.

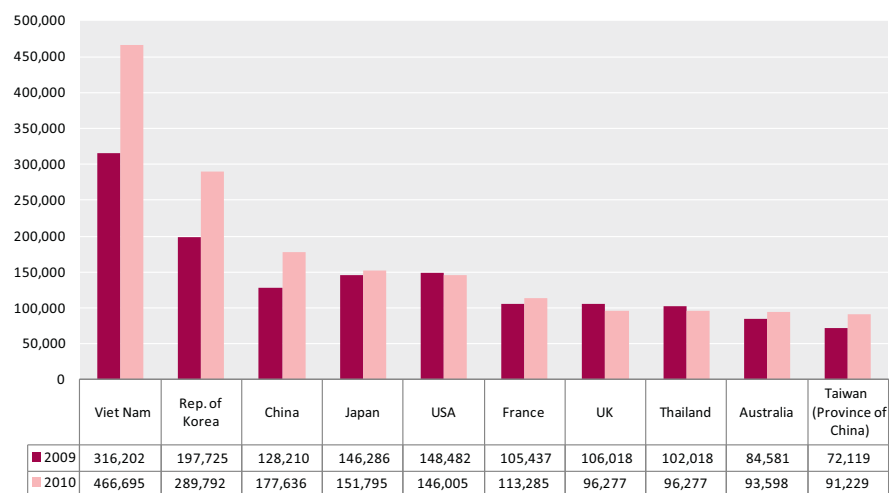
In both countries, domestic and foreign men exploit victims. While women outnumber men in many tourist destinations around the world,⁴ almost twice as many men as women holidayed in Thailand in recent years, with the number of male tourists doubling within a decade. Over half of male tourists come from East Asia itself (see Figures 1 to 4). According to academic studies, East Asian sex tourists come from China, Japan, Malaysia, Republic of Korea, and Singapore in particular. Several sex venues in Thailand cater almost exclusively to visiting East Asian men.⁵

Sex tourism is an issue for Thailand, but the main problem driving trafficking of women and girls today is rooted in high domestic demand for commercial sex. Of a sampling of men in north-eastern Thailand, 43% of single men and 50% of married men reported having purchased sex in their lifetimes, with 13% of married men having purchased sex within the last year. Of those who had patronized sex workers, 70% reported that their first sexual experience was with a sex worker.⁶

Similar to Thailand, the clients of sex workers in Cambodia appear to be predominantly from the country itself,⁷ but there is evidence that Cambodia is developing a sex tourism industry of its own.⁸ It also appears that certain sectors are being developed to cater for regional demand for sex (for example, in Siem Reap), especially for tourists and investors from China, Japan, and the Republic of Korea.⁹

The number of sex workers in Cambodia reportedly increased from 20,829 in 2002 to 27,925 in 2008, of which 15,070 are estimated to work in Phnom Penh and 12,855 in the provinces.¹⁰ Of these, a share would be trafficked.

Figure 4: Top ten sources of tourist arrivals to Cambodia in 2009 and 2010



Source: Cambodia Ministry of Tourism 2011

⁴ This gender variation is not standard for tourist arrivals. For example, female tourists to the Maldives were 3% more numerous than male tourists, in 2011.

⁵ Le Roux 2010: p. 125.

⁶ Maticka-Tyndale and others 1997.

⁷ HRW 2010a

⁸ Peters 2007: p. 9.

⁹ Peters 2007: p. 19.

¹⁰ Steinfatt and Baker 2010

Child Sex Tourism

When a person is too young to consent to sex, any sexual activity is inherently exploitative. In the region, the sexual exploitation of children appears to be especially prevalent in Cambodia, Lao PDR, Thailand and Viet Nam. Travelling child sex offenders make use of these markets, and also pursue children not involved in commercial sex. The Association of Southeast Asian Nations (ASEAN) has defined “child-sex tourism” as the sexual exploitation of children by men or women who usually travel from a richer country to engage in sexual acts with children in a less developed country.¹¹ Child-sex tourism is committed by an individual or a network that facilitates the exploitation.

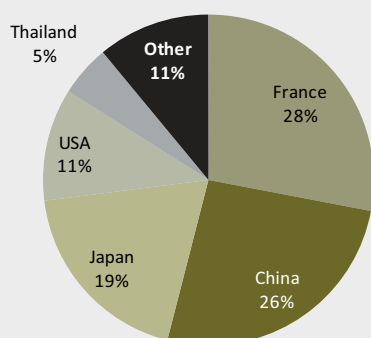
Many males from Australia, the European Union and the United States, working as business travellers, development workers, teachers or long-term residents, have been identified as travelling child sex offenders in the Greater Mekong Subregion. According to UNICEF, however, the majority of sex tourists in East Asia are regional tourists. Due to the close links of commercial sex industries with child-sex tourism, cases involving East Asian travelling sex offenders - mainly from Japan, the Republic of Korea and Taiwan (Province of China) - have been detected in a number of Southeast Asian countries.¹²

In the Greater Mekong Subregion, travelling child-sex offenders make contact with local children through their accommodation or other tourist-related services. In addition, some resident foreigners have strong links to the community and it is one of the ways that travelling child-sex offenders groom children for abuse.

Although relevant legislation has been adopted in countries of the region, including Cambodia, Lao PDR, Thailand and Viet Nam, these laws are often weakly enforced.¹³ There have been some law enforcement successes. Between 2001 and 2012, 80 Cambodians and 148 foreigners were arrested for child-sex offences in Cambodia after a total of 400 victims (263 boys and 137 girls), were recorded as “abused” by these foreigners (see Figures 5 and 6). ECPAT International reported that three international and 20 Thai child-sex tourists have been convicted since 2008 in Thailand.¹⁴

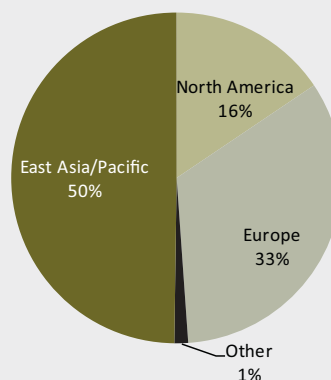
Although some countries, including Australia, Germany, Japan and the US, have established extra-territorial legislation against child-sex tourism, the number of arrests remains low.¹⁵ Based on available records, seven US citizens have been convicted in the US for sex offences against Cambodian children; three of these cases are still pending.¹⁶

Figure 5: Nationality of foreigners engaged in the sexual exploitation of children in three districts of Cambodia in 2001



Source: Niron and others 2001: p. 32.

Figure 6: Breakdown of region of origin of child sex tourists arrested in Cambodia 2003-April 2012



Source: Action pour les Enfants 2012

¹¹ ASEAN 2007: p. 5.

¹² ECPAT International 2010: p. 12.

¹³ ECPAT International 2010: p. 33.

¹⁴ ECPAT International 2010: p. 32.

¹⁵ Child Wise Australia 2009: p. 8.

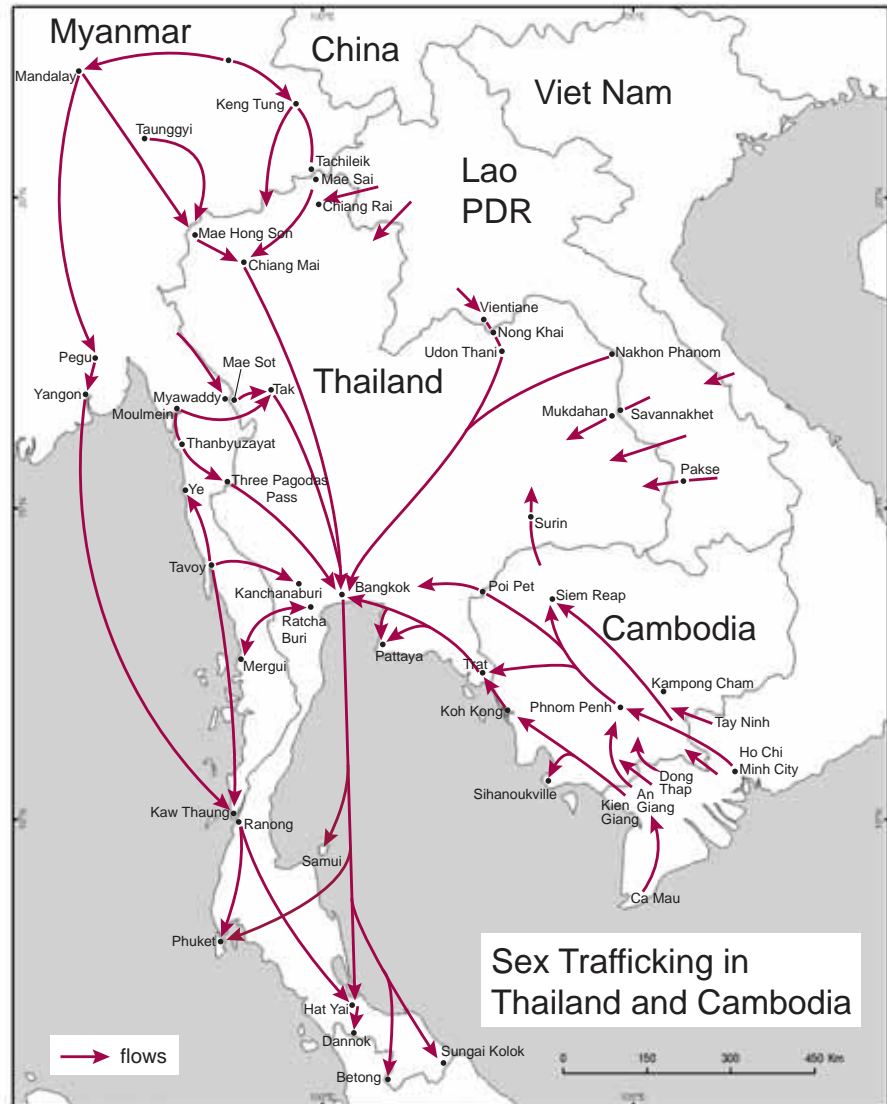
¹⁶ Action pour les Enfants 2012

2. How is trafficking conducted?

As indicated in the previous chapter, the large majority of migrants from Cambodia, Lao PDR, Myanmar, and Viet Nam enter Thailand voluntarily, with or without the assistance of a broker. Most traffickers control migrant sex workers through debt bondage accumulated from the cost of smuggling them into Thailand. Some brothel owners buy these debts and then use them to exploit the victim. To the initial sum, inflated costs may be added for the feeding, housing, and upkeep of the victim, extending the period of debt servitude.

Even those who migrate with the intention of working in the commercial sex industry may be exploited and become trafficking victims. For example, the district of Svay Pak, north of Phnom Penh, Cambodia, attracts a large number of sex workers who migrate from the south of Viet Nam for work.¹⁷ Certain brothel managers in this area exploit debt-bonded sex workers by placing restrictions on their freedom and ability to safeguard their own health. Brothel managers dictate how many and which clients “their” sex workers should entertain, and whether or not condoms are used.¹⁸

The Thai sex industry is also partly supplied by women and girls trafficked from neighbouring Myanmar, which remains one of the least developed countries in the region. One established route is the border crossing at Tachileik in Myanmar to Mai Sai in Thailand.¹⁹ It has been reported that traffickers offer sexual favours to border officials or bribes of between



Source: Wong and Rigg 2011: p.13; Le Roux 2010: p. 133-7; UNIAP: 2010; UNODC sources

US\$30 and US\$78 to facilitate the irregular border crossing.²⁰ Police officers reportedly extort money or accept bribes from brothel owners to prevent raids or to provide notice of planned raids.²¹

Trafficking of women and girls from Myanmar into Thailand for the purpose of sexual exploitation has been reported by World Vision and Asian Research Center on Migration (ARCM) in a 2004 joint research study. The study found that from a sample of 534 women migrants from Myanmar who had been involved in sex work in Thailand, 28 (or 5.3%) had been forced into prostitution.²²

¹⁷ Busza 2004: p. 242.
¹⁸ Busza 2004: p. 242.
¹⁹ Busza 2004: p. 142.

²⁰ Busza 2004: p. 139.
²¹ US TIP 2011
²² Cited in Huguot and Ramangkura 2007: p. 28.

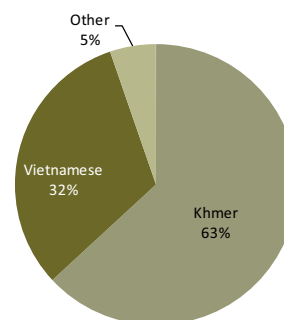
The sale of virginity seems to be a particular problem in Cambodia, and the means by which many young women are first exploited.²³ Of 203 women surveyed by the International Organization on Migration in Cambodia, 38% had their first commercial sexual encounter while selling their virginity. In this sample, Cambodian men reportedly accounted for about half of client demand, the other half being male tourists, largely from Asian countries. Ethnic Vietnamese women and girls represented over one quarter (28%) of virginity sales.²⁴ On average, the girls selling their virginity were reportedly between 16 and 17 years old.²⁵ The average price paid for the virginity of a Khmer or ethnic Vietnamese girl is US\$482, but can range from US\$20 to US\$2800.²⁶

Ethnic Vietnamese women represent a substantial portion of the commercial sex workers in Cambodia, and form the majority of sex workers in some areas such as Siem Reap and Svay Pak. The Cambodian sex market is negotiated in two distinct venues: brothels and beer gardens. The beer garden scene, which also includes karaoke bars, has grown in popularity due to the advantage of deniability: the bar owner does not pimp the women, but rather charges clients a “bar fine” to take a woman off-site. It also provides some social interaction before business is arranged and gives the women more manoeuvrability in general.

The purpose of brothels is more explicit, and they are where most of the trafficking takes place. With less freedom of movement, the women are more easily controlled and coerced. Most of the ethnic Vietnamese sex workers are based in the brothels. It is often assumed that brothels are a metropolitan phenomenon, but this does not appear to be the case. In one study, only 34 of the 377 brothels surveyed were found in Phnom Penh, with most (343) found in the provinces.²⁷

The share of these women who are victims of trafficking is difficult to determine, but the best study to date polled over 2000 venues, and found that of an estimated 27,925 sex workers, 1058 (4%) were estimated to be victims of trafficking for sexual exploitation, of which 29% were underage. Most of

Figure 7: Ethnicity of sex trafficking victims in Cambodia in 2008



Source: Steinfatt and Baker 2010

these victims were Khmer (63%), but a large share were ethnic Vietnamese (32%) and a statistically significant share ethnic Chinese (5%).²⁸

3. Who are the traffickers?

It does not take great organizational sophistication to traffic a woman or a girl in Southeast Asia. Since most of the women migrate across borders voluntarily, and most are subsequently exploited in a brothel setting, it is the brothel owners who are most often the “traffickers”.

There are also professional procurers, who are often of the same nationality as the victims, but may have resided in the destination country for many years. Using their community linkages to entice and entrap victims, they are generally independent and small scale. In one recent study of trafficking from Myanmar to Thailand, information was gathered on 100 of these recruiters.²⁹ Of the study sample, at least 65 were female, of various ethnicities (Palaung, Shan, Chinese, Burman and Kachin). Their professions were diverse, including police officers, government workers and one nun. Many were from Namkham in northern Shan State, with some from China, and some from central Myanmar.

Women may also be trafficked by friends or family members. Research in Viet Nam has found that many women are trafficked by their own boyfriends.³⁰ Sales of children by parents knowing they will be sex trafficked is rare.

²³ UNIAP 2010: p. 55.

²⁴ Brown 2007: p. 71.

²⁵ US TIP 2007

²⁶ Brown 2007

²⁷ Steinfatt and Baker 2010: p. 34.

²⁸ Steinfatt and Baker 2010: p. 44. This report uses “ethnicity” to refer to culture of origin rather than citizenship.

²⁹ Palaung Women’s Organization 2011.

³⁰ CEOP 2011

Child Sex Tourism and the Internet

The Internet allows the gathering of information to facilitate all forms of tourism, including child-sex tourism. Travelling child-sex offenders are able to anonymously gain access to networks that provide information on local children and the services available at destinations.³¹ Child-sex traffickers also advertise sexual services through the Internet.³²

A number of cases have been prosecuted where the Internet was key. In 2008, Japanese authorities arrested a Japanese man for arranging child-sex tours for Japanese tourists to Cambodia. He allegedly managed a specialised website allowing offenders to select children prior to their arrival in Cambodia.³³ In 2011, a New Zealand man was the first in that country to be convicted for organizing a tour with underage boys in Thailand, advertising over the Internet.³⁴ It appears that Internet use can also be a liability for child-sex tourists, however, as it allows legal authorities in the richer countries to intervene before the damage is done. Those trolling for victims may fall victim to a police sting.

Many East and Southeast Asian destinations and source jurisdictions such as Cambodia, Japan, the Republic of Korea, Taiwan (Province of China), Thailand and Viet Nam do not yet have a protocol for Internet Service Providers to report unlawful cyber activities in relation to child pornography and child sexual abuse.³⁵ These must be established as a vital means of undermining criminal activity.

Police corruption helps to facilitate the trade. In 2009, the Deputy Chief of the municipal police of Phnom Penh was arrested for allegedly accepting bribes in exchange for warning brothel owners of impending raids.³⁶ Border control officials have also been implicated.

4. How big is the flow?

To determine the number of women currently trafficked into sexual exploitation in Cambodia and Thailand, two things must be estimated;

- the number of commercial sex workers in both countries; and
- the share of these workers who are trafficked.

In 2012, preliminary research by the Ministry of Public Health indicated that the number of commercial sex workers in Thailand at around 140,000.³⁷ In 2008, based on extensive survey research, it was estimated the number of sex workers

in Cambodia at just under 28,000.³⁸ This leaves the question of what share of these people are trafficked.

Ironically, the best research on the rate of trafficking is not in the relatively well-known market of Thailand, but in Cambodia's sex industry. There are problems with applying the findings of the Cambodian research to the Thai situation, of course, including the fact that the Thai situation is both much larger and is based on a correspondingly larger tourist demand. Still, in the absence of comparable research in Thailand, the Cambodian research is the best available proxy for in-country trends in the region.

Field observation in over 2000 venues in all 24 provinces of Cambodia in 2008 concluded that 3.8% of the women at these venues met the rather strict criteria for trafficking, namely that they were either under the age of 18 or that they were not free to leave the venue.³⁹

There are problems with the methods and the criteria used for determining trafficking. To determine the availability of under-aged workers, researchers posing as potential customers simply asked the proprietors, who would have arguably had economic incentive to lie, possibly inflating the number of victims.

³¹ ECPAT International 2010: p. 60.

³² ECPAT International 2008: p. 6.

³³ ECPAT International 2008: p. 10.

³⁴ Hannan 2011

³⁵ ECPAT International 2010: p. 36.

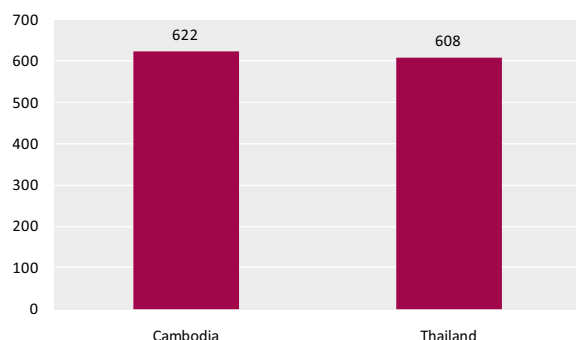
³⁶ US TIP 2010

³⁷ Preliminary estimates on at risk populations presented at Ministry of Public Health (MoPH) Workshop, Richmond Hotel, Nontaburi, 10 January 2012.

³⁸ Steinfatt and Baker 2010: p. 28.

³⁹ Steinfatt and Baker 2010. Venues included bars, restaurants, karaoke bars, massage parlours, and brothels.

Figure 8: Sex workers per 100,000 adult males aged 15-65 in the population



Source: UNODC estimates⁴⁰

On the other hand, victims can be trafficked while still permitted a degree of freedom. In fact, some venues, such as karaoke bars, may lack the facilities to provide sex on the premises, so some movement off-site may be required. This would lead to an underestimate of the number of victims. Given these conflicting biases, the estimate provided by the Cambodian research is applied here.

In Cambodia, this implies that about 4% of the estimated 28,000 sex workers in the country are trafficked, or about 1,120 victims. Applying these ratios to Thailand, taking 4% of an estimated number of 140,000 sex workers would result in a total of around 5,600 victims.

Since, for the purposes of this threat assessment, we are looking into the transnational nature of the flow – not the total number of all victims in Cambodia and Thailand (certainly a larger number) – we need to know what proportion of a total estimated 5,600 victims in Thailand and 1,120 victims from Cambodia would have originated from neighbouring countries in the Greater Mekong Subregion.⁴¹

Regarding Thailand, based on historical data (2005-2010), approximately 150 foreign victims of sex trafficking are rescued annually. Almost all of these individuals would have come from Cambodia, Lao PDR and Myanmar.⁴² The next question is, approximately what percentage of the overall total

⁴⁰ For Thailand, this figure is based on recent estimates by the Ministry of Health and Mahidol University project (140,000 sex workers); for Cambodia, this is based on the estimate of 28,000 sex workers, see Steinfatt and Baker 2010: p. 44.

⁴¹ The assumption is that the number of foreign trafficked victims from outside the Greater Mekong Subregion would be quite small.

⁴² UNODC 2009: p. 185.

does this represent? Because average interception rates for rescuing sex trafficking victims in Southeast Asia are not established a European proxy is used. In Europe, the standing estimate is that between 3% and 5% of sex trafficking victims are detected annually. Thus, using the average interception rate (4%) and applying it to the figure of 150, there would be approximately 3,750 victims of sex trafficking in Thailand from neighbouring countries (150 multiplied by 100 divided by 4).

The above-referenced study into sex trafficking in Cambodia estimates that around 35% of victims were not Khmer but ethnic Vietnamese.⁴³ This translates to about 300 victims.⁴⁴ In 2009, Cambodian authorities reportedly assisted with the repatriation of 11 Vietnamese sex trafficking victims to Viet Nam.⁴⁵ Using again the average interception rate of 4% and applying it to the number 11, it is estimated that there would be approximately 275 sex trafficking victims from Viet Nam in Cambodia (11 multiplied by 100 divided by 4).

The income generated by an estimated 4,025 foreign victims (Thailand - 3,750 victims, Cambodia - 275 victims) is difficult to calculate, given the lack of data on prices and hours worked. Court testimony from victims suggests an average of six clients per day for about 25 days per month. Prices vary greatly depending on the locations, venues, and the services provided, but an average spend of US\$25 per client seems to be a conservative estimate.

These figures suggest that each trafficked sex worker generates about US\$45,000 in income for her trafficker per annum. With an estimated 4,025 trafficked victims in these sex industries, this would place the annual value at about **US\$181 million** in Cambodia and Thailand.

Given the gaps in the data and the use of proxy indicators for other countries and regions, these figures can only be considered very tentative estimates of the possible magnitude of the problem.

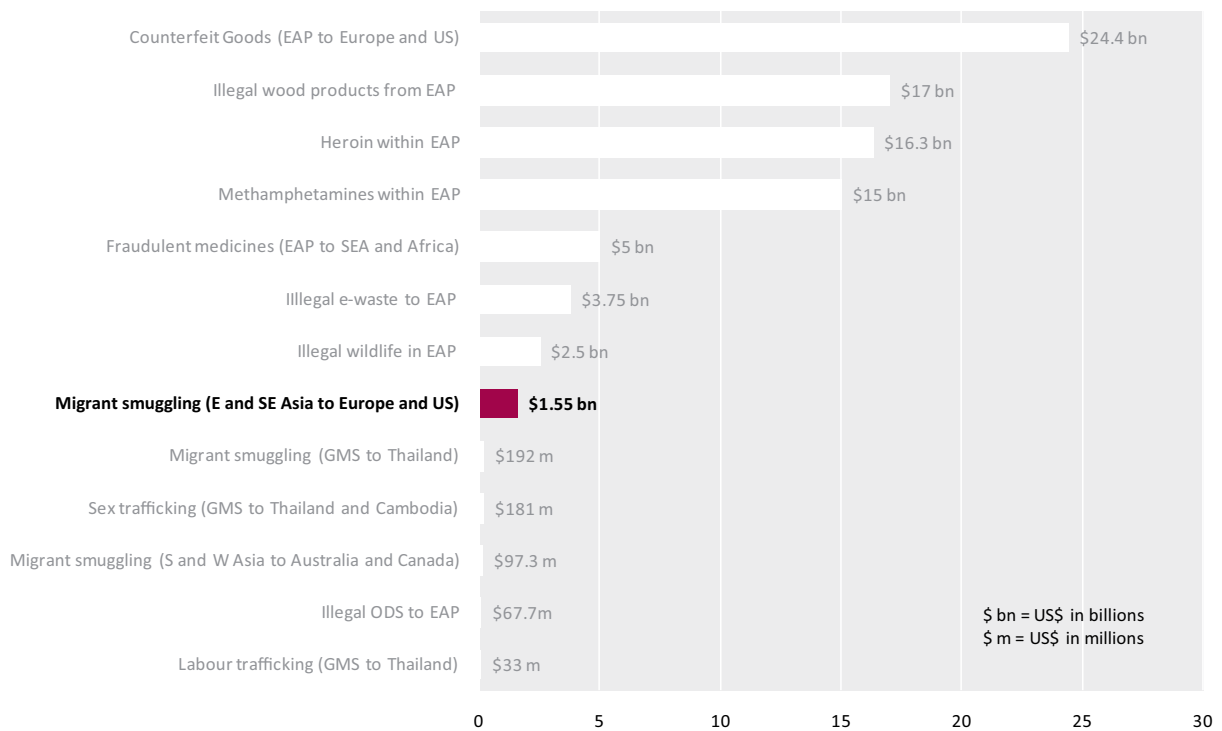
⁴³ Steinfatt and Baker 2010: p. 44. The study does not set out to estimate what proportion of these ethnic Vietnamese or Chinese were 'domestic' or 'foreign' sex trafficking victims from Viet Nam or other countries.

⁴⁴ It is probable that more than 50 of those 300 victims may constitute ethnic Vietnamese 'domestic' victims, given that around 13% of Cambodian nationals are of ethnic Vietnamese origin and a relatively large proportion of people of this ethnicity found in sex work.

⁴⁵ US TIP 2010. In general, limited data is available on foreign trafficking victims in Cambodia. In 2010, 500 Vietnamese trafficking victims were repatriated to Viet Nam, including 100 who had been trafficked to South Korea, Malaysia, and Singapore. Source: US TIP 2011.

Chapter 3

Migrant smuggling from East and Southeast Asia to the United States and the European Union



NATURE OF THE THREAT

<p>1. Deadly risks and loss of human life – smuggled migrants are exposed to deadly risks, including loss of life, en route to destination. Thousands of migrants die each year during the process of illegal migration.</p>	<p>2. Human rights abuses – irregular status of migrants creates vulnerabilities to discrimination, exploitation, and trafficking in persons. Smuggled migrants often end up with dangerous jobs. They are often excluded from health, education and other social welfare provisions.</p>
<p>3. Economic impact – the illegal economy creates unfair competition, and undermines wages and social protection, loss of legitimate tax revenue for governments.</p>	<p>4. Threat to state security – migrant smuggling is a high-profit / low-risk crime. It empowers criminals and undermines state security due to links with organized crime, violence, and corruption. People cross borders without the host states’ consent and knowledge.</p>
<p>5. Corruption – fuels corruption among public officials.</p>	<p>6. Cost of law enforcement – costs to the state to improve border security measures, conduct search and rescue operations (e.g. with maritime smuggling), and provide protection and assistance.</p>

1. What is the nature of the market?

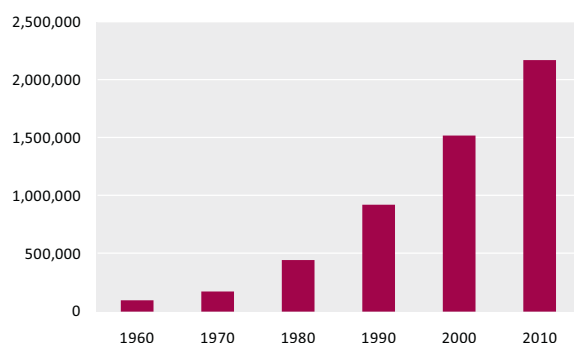
Due to the prominence of China and Viet Nam as source countries typifying these flows, this chapter will focus almost exclusively on these two states.

Though migration to Europe and the United States is nothing new, China's economic reforms of the 1980s greatly increased migrant flows. The Chinese-born population in the United States, for example, has grown five-fold since 1980 (see Figure 1), rising to 2.2 million people in 2010.¹ Viet Nam is, in many ways, following in the footsteps of China. Its economy is growing nearly as fast, and export-oriented industries have fed emigration.

Most of this migration is legal, but some is not. In 2010, an estimated 10.8 million irregular migrants were living in the United States, of which 130,000 were from China.² Based on the difficulties of making the journey successfully, it is reasonable to assume that most of those who entered through irregular channels employed the assistance of migrant smugglers.

China and Viet Nam are two of the most rapidly growing economies (see Figure 2), and have – in fact – recently experienced labour shortages.³ In contrast, both North America and Europe are still struggling with the recession brought about by the financial crisis of 2008. Irregular migration from Latin America to North America and from Africa to Europe has declined dramatically in response to diminishing job prospects.⁴

Figure 1: Size of the Chinese-born population in the United States



Source: McCabe 2012a and 2012b⁵

¹ This estimate is based on Census data and includes people born in Taiwan (Province of China). See McCabe 2012a.

² Hoefer and others 2011

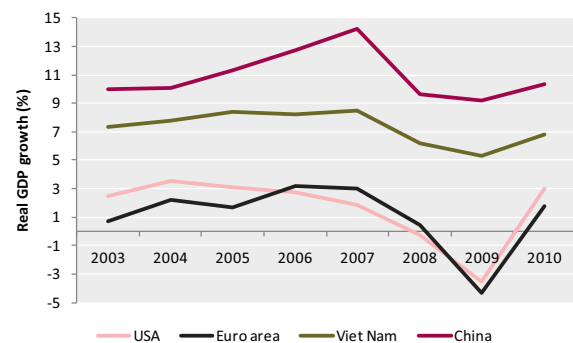
³ The World Bank 2011a

⁴ For example, see Orozco 2009; Passell and Cohn 2010.

⁵ These estimates include Taiwan (Province of China).

The exact destination of these migrants is not determined by economics alone. Most venture forth to join existing diaspora communities where they have family, friends or contacts. According to remittance flows, the largest Chinese communities in Europe are in Italy, Spain, and the United Kingdom. The largest Vietnamese communities are in France, Germany, and the Czech Republic.

Figure 2: Real GDP growth



Source: IMF, *World Economic Outlook*, 2011

The largest flow of remittances to China and Viet Nam are from migrants residing in the United States (see Figures 3 and 4). In 2010, over US\$12 billion in remittances was sent from the United States to China and over US\$4 billion from the United States to Viet Nam. Pulled towards existing communities, remittances and well established smuggling networks enable others to migrate or be smuggled. In the case of China, smuggled migrants are largely from Sichuan, Hunan, Anhui, Fujian, Guangdong, and Zhejiang.⁶ Both population data and deportation figures suggest that the main destinations are France, Germany, Italy, Spain, and the United Kingdom. The Fujian province of China is the point of origin for many irregular migrants destined for the United States,⁷ most of whom head for California or the greater New York area.⁸

Except for Sichuan and Hunan, these source areas are located in Eastern China and are among the more affluent provinces, which means that residents may be able to afford high smuggling fees.⁹ These six provinces, especially Fujian and Guangdong,

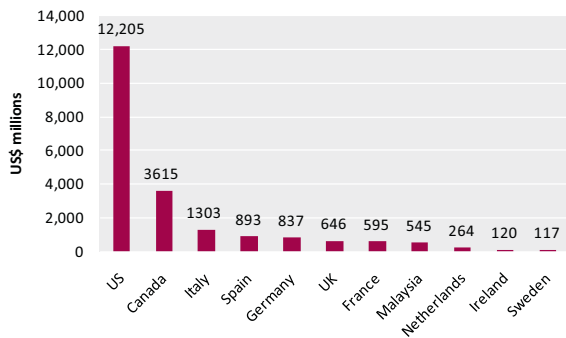
⁶ UNODC communication with the Joint Analysis and Strategy Centre on illegal Migration (GASIM) 2011; UNODC communication with the UK Border Agency (UKBA) 2011.

⁷ UNODC communication with the Human Smuggling and Trafficking Center (HSTC), United States 2011.

⁸ McCabe 2012a

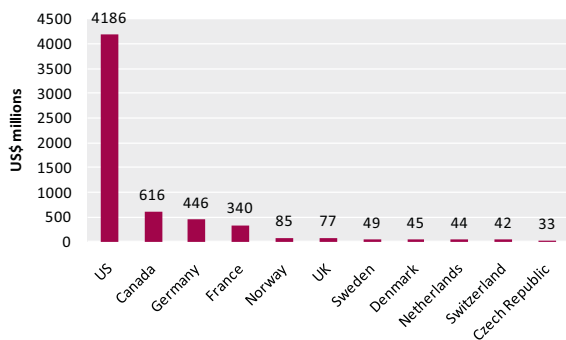
⁹ Skeldon 2011

Figure 3: Remittances to China in 2010, by country of origin (Top ten)



Source: The World Bank 2011b

Figure 4: Remittances to Viet Nam in 2010, by country of origin (Top ten)



Source: The World Bank 2011b

also have well-established histories of migration and residents have travelled for hundreds of years to find work in the United States and Europe.¹⁰

The majority of smuggled Vietnamese migrants, in particular to the United Kingdom, are from the northern provinces of Hai Phong and Quang Ninh.¹¹

As the source region or province varies, so does the profile of the smuggled migrants detected in the destination countries. German authorities report that most detected Chinese smuggled migrants are adults between 20 and 49 years of age,¹² but one-third are children nine years old and younger.¹³ The profile of

the detected Vietnamese smuggled migrants shows a narrower age range: 85% are between the ages of 10 and 39 years of age.¹⁴

Even within a national group, the profile of the smuggled migrant depends on the destination. Research indicates that the Vietnamese detected in Germany are fairly well-educated.¹⁵ French authorities report that the smuggled Vietnamese migrants they detect are both younger than in Germany (most in their late 20s) and less educated.¹⁶ There are a number of possible explanations for this difference. The Vietnamese population in Germany is well established, originating from a formal worker exchange programme in the 1980s, and this community may attract better-educated migrants. Many of those detected in France may be destined for the United Kingdom, some to become workers in indoor cannabis cultivation operations.¹⁷

2. How is the smuggling conducted?

The image most commonly associated with Chinese migrant smuggling is that of the *Golden Venture*, a cargo ship that foundered off the coast of New York in 1993. The ship had embarked from Thailand and spent 112 days at sea before running aground with its cargo of 186 Chinese migrants. Ten of these people died attempting to swim ashore.¹⁸

Although the sea route is still used, new trends in the smuggling business have emerged since the *Golden Venture* tragedy. Today, most smuggled Chinese and Vietnamese migrants fly as close as possible to their destination, landing in countries where they can enter without a visa or where visa controls are weak, and then move clandestinely the rest of the way. The smugglers help with both phases of the journey – the preparation of the necessary paperwork and the illicit border crossings.

Migrant smuggling from China proceeds along a number of well-established paths, although the exact route a migrant will take is rarely predetermined.

¹⁰ Zhang 2008

¹¹ UNODC communication with Vietnamese Immigration Department, Ministry of Public Security.

¹² UNODC communication with the Human Smuggling and Trafficking Center (HSTC), United States 2011; UNODC communication with the Austrian Federal Criminal Intelligence Service 2011.

¹³ UNODC communication with GASIM 2011.

¹⁴ UNODC communication with GASIM 2011

¹⁵ UNODC communication with GASIM 2011

¹⁶ UNODC communication with the Office Central de Répression de l'Immigration Irrégulière et de l'Emploi d'Etranger (OCRIEST) 2011.

¹⁷ Europol 2011b

¹⁸ Zhang 2008. For example, Zhang reports that smugglers are using peripheral locations for migrant smuggling, such as the U.S. Virgin Islands, Guam, Mexico, and Canada. Often these ships or fishing trawlers leave from Hong Kong (China).

Vietnamese indoor cannabis cultivation

Vietnamese organized crime groups are gaining a reputation as specialists in cannabis cultivation, particularly indoor cultivation. Vietnamese cannabis farms have been detected in Australia, Canada, the Czech Republic, Germany, Poland, the United Kingdom and the United States. The situation in the United Kingdom has been particularly well documented with police raiding an average of 500 cannabis farms per month in 2010. Although many of these were controlled by British criminal organizations, Vietnamese gardeners were often preferred over local labour.¹⁹

Research suggests that migrants are encouraged to work in cannabis farms as a way of rapidly paying off the debts accumulated through the process of smuggling.²⁰ Exploitation and trafficking in persons, however, can occur. In 2010, the UK's Child Exploitation and Online Protection Centre identified 58 Vietnamese children who were allegedly trafficked, and of these, 39 were working on cannabis farms.²¹

One common technique is for migrant smugglers to arrange for migrants to travel legitimately from China to Latin America or Cuba via the United Arab Emirates and then Russia by air. From Latin America or Cuba, Chinese and local smugglers arrange onward air travel to Mexico (e.g., Cancun), although a small number are moved by sea given the short distance from coast to coast (509 kilometres). Cuba is a popular departure point for maritime routes to southern Florida or the Caribbean Islands, although maritime entry to the United States is – due to the ease of detection on a well-patrolled coastline – far more difficult than crossing at the land border. Countries in Central and South America are also commonly used to reach Mexico with the aid of Chinese and local smugglers (such as ‘coyotes’ or ‘polleros’). Once close to the United States border, authorities believe that most smuggled migrants destroy their documentation as it is common to find sets of partially destroyed documents just south of the border. Smuggled in trucks or on foot, authorities suspect that Chinese migrants are held in Mexican safe houses until onward passage can be arranged. The journey to the United States – Mexico border is notoriously dangerous. As a result, migrant smuggling via Latin America is constantly changing. Immigration enforcement, corrupt officials, immigration policies, and even weather conditions affect the actions of smugglers (including the routes used, *modus operandi*, and fees charged).²²

Ethnic Chinese migrant smugglers (often referred to as ‘snakeheads’) are well versed in international visa waiver agreements, and are quick to exploit any opening.²³ Faced with a sudden influx of Chinese migrants in the mid-2000s, countries like Colombia and Ecuador had to adapt their visa regimes. Even where conditions appear strict on paper, countries without the capacity or motivation to scrutinize visa applications may become conduits for migrant smuggling.

In many countries, Chinese tour groups are granted visas under the Approved Destination Status visa programme. Any country wishing to receive Chinese tour groups must assent to this programme, under which blanket visas are granted to licensed Chinese tour operators. It has been alleged that certain operators will charge an additional fee for those wishing to disappear part way through their tour. Although tour operators are subject to sanctions if their charges abscond, this may be a source of smuggled migrants in some countries.

A number of countries in Africa will award visas upon arrival for a fee, and with growing Chinese engagement with the continent, smuggling through Africa is likely to increase.²⁴ The United Kingdom Border Agency, which continues to monitor passenger movements out of Hong Kong (China), recently observed a shift from Latin American and Caribbean transit countries to African ones.

¹⁹ UK Association of Chief Police Officers 2012

²⁰ Silverstone and Savage 2010

²¹ Child Exploitation and Online Protection Centre 2010

²² UNODC communication with the Human Smuggling and Trafficking Center (HSTC), United States 2011.

²³ UNODC communication with the Human Smuggling and Trafficking Center (HSTC), United States 2011.

²⁴ UNODC communication with the Canada Border Services Agency (CBSA) 2011.

For countries and territories that do require visas, forgery and fraud are big issues. European authorities report that the majority of smuggled Chinese nationals enter Europe by air using a combination of genuine as well as forged or fraudulently obtained documentation from China, Hong Kong (China), Japan, Malaysia, the Republic of Korea, Singapore, and Taiwan (Province of China).²⁵ Mexico does not require visas for nationals of Japan or Hong Kong (China), so Chinese nationals may enter with illicitly obtained passports from these countries and territories.

Visa fraud, carried out with the assistance of skilled specialists, is often based in China and Thailand. Fake invitations to attend conferences, business meetings, cultural events, or trade shows are commonly used by smugglers to secure genuine visas. Admission forms to educational programmes are also used.²⁶

An emerging migrant smuggling scheme involves employment-based fraud.²⁷ False companies are created in Europe and “sold” to Chinese nationals. A Chinese citizen applies for residency permits for himself and his family as the Chief Executive Officer (CEO) of the firm he owns. Others may receive permits as employees of this company.

Another scheme popular with Chinese smugglers is marriage fraud. Arranged marriage to a European or United States citizen is an effective and relatively fast way to gain residency in Western countries. In 2006, Europol detected more than 8,000 cases of marriage fraud, but the number of cases is undoubtedly much higher.²⁸

It is almost impossible to stop fraudulent schemes at the port of entry because these migrants hold genuine passports or visas - the only illegal aspect is their intentions. Bribery of checkpoint personnel is often used to ensure safe departure. To combat corruption, the Chinese government has instituted mandatory rotations of border personnel.²⁹

Because Chinese citizens cannot usually fool their own border protection agents, many use their genuine passports to depart the country. Once outside, many switch to forged or fraudulently obtained documentation. Documents may be prepared in China and sent to Europe. At a pre-selected point (e.g., when in transit at an airport), the smuggler provides new travel documents and tickets to the chosen destination. It is common practice to use Asian passports that do not require visas for the European Union, such as those of Japan, Hong Kong (China), Malaysia and the Republic of Korea.³⁰ This is indicative of a growing trend. In Europe, between 2009 and 2010, Frontex reported a 12% increase in the use of fraudulent travel documents. While one-third of these were forged passports, 15% of the fraudulent travel documents were altered authentic passports.³¹

As Latin America is the preferred flight destination for smuggled Chinese migrants headed for North America, Eastern Europe is often the transit region of choice for those headed for Western Europe. A typical route would follow the following pattern. First, arrive in Russia (Moscow in particular), the Ukraine or Belarus by plane. Then travel overland into Schengen countries³² such as Poland, Slovakia, Czech Republic, Hungary, Germany, or Austria. Then travel to the intended target countries of the United Kingdom, France, Belgium, or the Netherlands, typically by car, lorry, or train.³³ Italy and Spain are also popular destinations.³⁴ Another popular route is to travel by air to Moscow or Belgrade and then travel by vehicle or on foot to Greece via the former Yugoslav Republic of Macedonia. Once in Greece, smuggled migrants continue on to their chosen European Union destination.³⁵

Some migrants make the journey to Europe entirely by land. For example, a Chinese migrant arrives in

²⁵ UNODC communication with GASIM 2011; UNODC communication with OCRIEST 2011

²⁶ UNODC communication with OCRIEST, 2011

²⁷ Europol 2011a

²⁸ Europol 2010b

²⁹ Zhang 2008

³⁰ UNODC communication with ORCIEST, 2011

³¹ Europol 2011b

³² The countries that are part of the Schengen Area allow the freedom of movement within and between the members. This means that irregular migrants can move across national borders within these countries without needing to officially cross at border checkpoints.

³³ UNODC communication with the Austrian Federal Criminal Intelligence Service 2011; UNODC communication with GASIM 2011.

³⁴ UNODC communication with the Austrian Federal Criminal Intelligence Service 2011; UNODC communication with GASIM 2011.

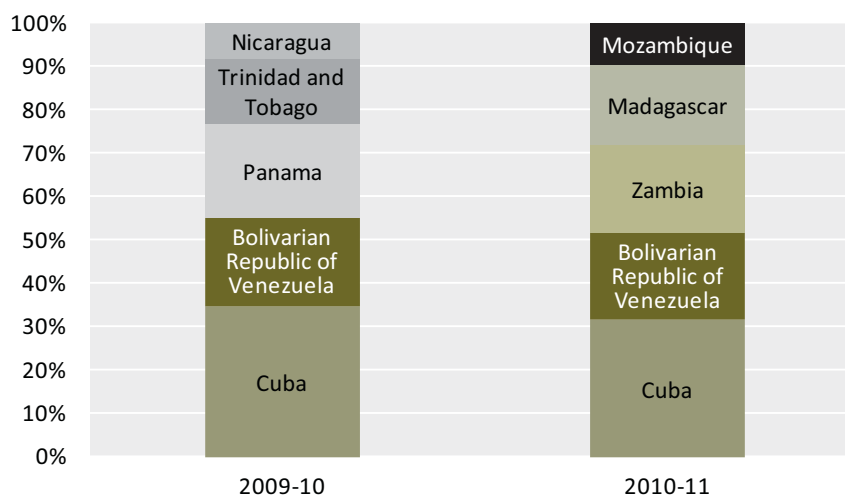
³⁵ Europol 2011c

Moscow via the Trans-Siberian railway. A smuggler meets the train and takes the migrant to a hotel until another smuggler takes him or her to Prague by train. A car then meets the train to take the migrant to the German border where the green border (i.e., not an official border entry point, but across a field, forest, or river) is crossed either on foot or by lorry.³⁶ From Germany, the smuggled migrant remains or proceeds to the final preferred destination.

From Viet Nam, organised smuggling networks use a range of methods to smuggle migrants into and within Europe. For example, it is common for smugglers to provide migrants with forged or altered documents or genuine documents under false identities, as described above, before leaving Viet Nam or en route, often with the help of corrupt consular officials. The migrants fly to Moscow, Minsk, or Kiev and then continue overland into the European Union. Once the migrants reach Europe, the travel documents are usually returned to the criminal network.³⁷ If the United Kingdom is the preferred destination, Iraqi Kurdish smuggling networks based in Belgium and France are subcontracted for this service. In and around the French port of Calais, migrants wait in illegal camps, often for long periods of time, to cross the English Channel into the United Kingdom.³⁸ They are often transported in vans with hidden compartments or concealed among commodities in lorries.³⁹

Another popular smuggling route is from Turkey to Greece, onwards to Italy, and through Central Europe to Belgium, before continuing to the United Kingdom as the final destination.⁴⁰ Iraqi nationals are known to smuggle hundreds of migrants along this route mainly from Iraq and Afghanistan, but also from Viet Nam and China.⁴¹ Smuggled into Belgium

Figure 5: Top five destinations of “suspicious” Chinese passengers travelling out of Hong Kong (China) in 2009-2010 and 2010-2011



Source: United Kingdom Border Agency 2011⁴²

by an Indian network, the migrants are then handed over to the Iraqi smuggling network who facilitate the onwards journey to the United Kingdom. Although it is not yet known if the Indian and Iraqi networks were subcontracted by Vietnamese and Chinese smuggling networks, both groups are known to outsource services to locally based networks (e.g., Czech, Iraqi, Serbian and Turkish) in transit countries.

On finding a suitable smuggler, Vietnamese smuggled migrants pay a deposit from US\$1,000 to US\$2,000 so the smuggler can obtain the required fraudulent documentation.⁴³ The passport is not given back to the migrant until full payment is received. Once the migrant has reached the European Union (e.g., Czech Republic), the migrant is asked if the United Kingdom is the final destination. If yes, the migrant pays an additional fee to an associate of the European-based smuggling coordinator with cash carried from Viet Nam.⁴⁴ Typical amounts are around US\$600 for the journey to France, and then an additional US\$4,700 from France to the United Kingdom (which requires leaving the Schengen area).

All financial flows between Viet Nam and Europe are managed internally by the smuggling network through a hawala-like system. A broker in Viet Nam

³⁶ Chin 2007

³⁷ COSPOL 2011

³⁸ UNODC communication with OCRIEST 2011

³⁹ Europol 2011b

⁴⁰ Europol 2010a

⁴¹ Europol 2010a

⁴² UNODC communication with UKBA 2011

⁴³ Neske 2011

⁴⁴ Neske 2011

is given the cash and arranges payment to another broker in the European Union.⁴⁵ If the smuggling operation is unsuccessful, a portion of the fee paid is refunded to the migrant's family.⁴⁶

3. Who are the smugglers?

Chinese and Vietnamese smuggling networks are capable of managing all phases of smuggling from the source to the destination countries. Yet, both groups are known to outsource travel through transit countries as well as entry into the destination countries to locally based networks (e.g., Czech, Hungarian, Iraqi, Serbian, and Turkish networks).⁴⁷ These are business relationships requiring frequent contact between smugglers of the two networks in order to ensure that both parties adhere to their respective agreements.⁴⁸ At times, there is even collusion between Chinese and Vietnamese networks. For example, Chinese smugglers see the Vietnamese in the Czech Republic as 'local specialists' because of the well-established diaspora.⁴⁹

Located at various points along the different routes, Chinese smugglers are primarily male between 20 to 50 years of age with no prior criminal history.⁵⁰ The Chinese smugglers based in the European Union have typically lived abroad, legally, for a long time. Thus, they have the connections and networks needed in transit countries to facilitate the various phases of the smuggling process.⁵¹ Although Chinese smuggling networks are male-dominated, women are also involved. It is estimated that approximately one out of eight Chinese smugglers are women.⁵² Less is known about the smugglers of Vietnamese migrants even though Vietnamese smuggling networks are well established throughout Europe.

4. How big is the flow?

Not all irregular migrants are smuggled. However, while survey data on the share of irregular Chinese and Vietnamese migrants is not available, there are many reasons to believe that most are smuggled.

These migrants pay a large amount to be smuggled, many times their average annual income in the country. If there were easy alternatives to paying smugglers, it is unlikely that the smugglers would be able to charge such large amounts. The distance to be travelled to the destination countries is great and often involves transiting countries with which the migrants are unlikely to have much familiarity. For example, migrants may be able to enter Kosovo or certain African states without a visa, but they would have to be exceptionally resourceful to proceed on their own from there. The vast majority of migrants from origins much closer to the destination countries, like those from Mexico, make use of smugglers. Given this knowledge, it would be surprising if Chinese migrants did not make use of smugglers.

In the year 2000, the United States government estimated that 30,000 to 40,000 Chinese migrants were being smuggled into the United States each year. In 2007, one academic placed this number between 50,000 and 100,000.⁵³ While these numbers represent only 1% to 6% of the recognised 2.2 million Chinese-born people in the United States, the range represents between one-quarter and three-quarters of the 130,000 irregular Chinese migrants the United States government estimates were present in that country in 2010.⁵⁴ In other words, the estimates of the annual inflow are almost as large as the entire irregular community.

This would suggest one of several possibilities;

- migrants entering irregularly are normalising their status at a very rapid rate;
- there are high rates of migrant return, so that migrants are leaving almost as fast as they are arriving;
- the size of the Chinese irregular migrant population has been substantially underestimated;
- the inward flow has been substantially overestimated.

In recent years, around 2,000 Chinese irregular migrants have been detected annually. Of the 1,970 Chinese irregular migrants detected in 2010,⁵⁵ 1,157

⁴⁵ Neske 2011

⁴⁶ Neske 2011

⁴⁷ Europol 2011c

⁴⁸ Europol 2011c

⁴⁹ COSPOL 2011

⁵⁰ Zhang and Chin 2004

⁵¹ Neske 2011

⁵² Soudjin 2006

⁵³ Zhang 2007

⁵⁴ Hoefler and others 2011

⁵⁵ Hoefler and others 2011

(59%) were detected at the border.⁵⁶ The other 41% (813 migrants) were detected inside the country. These people may have been detected the same year they entered, or they could have been resident without documentation for years.

Based on extensive survey data, the intercept rate for Mexican migrants attempting to cross the border clandestinely is about 20%.⁵⁷ If the same rate were applied to the lower end of the official US estimates for Chinese being smuggled, this would imply as many as 6,000 illegal border crossers in 2010. Survey data suggests that as many as 45% of irregular migrants simply overstay their visas.⁵⁸ Again, applying this rate to Chinese migrants would imply that another 6,000 irregular migrants could be visa over-stayers, yielding a total of around 12,000 irregular migrants in 2010. This is less than the estimates cited above, but reasonable if the true size of the resident Chinese irregular migrant population was really 130,000 in that year.

In 2008, the cost cited for Chinese migrant smuggling to the United States was around US\$50,000,⁵⁹ but more detailed European data suggests a range of prices depending on the exact service provided – provision of a false conference invitation would cost considerably less than an arranged marriage or a circuitous clandestine border crossing arrangement. Assuming this premium price is paid by all migrants, and assuming virtually every irregular migrant had used a smuggler, the 2010 flow could be valued at as much as **US\$600 million**. The actual value is probably less, however, and there is a need for survey data to confirm these estimates.

The number of Vietnamese being smuggled to the United States is likely much lower. For example, only some 55,000 Vietnamese received non-immigrant visas to the US in 2010, compared with over 1 million Chinese. Since visa overstays contribute about half of all irregular migrants, this would suggest that Vietnamese irregular migrants are about 5% of the Chinese total, or fewer than 1,000 migrants, with a resulting flow worth at most **US\$50 million**.

⁵⁶ Sapp 2011

⁵⁷ UNODC 2010

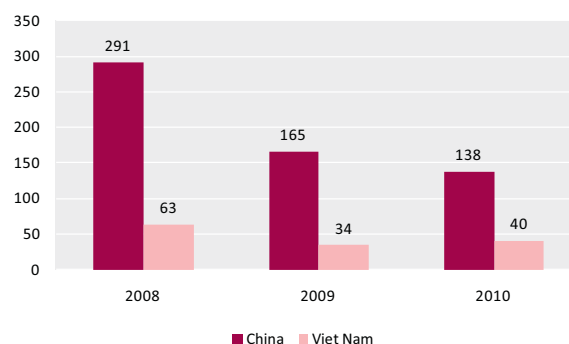
⁵⁸ Pew Hispanic Center 2006

⁵⁹ Zhang 2008

The number of irregular Asian migrants detected in Europe is much higher. A small and declining number of Chinese and Vietnamese irregular migrants are apprehended crossing between official border points (see Figure 6). A larger but also declining number of Chinese and Vietnamese irregular migrants are denied entry at the border, including migrants concealed in vehicles to those arriving in an airport without a visa (see Figure 7). Combining the two together, there were 1,842 border detections of Chinese irregular migrants in 2010. Although the data is not directly comparable, both of these figures appear to be smaller than in the United States.

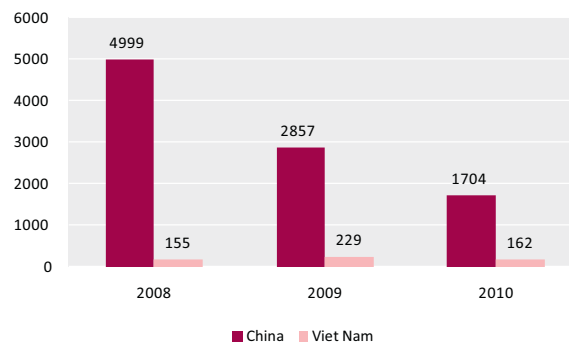
But a large number – between 15,000 and 20,000 per year – of Chinese and Vietnamese irregular migrants are discovered staying in the EU illegally. Either they managed to successfully enter the EU clandestinely and were only caught later, or they entered legally and overstayed their visas.

Figure 6: Illegal entries between official border crossings



Source: Frontex Risk Analysis Network (FRAN) 2011⁶⁰

Figure 7: Refusals of entry to the EU



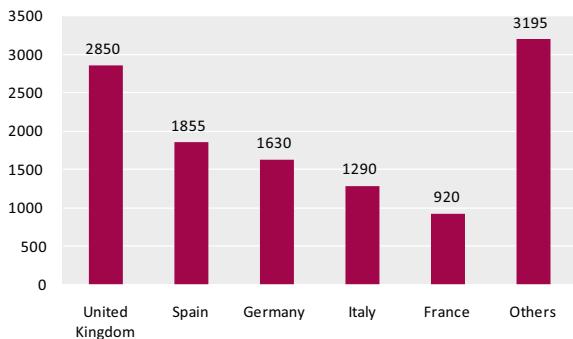
Source: Frontex Risk Analysis Network (FRAN) 2011⁶¹

⁶⁰ UNODC communication with Frontex 2011

⁶¹ UNODC communication with Frontex 2011

Just five countries are home to the majority of the Chinese-born population in Europe: Italy, Spain, the UK, France, and Germany. Based on historic data, it appears that the authorities in these countries apprehend around 12,000 illegally-resident Chinese each year, or about five to six times as many as the US (see Figure 8). If detection rates were similar, this would imply as many as 72,000 Chinese irregular migrants entered the EU in 2010, but this would be difficult to believe: the Chinese-born population of Europe (around 750,000) is about one-third the size of that in the United States.

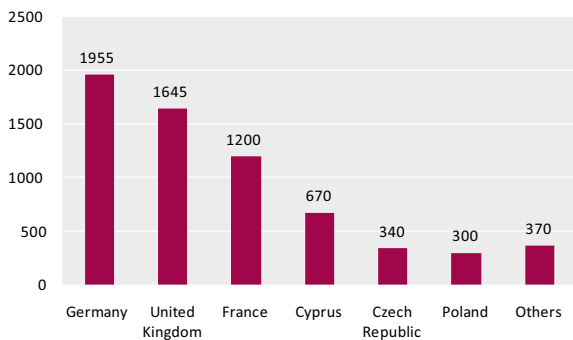
Figure 8: Chinese found to be illegally present in EU countries in 2011



Source: Eurostat database 2012

It is possible that irregular migrants make up a much larger portion of the entire Chinese-born population of Europe than in the US. The European Union has a more generous set of welfare provisions, which could make it both more reluctant to grant licit residence and a more attractive destination to potential migrants. Perhaps irregular migrant detection rates, particularly for visa over-stayers, are much higher than in the US because irregular migrants represent

Figure 9: Vietnamese found to be illegally present in EU countries in 2011

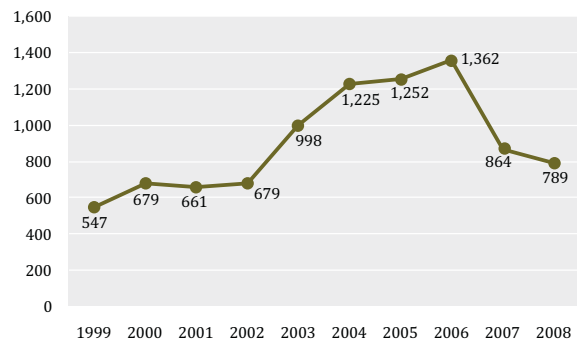


Source: Eurostat database 2012

a greater potential cost to EU member states. If detection rates were twice as high, this would suggest that there are up to 36,000 Chinese irregular migrants in the EU.

Fees range from US\$7,800 to US\$27,000 for smuggling migrants from China to the European Union.⁶² Premised on the basic assumption that all the irregular migrants use smugglers, and using an average price of around US\$17,000, this suggests an income for smugglers of as much as **US\$600 million** per year.

Figure 10: Chinese deportable aliens located in the US



Source: US Department of Homeland Security 2009

Roughly half as many Vietnamese are detected as Chinese, suggesting a flow of perhaps as many as 18,000 migrants. For Vietnamese irregular migrants, Europol reports that smuggling services to the European Union cost from US\$9,450 to US\$31,000.⁶³ If Vietnamese smugglers are paid the same as Chinese, this would result in an income for smugglers of around **US\$300 million**. This would imply a European flow for both national groups worth about US\$900 million per year.⁶⁴

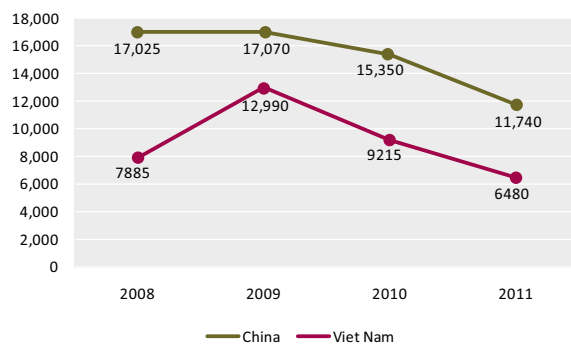
⁶² UNODC communication with GASIM 2011. With ADS schemes, travel agencies are said to charge a fee of US\$6,750 for travellers wishing to remain illegally in the European Union at the end of the trip, according to the Europol 2011c. To reach the United Kingdom, the cost is higher, with smuggling networks charging approximately US\$33,000, according to Europol 2011c. Schemes involving immigration fraud (e.g. fake companies to secure residency permits) cost even more, with smugglers charging US\$30,000 to US\$44,500 per person, according to the Europol 2011a.

⁶³ Europol 2011a. Other research indicates costs are lower, with a smuggling operation to the Czech Republic costing US\$7,000, which includes fraudulent documentation. A trip to reach the United Kingdom costs around US\$20,000 to US\$22,000. See Neske 2011.

⁶⁴ Please note that the estimated numbers in this chapter are drawn by employing various published sources which are not official national data approved by either the China or Viet Nam government.

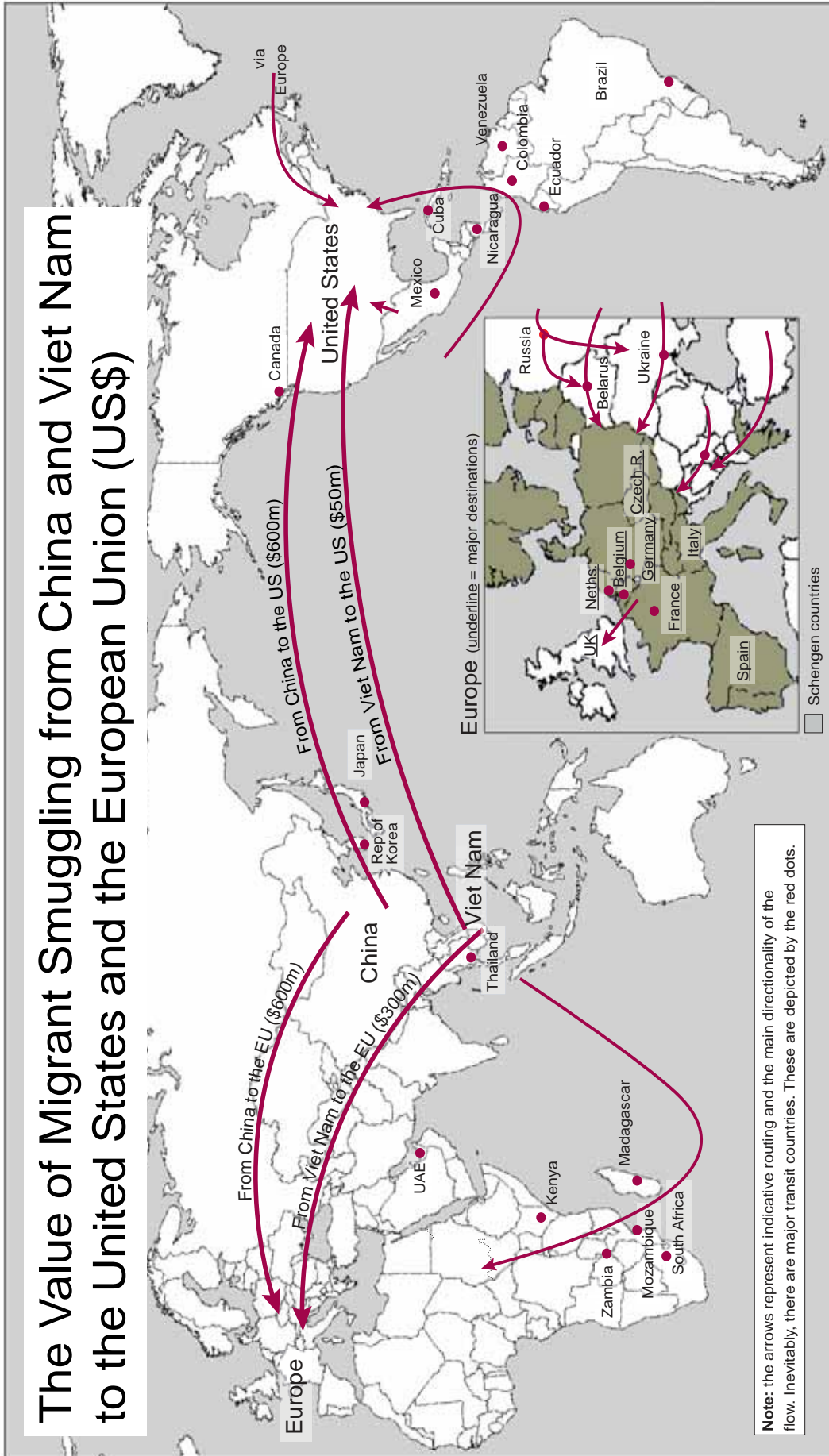
After a peak in the mid-2000s, the number of irregular Chinese migrants detected in the US has declined in recent years. The number of irregular migrants detected in Europe from both China and Vietnam are declining. Since there are no indications of declines in enforcement, these changes likely represent a decline in flow of irregular migrants.

Figure 11: Total number of Chinese and Vietnamese found to be illegally present in EU countries



Source: Eurostat database 2012

The Value of Migrant Smuggling from China and Viet Nam to the United States and the European Union (US\$)

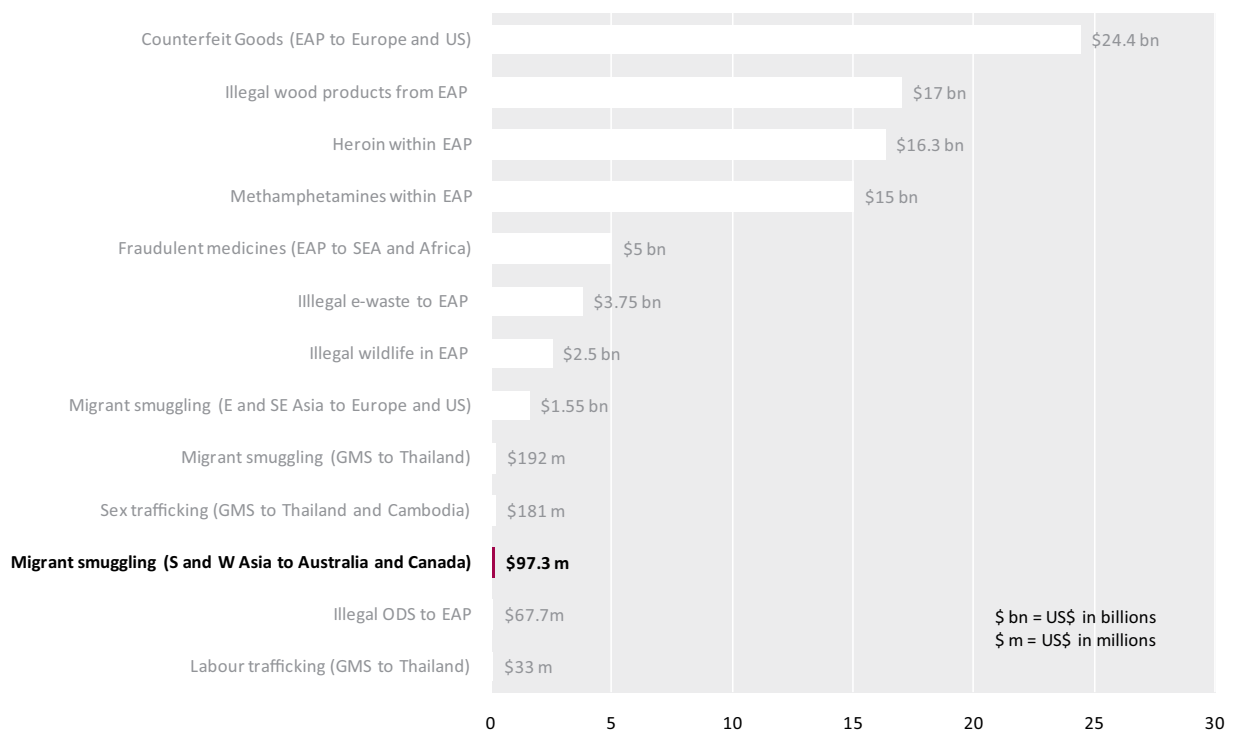


The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC

Chapter 4

Migrant smuggling from South and West Asia through Southeast Asia to Australia and Canada



NATURE OF THE THREAT

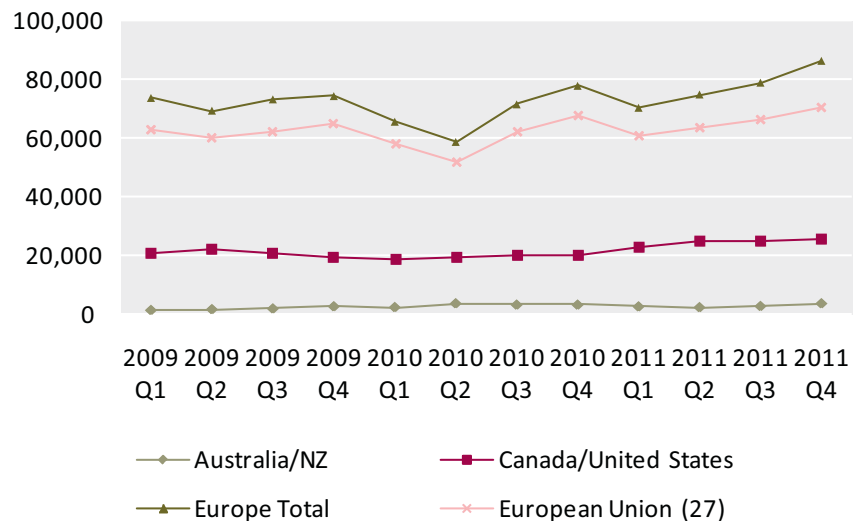
<p>1. Deadly risks and loss of human life – smuggled migrants are exposed to deadly risks, including loss of life, en route to destination. Thousands of migrants die each year during the process of illegal migration.</p>	<p>2. Human rights abuses – irregular status of migrants creates vulnerabilities to discrimination, exploitation, and trafficking in persons. Smuggled migrants often end up with dangerous jobs. They are often excluded from health, education and other social welfare provisions.</p>
<p>3. Economic impact – the illegal economy creates unfair competition, and undermines wages and social protection, loss of legitimate tax revenue for governments.</p>	<p>4. Threat to state security – migrant smuggling is a high-profit / low-risk crime. It empowers criminals and undermines state security due to links with organized crime, violence, and corruption. People cross borders without the host states’ consent and knowledge.</p>
<p>5. Corruption – fuels corruption among public officials.</p>	<p>6. Cost of law enforcement – costs to the state to improve border security measures, conduct search and rescue operations (e.g. with maritime smuggling), and provide protection and assistance.</p>

The dynamics behind the smuggling of migrants from the Middle East as well as West and South Asia are complex because a large proportion of smuggled migrants are either refugees or intend to claim asylum upon reaching their destination.¹ Consequently, the smuggling of asylum-seekers presents particular policy challenges for destination countries, such as Australia and Canada. On the one hand, such destination countries need to maintain sovereign control over their borders and manage the flow of irregular migrants. On the other hand, these countries are also obliged, through their international commitments, to respect the rights of asylum-seekers and protect refugees.²

The main focus of this chapter is on the smuggling of migrants from Afghanistan, the Islamic Republic of Iran, Iraq, and Sri Lanka, and stateless individuals who travel through Southeast Asia in order to enter Australia and Canada by sea. Of the irregular

maritime arrivals who lodge asylum applications in Australia, the majority are from the aforementioned four countries. Canadian authorities are currently largely concerned about the smuggling of Sri Lankan Tamils by sea after two boats were intercepted in 2009 and 2010.

Figure 1: Quarterly asylum claims submitted in selected industrialized regions, 2009 – 2011



Source: UNHCR 2012

Who is an asylum-seeker?

An asylum-seeker is an individual who has sought international protection and whose claim for refugee status has not been determined yet.

As part of its obligation to protect refugees on its territory, the country of asylum is normally responsible for determining whether an asylum-seeker is a refugee or not. This responsibility is often incorporated in national legislation of the country and, for State Parties, is derived from the 1951 Convention Relating to the Status of Refugees.

Source: UNHCR

1. What is the nature of the market?

People migrate continuously with the help of smugglers for a range of reasons – to seek employment and higher earnings, to reunite themselves with their families, to flee internal conflict, persecution, and hardship, to benefit from better education, or to find adventure overseas.

A significant factor that fuels migrant smuggling in the Middle East as well as South and West Asia is past and ongoing internal conflicts which have led to the displacement of people fleeing persecution, war, and economic hardship. Past conflicts or ongoing conflicts (or both) in Afghanistan, Iraq, and Sri Lanka have caused people to seek asylum in developed countries, including Australia and Canada. According to the United Nations High Commissioner for Refugees (UNHCR), in 2011, Afghans (35,729) and Iraqis (23,460) were among the top source countries of asylum-seekers in 44 selected industrialised countries. The Islamic Republic of Iran (18,128), Pakistan (18,141), and Sri Lanka (8,521) were also important source countries.³

¹ West and South Asia comprise the countries of Afghanistan, Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Cyprus, Georgia, India, Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, the Maldives, Nepal, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sri Lanka, Syrian Arab Republic, Turkey, United Arab Emirates, and Yemen.

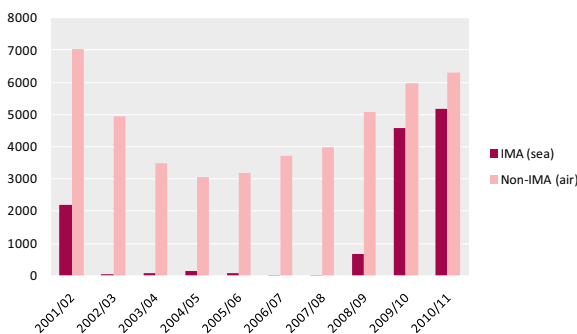
² Koser 2011

³ UNHCR 2012

The arrival of smuggled asylum-seekers from Afghanistan, the Islamic Republic of Iran, Iraq, Sri Lanka, and stateless individuals by boat has prompted intense public debate in Australia and Canada. Hence, it is important to put these maritime arrivals in context. First, the vast majority of refugees flee to, and subsequently reside in, neighbouring countries.⁴ Second, as Figure 1 above shows, the majority of people who do seek asylum further abroad submit claims in European countries.⁵

The number of people seeking asylum in Australia has fluctuated considerably over the decade. Smuggled migrants who arrive by boat are classified as ‘Irregular Maritime Arrivals (IMAs)’ and those who arrive by air as ‘Non-Irregular Maritime Arrivals (non-IMAs)’. From 2001 to 2011, the number of asylum applications lodged by non-IMAs averaged 4,681 per annum with a range from 3,062 to 7,026.⁶ There is much greater variation in the number arriving by sea (IMAs). The annual average was 1,312 from a low of 21 to a peak of 5,175.⁷ In the 12 months to 30 June 2011, 55% of onshore asylum applications were lodged by migrants who arrived by air and 45% by sea (see Figure 2). A higher proportion of asylum-seekers who reach Australia by boat were successful in their applications. Of final protection determinations in 2010 to 2011, 90% of arrivals by sea were granted protection visas compared to just 44% of those who arrived by air.⁸

Figure 2: Number of applications lodged in Australia (onshore) for protection visas, 2001 – 2011



Source: Australia Department of Immigration and Citizenship (DIAC), 2011⁹

⁴ UNHCR 2010

⁵ UNHCR 2012

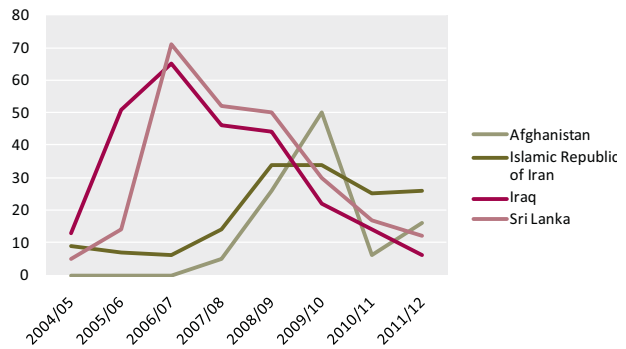
⁶ UNCHR 2012

⁷ UNODC communication with DIAC 2011. Numbers differ from the data presented in ‘How Big is the Flow’ section because data presented in Table 3 is according to financial year.

⁸ Markus 2012

⁹ DIAC 2011; also see Markus 2012.

Figure 3: Asylum claims lodged by Afghan, Iranian, Iraqi and Sri Lankan nationals while in Australia after arrival by air

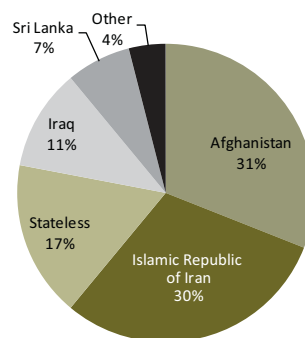


Source: DIAC systems

Out of the irregular maritime arrivals who lodged asylum applications in 2010 to 2011 in Australia (see Figure 3), the majority originated from Afghanistan (31%), the Islamic Republic of Iran (30%), Iraq (11%), and Sri Lanka (7%). A further 17% were stateless, of which a proportion were likely Rohingyas from Myanmar, who are not recognised as citizens by the Myanmar government (see Figure 4). A notable trend is the rise in smuggled migrants from the Islamic Republic of Iran – 30% in 2010-2011 compared to 4% in 2009-2010.¹⁰

The majority of smuggled migrants from Afghanistan, the Islamic Republic of Iran, Iraq, and Sri Lanka are single males below 40 years of age (see Figure 5). In 2010-2011, of arrivals by sea, 83% were male (4,308 out of 5,175), with the largest proportion between 18 to 30 years old (44%).¹¹

Figure 4: Refugee status determination requests by top countries of citizenship (2010 –2011) in Australia by irregular maritime arrivals

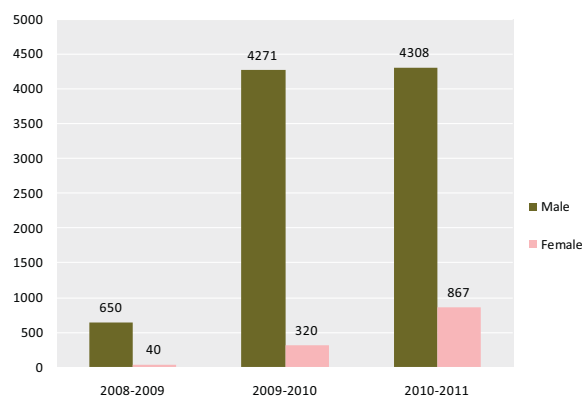


Source: DIAC 2011

¹⁰ DIAC 2011

¹¹ DIAC 2011

Figure 5: Australian irregular maritime arrival refugee status determination requests received by sex



Source: DIAC 2011

It is often difficult to distinguish bona fide refugee applicants from those irregular migrants who use asylum and refugee protection systems to facilitate their travel and entry into the destination country. People not in need of protection, as well as the migrant smugglers who facilitate their movement, also resort to asylum channels in an attempt to gain temporary or permanent stays in countries such as Australia or Canada. At the same time, genuine asylum-seekers and refugees also seek the assistance of migrant smugglers.

Asylum-seekers are an important clientele for people smugglers. Strengthened law enforcement activities in transit and destination countries means it is often more difficult for asylum-seekers to reach countries of their choice. Consequently, individuals employ the services of human smugglers for their specialised knowledge (e.g., the least risky routes) to reach certain countries. Australian authorities believe that migrant smugglers are well attuned to changing government policies and aim to exploit 'softer' enforcement practices through whatever means and routes available to them.¹²

In addition to the prospects of being granted asylum, other major pull factors are existing communities and strong diaspora ties in Australia and Canada. Canada, for example, has the largest Tamil population (over 300,000) outside Sri Lanka and India. Under the circumstances, it is not surprising that all of the smuggled Tamils onboard the *Ocean Lady* and the *MV Sun Sea* ships in 2009 and 2010 made asylum claims when they reached

¹² UNODC communication with DIAC 2011

Canadian shores.¹³ Existing social networks provide potential migrants or asylum-seekers with trusted information, financial loans for smuggling fees, and assist with immediate arrival challenges, such as overcoming language barriers in addition to finding accommodation and employment. Social networks can also act as advocates as the Canadian Tamil Congress did in the case of the detained smuggled asylum-seekers from the *MV Sun Sea*.

Australia and Canada are attractive destinations for a variety of political, economic and social reasons. Moreover, both are signatories of the 1951 UN Convention Relating to the Status of Refugees and adhere to their commitments. In comparison with other countries, they have relatively open immigration policies as well as well-working welfare systems. Australia and Canada were also relatively unaffected by the recent global economic crisis. Consequently, their economies remained fairly stable. Nationals from Afghanistan, the Islamic Republic of Iran, Iraq, Sri Lanka, and other states (e.g., the Rohingyas from Myanmar) believe opportunities in these countries are worth the risks of being smuggled by sea.

The decision to seek asylum from the Middle East as well as South and West Asia is not often an individual decision but a group one. The decision is frequently made by the male members of the household,¹⁴ and either the oldest son or father will often depart first.¹⁵ Other family members follow once protection is granted in Australia, Canada, or other destination countries. In 2011, however, Australian Department of Immigration and Citizenship (DIAC) authorities noted an increase in the arrivals of families. DIAC authorities contend the increase is due to adjustments in border policies that stipulate children and families are to be kept in community based accommodations rather than detained in immigration detention centres. With regard to the Sri Lankans smuggled by boat to Canada, their profiles were similar. Among those smuggled migrants of Tamil origin, the majority were from middle class families or were single men between 20 and 40 years of age.¹⁶ There were no unaccompanied children. All of the *MV Sun Sea*

¹³ Canadian Government Presentation at the Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through and within Southeast Asia, Bangkok, Thailand, December 2010.

¹⁴ Neske 2006

¹⁵ UNODC communication with DIAC 2011; Neske 2006

¹⁶ UNODC communication with Royal Canadian Mounted Police (RCMP) 2012

passengers claimed asylum and were not detained upon arrival in Canada. As stated previously, law enforcement authorities in Australia as well as Canada believe smugglers are attuned to changing government policies and aim to exploit weaknesses in enforcement policies and practices through whatever means and routes available to them.¹⁷

2. How is smuggling conducted?

The smuggling of migrants from Afghanistan, the Islamic Republic of Iran, Iraq, and Sri Lanka to Australia and Canada proceeds along a number of well-established paths, although the exact route a smuggled migrant may take is rarely predetermined. Depending on the intended destination, a variety of routes and methods are used. Typically, migrant smugglers use a combination of legal and illegal strategies to transport migrants from place to place along the route to the destination.

From South and West Asia to Australia

Although boats first began arriving in the 1970s from Viet Nam, a new wave of maritime arrivals (see Figure 6) from the Middle East and the Asian region – Afghanistan, the Islamic Republic of Iran, Iraq, Sri Lanka, and Myanmar (stateless Rohingyas) in particular – were recorded in the late 1990s.¹⁸ Indonesia is the main departure point (discussed below) for smuggled migrants hoping to reach Australia by boat and claim asylum. In order to reach Indonesia, a number of routes are used. Smuggled migrants from Afghanistan typically cross by bus or on foot into Pakistan or the Islamic Republic of Iran at official and unofficial land borders.¹⁹ From Pakistan or the Islamic Republic of Iran, smuggled Afghans travel by air to Malaysia. Once in Malaysia, they travel by either bus or train, or are ferried by boat to Indonesia where they change to another boat bound for Australia.

Iranians and Sri Lankans use a more direct route. They are generally smuggled by air (see Figure 7) to Malaysia or Indonesia. They then take a boat bound for Australia. From Iraq, smuggled migrants fly direct to Malaysia or stopover in transit destinations, such as Jordan or the Islamic Republic of Iran, before continuing on to Indonesia. Finally,

smuggled migrants from Myanmar travel overland through Thailand to Malaysia, and then on to pooling locations in Indonesia before completing the final leg of the journey to Australia by sea. Other routes include lawful travel to Southeast Asia (e.g., Indonesia, Malaysia, or Thailand) via the Gulf States (e.g. the UAE), which legitimises their trip – having gained departure stamps in genuine passports from authorised immigration counters. This method provides smuggled migrants with a relatively quick and safe method of travel to the pooling location.

Smugglers take advantage of the relatively agreeable visa conditions offered by Malaysia and Indonesia. For example, Iranians and Iraqis are granted visas on arrival or visa-free access for a period of up to one month. For nationals from Afghanistan, Sri Lanka, and Iraq, who require a visa prior to arrival, the migrant will seek out a smuggler at the point of origin. The smuggler will provide documentation with which the migrant can assume a false identity by means of: a genuine passport that is physically altered by photo substitution or insertion of a visa page; an entire passport that is fabricated; visa pages that are fabricated; a genuine passport or visa fraudulently obtained through stolen or illegally-obtained paperwork; or a genuine passport stolen or purchased from the black market.²⁰ On occasion, smugglers have actually accompanied the migrants all the way from the country of origin (e.g., Afghanistan) by air to Indonesia.

Once in Indonesia or Malaysia, smuggled migrants are transported by car or bus to pooling locations where they wait to be notified of the time and location of departure by boat to Australia.²¹ The waiting period ranges from two weeks to several months, and the time is spent in apartment-style hotels near the departure harbour.²² A small proportion of prospective asylum-seekers travel independently to boat departure points, but then engage the services of a smuggler simply to reach Australia by boat.²³

¹⁷ Mountz 2010

¹⁸ Phillips and Spinks 2012

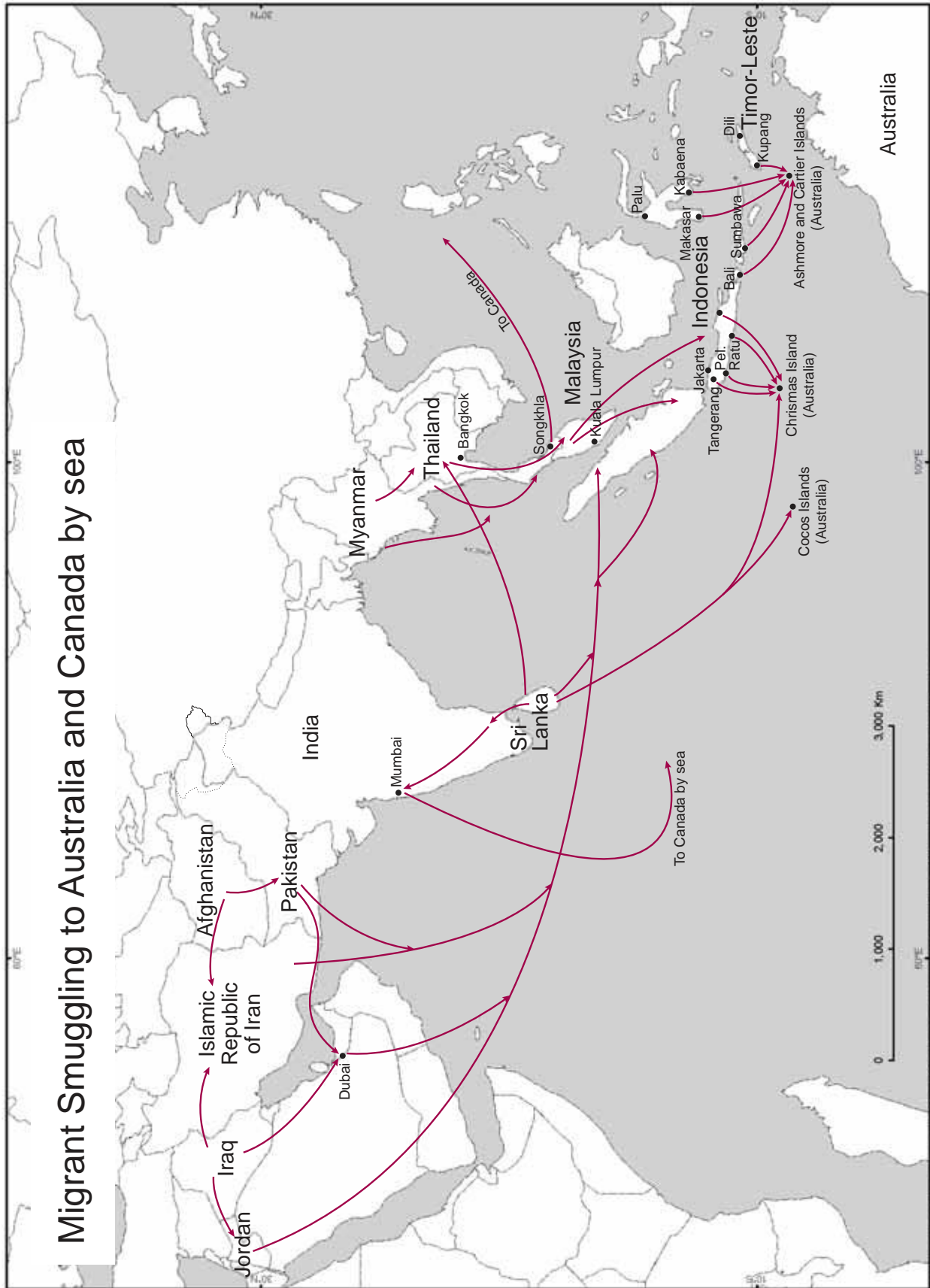
¹⁹ Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

²⁰ Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011. Indonesians are discussing the possibility of relaxing its visa policy for Sri Lankans in 2012.

²¹ Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

²² UNODC communication with DIAC 2011

²³ UNODC communication with DIAC 2011; UNODC communication with Australian Federal Police (AFP) 2012



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration based on information from the Indonesian National Police (INP), the Australian Department of Immigration and Citizenship (DIAC) and the Royal Canadian Mounted Police (RCMP)

The boats carrying smuggled migrants from Afghanistan, the Islamic Republic of Iran, Iraq, and Sri Lanka depart from Indonesia because of its close geographical proximity to Australia. They head directly for the Australian territories of Christmas Island (about 340 km from Java) and Ashmore Reef (about 150 km from the Indonesian Island of Roti).²⁴ Several departure points and harbours are used by boats travelling to Australia. It is rare for a boat to head directly for the coast of the Australian mainland itself.

In the year 2000, Australia signed a regional cooperation agreement with Indonesia, under which Indonesia is provided with financial and technical support to intercept smuggled migrants before they start their journeys to Australia. The agreement did not immediately curb the number of boats, but it did raise the stakes as smaller operators were forced out of smuggling operations.²⁵ Sea crossings became increasingly dangerous as smugglers switched to cheap, small, and poorly-maintained fishing vessels to increase their profits. Consequently, voyages are even more hazardous. Smugglers expose migrants to tremendous risks as was dramatically illustrated in 2001 when the SIEV X, a severely-overloaded small fishing boat, sank off the coast of Indonesia en route to Christmas Island, killing 146 children, 142 women and 65 men from Iraq, Pakistan, Afghanistan, and Algeria.

Since 2001, boats have continued to sink off the coast of Christmas Island, including a recent incident reported in June 2012 when Australian authorities were called to rescue around 200 Afghan smuggled migrants off the coast of north-western Australia. Just 108 migrants survived.²⁶ Six days later, 130 smuggled migrants were rescued from a second vessel. Indonesian boat captains, who are willing to take advantage of the money on offer to move the smuggled migrants to Australia, are recruited by smugglers to undertake the voyage to Christmas Island or Ashmore Reef.²⁷ Boat captains will normally steer the boats into international waters, hand over control to junior crew members, and then return to Indonesia via a support vessel supplied by the smuggling network to avoid either being caught

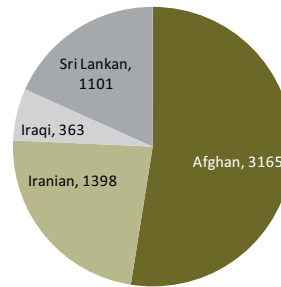
²⁴ Karlsen 2011

²⁵ Crock and others 2006

²⁶ The Economist 2012 "Boats Sink, Parliament Flounders", *The Economist*, 28 June 2012

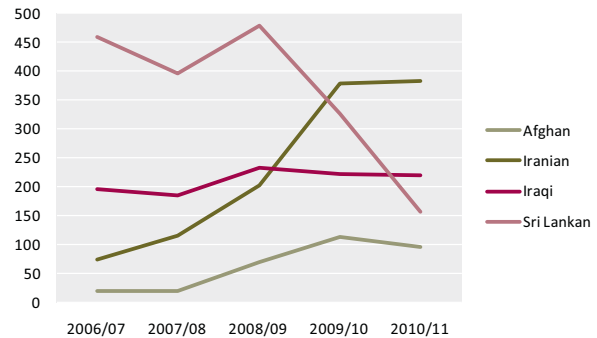
²⁷ The Economist 2012 "Boats Sink, Parliament Flounders", *The Economist*, 28 June 2012

Figure 6: Irregular maritime arrivals to Australia by select nationalities (2011-2012)



Source: DIAC Systems

Figure 7: Attempted unlawful entry by air (Refused entry at the air border and interdicted offshore) by individuals of Afghan, Iranian, Iraqi and Sri Lankan nationality.



Source: DIAC systems

by Indonesian or Australian authorities or drowning at sea if conditions become hazardous.²⁸ Boats are continuously intercepted before reaching Australian shores. During the single month of January 2012, four boats were intercepted southwest of the Ashmore Islands.

According to Australian authorities, these smuggling methods are tried and tested. As a result, they have not varied much in recent years. However, as certain countries in the region criminalise migrant smuggling, such as Indonesia, it is expected that smugglers will respond by looking at alternative departure points. Remote islands with limited border security to the north of Australia, such as the Democratic Republic of Timor-Leste and Papua New

²⁸ UNODC communication with DIAC 2011

Guinea, are possible embarkation points for Middle Eastern as well as South and West Asian migrants.²⁹

From South and West Asia to Canada

Since 1985, Canada has been the global destination of choice for asylum-seekers from Sri Lanka. For asylum-seekers from Afghanistan, Iraq, the Islamic Republic of Iran, and Myanmar, Canada is a secondary option, with preference instead given to the European Union and/or the United States of America.³⁰ Although, as indicated above, most smuggled migrants who seek asylum enter Canada by air or land, boat arrivals have increased in recent years.³¹

In May 2009, more than 25 years of conflict came to an end when government forces seized the last area controlled by Liberation Tigers of Tamil Eelam (LTTE or the Tamil Tigers), a group of armed militants who had been fighting for an independent state of Tamil Eelam. As a consequence, thousands of Tamil asylum-seekers fled to India, and then on to Southeast Asia, to await boats that would smuggle them to countries such as Australia and Canada. In 2009, the *Ocean Lady*, carrying 76 Sri Lankan Tamil male migrants, was the first boat since the late 1990s to reach the coastal shores of Western Canada. The men had been encouraged to migrate largely through word of mouth from friends, families, and acquaintances with ties to the Sri Lankan Tamil diaspora in Canada. It is alleged that the ship set sail from Mumbai, India, and it is suspected of having made stops to pick up small groups of Tamils throughout Southeast Asia. Authorities also suspect that the ship had been previously involved in arms smuggling for the LTTE.³²

In August 2010, Canadian authorities intercepted a second vessel, the *MV Sun Sea*, off the coast of British Columbia. On board the ship, which had travelled from the port of Songkhla in Southern

Thailand and then crossed the Pacific to Canada, were 492 smuggled Tamil migrants from Sri Lanka (380 men, 63 women, and 49 children of whom six were unaccompanied) who had spent three months at sea. Thailand has become a key transit point for Sri Lankan asylum-seekers hoping to reach Australia and Canada by sea. Most smuggled Sri Lankans travel by air from Jaffna to Bangkok legally as tourists, but then overstay their visas. Others use genuine, but fraudulently obtained, visas acquired in Colombo. In the case of the *MC Sun Sea*, approximately 45 smugglers working in multiple countries (Sri Lanka, Thailand, Singapore, Malaysia) were involved in the operation.³³ The smugglers were involved in recruitment as well as providing the migrants with passports and tickets to Bangkok. Subsequently, the migrants' passports and other identifying documents were confiscated, and they spent one to five months in apartment-style hotels before being taken at different stages from April to July 2010 to the *MV Sun Sea*.³⁴

A third ship, the *MC Alicia*, was intercepted by Indonesian authorities on 9 July 2011, after it developed mechanical difficulties. The 87 Sri Lankan asylum-seekers (76 men, six women, and five children) refused to leave the ship until they were assured asylum. Officially, the ship was destined for New Zealand, however, evidence found on board suggests it was bound for Canada. Authorities believe that there are pools of Sri Lankan migrants waiting in transit countries, such as Thailand, who have already made a down payment and are waiting to board ships that will take them to Canada. Some smuggled Sri Lankans have been reportedly waiting for over a year.³⁵

3. Who are the smugglers?

Migrant smuggling from Afghanistan, Iraq, and the Islamic Republic of Iran to Australia and Canada has developed into a series of small and medium-sized criminal networks involving a number of smugglers, including recruiters, helpers, transporters, drivers, forgers, and other intermediaries located throughout the Asian region.³⁶ As Figures 8 and 9 show, smugglers who act as carriers are also common

²⁹ UNODC communication with DIAC 2011; Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, with-in and to Southeast and East Asia, Bangkok, Thailand, October 2011.

³⁰ UNODC communication with CBSA 2011

³¹ In 1999, a ship with 123 smuggled migrants from Fujian province in China was intercepted by Canadian authorities off the coast of British Columbia. Over the next couple of months, three more ships arrived at Canadian shores from China. In total, 599 smuggled migrants arrived without proper documentation.

³² Perrin 2011

³³ Quan 2011

³⁴ National Post Staff 2011

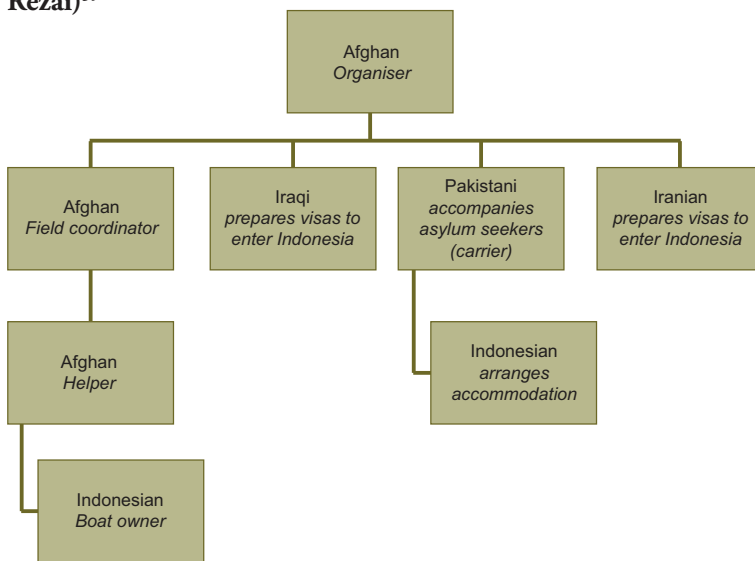
³⁵ Bell 2011

³⁶ UNODC 2010a

actors in the migrant smuggling networks.³⁷ A few of them are also female.³⁸ Female smugglers are preferred because they attract less attention from law enforcement and border officials. Their service is required because some smuggled migrants (both females and males) are not comfortable travelling independently with fraudulent documents. Smuggled migrants who are accompanied by smugglers typically pay higher fees.

is often shared by smugglers and smuggled migrants (e.g., Afghans), some stages and services are outsourced to local smugglers (e.g., Indonesians) in the transit countries. They are responsible for arranging travel documents, accommodation, and travel, including boat departures for Australia and Canada. Reputation, too, is important. Prospective migrants screen for dependable smugglers, relying on word of mouth for recommendations.

Figure 8: Afghan smuggling network (Example 1: Amanullah Reza)³⁹



Source: Indonesia National Police 2011

Although there are exceptions, most Middle Eastern as well as West and South Asian smuggling networks have a loose but predictable hierarchical structure. Only rarely does one person control the entire process outside his or her own immediate network. Depending on the smuggling method and route, migrant smuggling from Afghanistan, the Islamic Republic of Iran, Iraq, and Sri Lanka is a multi-stage process involving several groups of smugglers who cooperate from the point of origin to the final destination. Although the same ethnic background

The networks involved in smuggling Tamils from Sri Lanka to Australia and Canada are somewhat different because they are closely linked to the LTTE. The LTTE remains listed as a terrorist organisation under Canadian law, but not Australian law. The rebel separatist network is reportedly engaged in additional illegal activities, ranging from the skimming of credit cards to drug trafficking and maritime piracy.⁴⁰ Most smuggling clients are Tamils. However, authorities suggest that facilitators also extend their services to other nationalities, especially those from elsewhere in South Asia who tend to use similar routes.⁴¹ Sri Lankan smuggling networks also are involved in the falsification of documents. Again, clients are mainly Tamils, but other criminal

groups and individuals outside the Tamil community will, at times, use their services.⁴²

³⁷ UNODC 2010a; UNODC 2009a; Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

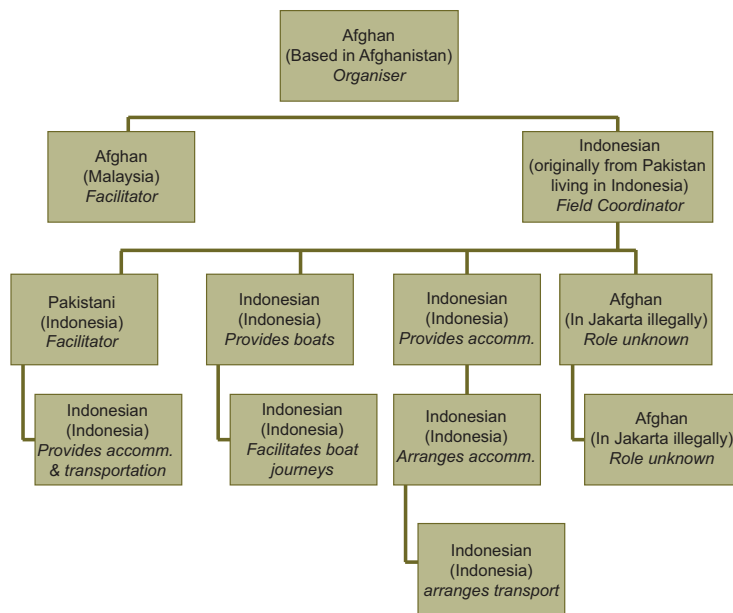
³⁸ UNODC 2010a; UNODC 2009a; Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

³⁹ Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

⁴⁰ Europol 2010

⁴¹ Europol 2010

⁴² Although Canadian authorities have profile information on the smugglers involved in MV Sun Sea incident, the details cannot be shared publicly because the investigation is ongoing.

Figure 9: Afghan smuggling network (Example 2: Muladad)⁴³

Source: Indonesia National Police 2011

4. How is the money handled?

Fees vary by mode, route, and time spent in transit. If a migrant engages the services of a smuggling network from source to destination, the fee from the Middle East as well as South and West Asia to Australia is around US\$10,000.⁴⁴ If the migrant uses a piecemeal approach and pays separately for each leg of the journey, fees can cost up to US\$18,000 (see Figure 10). If a migrant has travelled independently to a boat departure point in Indonesia and then engages the services of a smuggler to reach Australia by boat, the cost is approximately US\$5,000.⁴⁵

Although the cash flow varies from network to network, prospective asylum-seekers wanting to enter Australia will make payments – typically in instalments – either directly to smugglers (e.g., the organisers based in the source countries) or via a third party (hawala brokers or hawaladars).⁴⁶ A cash

deposit is paid prior to departure. A further cash disbursement, carried by the asylum seeker, is paid to smugglers along each stage of the route, with the final cash payment made upon reaching the intended destination. Because most migrants are young men urged by their families to seek work or asylum abroad, parents and other relatives often sell assets or borrow funds from banks or informal money lenders to mobilize the fees.⁴⁷

To reach Canada, smuggled Sri Lankans reportedly paid up to US\$45,000 to board the MV Sun Sea, although the standard fee collected was approximately US\$25,000.⁴⁸ By comparison, the purchase price of the actual vessel (MV Sun Sea) was estimated at US\$175,000. Cash deposits ranging

between US\$2,500 and US\$8,000 paid prior to departure were used by smugglers to purchase the ship.⁴⁹ Smugglers were paid in Sri Lankan rupees as well as Canadian and US dollars. Some Sri Lankans exchanged Sri Lankan rupees into US dollars once they arrived in Thailand. Similar to other Middle Eastern and West and South Asian smuggled migrants, most Sri Lankans sold possessions to finance the voyage. Loans from the bank or private lenders were also used to mobilise fees. The outstanding fare was to be paid by relatives in Sri Lanka and Canada upon arrival.

Sri Lankan criminal networks often invest the proceeds of migrant smuggling operations in legitimate businesses, including jewellery, textile, and newspaper shops as well as TV and radio stations, which act as front organisations or shell companies. Sri Lankan organised criminal networks also engage in a range of criminal enterprises to raise, transfer, and launder funds.⁵⁰ One major area of crime is credit card fraud, carried out largely through ATM-skimming schemes. Another area is the production

⁴³ Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

⁴⁴ UNODC communication with DIAC 2011; Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to Southeast and East Asia, Bangkok, Thailand, October 2011.

⁴⁵ Indonesian National Police Presentation at the 2nd Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through, within and to South-East and East Asia, Bangkok, Thailand, October 2011.

⁴⁶ UNODC communication with AFP 2012; Neske 2011

⁴⁷ UNODC 2011

⁴⁸ Canadian Government Presentation at the Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through and within Southeast Asia Presentation, Bangkok, Thailand, December 2010; UNODC communication with RCMP 2012.

⁴⁹ Canadian Government Presentation at the Inter-Regional Workshop on Improving Evidence-Based Knowledge on Migrant Smuggling from, through and within Southeast Asia Presentation, Bangkok, Thailand, December 2010.

⁵⁰ Europol 2010

Figure 10: Potential smuggling service fees from Afghanistan to Australia

Smuggling Service	Amount
Organiser (in source country)	\$4,000
Fraudulent documents	\$400
Bribes – law enforcement & border officials	\$2,500
Logistics air	\$700
Facilitator (based in Malaysia)	\$1,700
Facilitator (based in Indonesia)	\$3,000
Sea voyage	\$5,000
Total	\$17,300

Source: UNODC 2010

of falsified documents including passports, identity documents, and residence permits. Customers are mainly Tamils, but counterfeit documents are also sold to other criminal groups and persons outside the Tamil community. Furthermore, Tamil networks are suspected to be involved in drug trafficking and maritime piracy off the coast of Northern Sri Lanka.⁵¹

5. How big is the flow?

Maritime smuggling to Australia is a lucrative operation for people smugglers. During 2009 to 2010, 118 boats were intercepted by Australian authorities, carrying a total of 5,609 people, including crew. This figure is the highest number of boat arrivals in Australia in the last 20 years, exceeding peak years between 1999 and 2001. It is clear that boat arrivals in Australia have fluctuated considerably during the past 30 years in response to both global events and government policies. For example, the number of boat arrivals declined in 2002 after the ‘Pacific Solution’ was introduced in August 2001.⁵²

To calculate the annual market volume, data from the table above is useful. Between the years 2009 and 2012, an annual average of around 6000 asylum-seekers attempted to reach Australian shores (see Figure 11). If this number is taken as an estimate of annual market volume, then the total annual value of the market is **US\$85 million** if each smuggled migrant paid approximately US\$14,000 (average cost

⁵¹ Europol 2010

⁵² The Pacific Solution was the name given to an Australian government policy (2001 – 2007) that involved transporting asylum-seekers to detention centres on small Pacific Island nations, such as Nauru, for processing, instead of allowing them to land on the Australian mainland.

as fees vary by mode, route, and time spent in transit – see ‘How is the money handled?’ section above).

For Canada, if the annual market volume is derived from the MC Sun Sea, 492 asylum-seekers were smuggled in 2010 by boat. If each smuggled migrant reportedly paid US\$25,000, then the total annual value of the market is **US\$12.3 million**.

Figure 11: Boat arrivals in Australia since 1989⁵³

Financial year	No. of boats	No. of people (excl. crew)
1989-1990	3	234
1990-1991	5	158
1991-1992	3	78
1992-1993	4	194
1993-1994	6	194
1994-1995	21	1071
1995-1996	14	589
1996-1997	13	365
1997-1998	13	157
1998-1999	42	921
1999-2000	75	4175
2000-2001	54	4137
2001-2002	19	3039
2002-2003	0	0
2003-2004	3	82
2004-2005	0	0
2005-2006	8	61
2006-2007	4	133
2007-2008	3	25
2008-2009	23	1033 ⁵⁴ (incl. 48 crew)
2009-2010	118	5609 ⁵⁵ (incl. 282 crew)
2010-2011	89	4940 ⁵⁶ (incl. 210 crew)
2011-2012	104	7739 ⁵⁷ (incl. 241 crew)

Source: DIAC System; UNODC

⁵³ Phillips and Spinks 2012; UNODC communication with DIAC 2012.

⁵⁴ The number includes five deceased at sea on 16 April 2009 and 12 deceased at sea on 1 November 2009. Arrival figures do not include two arrivals in an ‘esky’ on 17 January 2009, four on Deliverance Island with no boat on 29 April 2009. The figures included 12 people who died when a boat sank on 1 November 2009, but do not include the 78 asylum-seekers on board Oceanic Viking intercepted in Indonesian waters in October 2009 or the five who reportedly drowned before a boat was rescued and towed to Cocos Islands in May 2010.

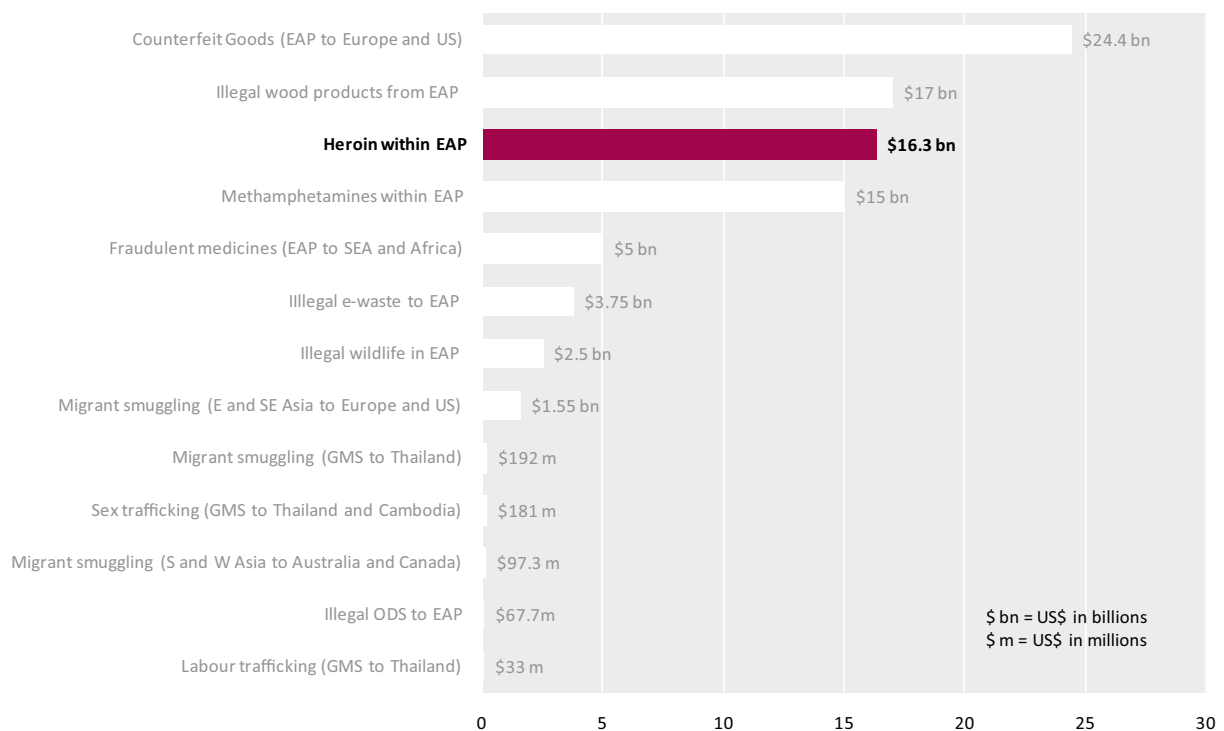
⁵⁵ See above.

⁵⁶ Arrivals from the boat tragedy on 15 December 2010 where a boat sank as it neared Christmas Island include the 42 people saved and the 30 bodies recovered, but do not include the unknown number of those who drowned, estimated at 18.

⁵⁷ UNODC communication with DIAC 2012. It is not known if this total includes crew.

Chapter 5

Trafficking of opiates from Myanmar and Afghanistan into East Asia and the Pacific



NATURE OF THE THREAT

<p>1. Personal and public health: drug-related morbidity and mortality. Risks such as drug dependency and HIV infection.</p>	<p>2. Cost of treatment: cost to the state of treatment for dependent users.</p>
<p>3. Burden on the economy: lost productivity, absenteeism from work, accidents at work.</p>	<p>4. Burden on society: depletion of youth potential, lost school days, family breakdown.</p>
<p>5. Human rights: human rights issues related to forms of compulsory treatment and extra-judicial killings of suspected drug traffickers and users.</p>	<p>6. Cost of crime and law enforcement: increases in crime levels as users fund addiction. Cost to the state of law enforcement to counteract drug crimes.</p>
<p>7. Burden on the criminal justice system: court processes bottlenecks; overcrowding of the prison system.</p>	<p>8. Insecurity and violence: cost to society of violence associated within drug markets. Illicit drugs often a source of funding for criminal groups and insurgencies. Regional and national security impact, particularly in cross-border issues.</p>
<p>9. Corruption: impact of drug-related corruption on the economy and political system undermining governance and rule of law.</p>	

1. What is the nature of the market?

A century ago, the world confronted the single largest drug problem ever to have been recorded: Chinese opium addiction. By a variety of means, this problem was almost entirely resolved by the middle of the 20th Century.” In recent years, unfortunately, there has been a resurgence of opiate use in China. Opium is still consumed, but the main opiate problem in the 21st century involves the more refined form of the drug: heroin.

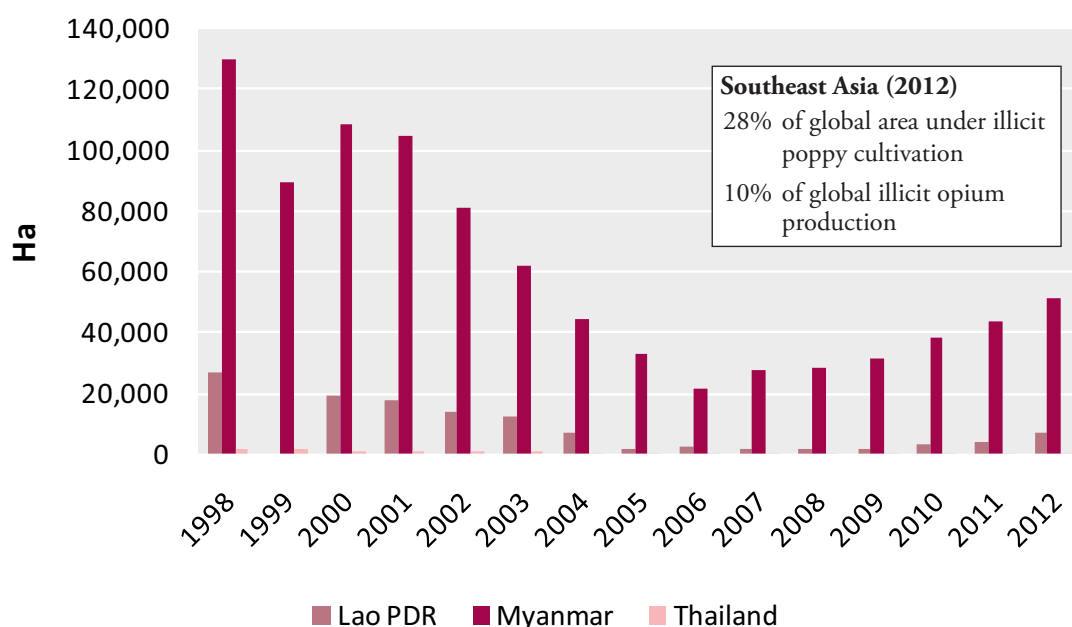
Today, China accounts for around 16% of the world’s heroin users. Consuming between 46 and 60 tons of heroin per year, China represents one of the largest national illicit heroin markets globally. Over one million heroin users are officially registered in China, and the number is rising. Most of these users inject the drug, constituting what is probably the single largest injecting drug user (IDU) population in the world.

Other countries of the region are also experiencing high and rising levels of heroin use. Opiate users also

account for the majority of problem drug users in a number of countries in the region, including Viet Nam, Myanmar, Mongolia, Indonesia, Singapore and Malaysia. In response to the 2010 United Nations Annual Reports Questionnaire, six countries from the region – China, Indonesia, Malaysia, Singapore, Thailand and Viet Nam – reported increasing heroin use. There are presently an estimated 3.3 million heroin users in East Asia and the Pacific, and the number is expected to continue to rise.

Southeast Asia is the site of the notorious “Golden Triangle”, an area long associated with heroin production, located where the borders of eastern Myanmar, northwestern Lao PDR and northern Thailand converge along the Mekong River. Thirty years ago, the Golden Triangle was the largest heroin production zone on the planet, supplying the region’s needs and exporting its heroin surplus to Europe and the United States. But, in the intervening period, the countries of Southeast Asia succeeded in eliminating much of the production in the Golden Triangle (see Figure 1).¹

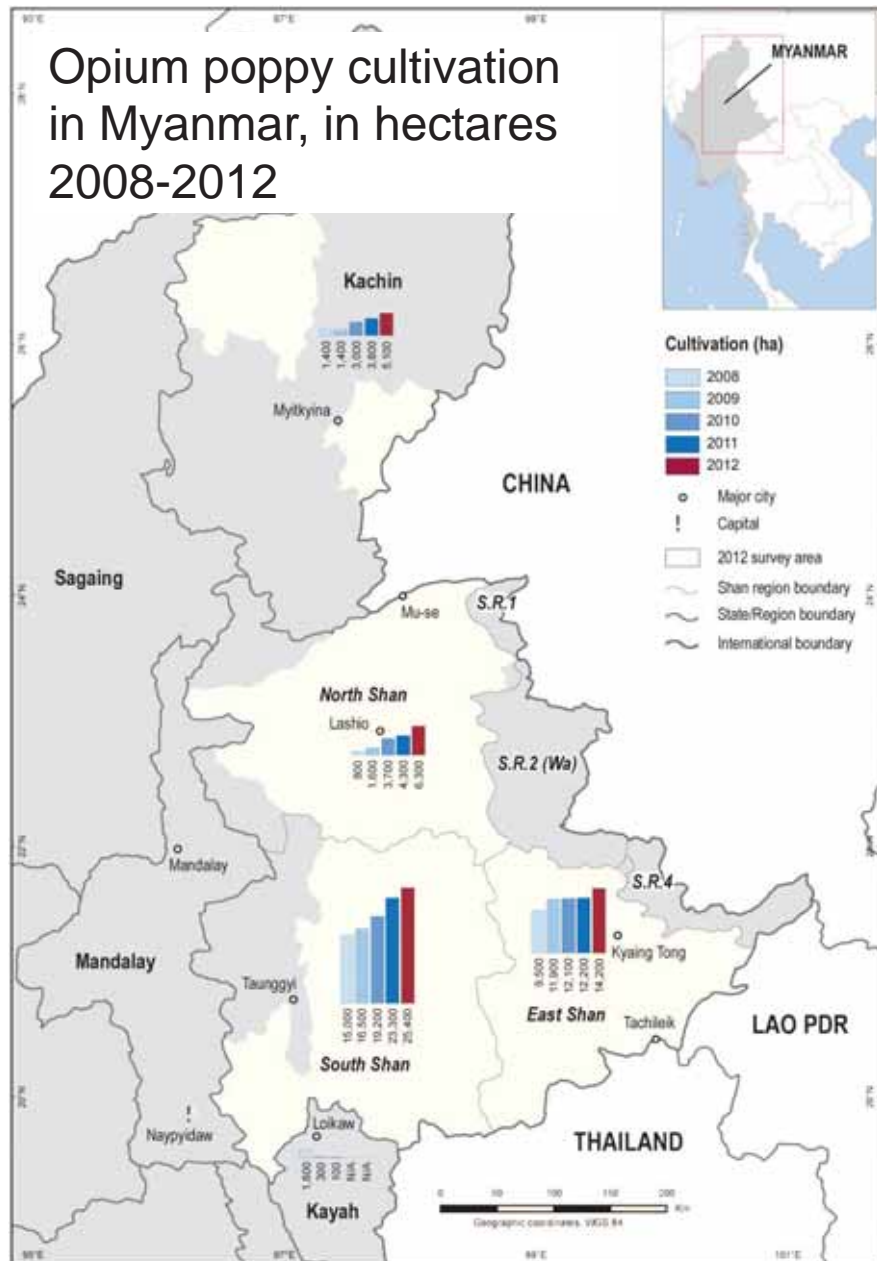
Figure 1: Opium poppy cultivation in Southeast Asia (hectares), 1998-2012



Source: UNODC, *South-East Asia, Opium Survey 2012*, October 2012

¹ Though the 2012 survey data became available immediately before the publication of this report, other calculations in this chapter refer to 2011, the last year for which comprehensive seizure data were available.

Today, almost all of the heroin production in the region is confined to the politically-contested parts of Myanmar, and traffickers are compelled to import heroin from Afghanistan to meet local demand.² On the one hand, this is an encouraging development, showing that supply reduction is possible. On the other, it is disheartening, because it demonstrates that even if opium poppy cultivation were eliminated in East Asia, regional demand can be met by external sources. In recent years, opium cultivation in Myanmar has shifted away from the former growing areas in Wa and Kokang regions (which eventually became effectively poppy-free) to South Shan, East Shan and North Shan State (see map). Opium production in Myanmar is mainly found in the Shan State (91% of the total in 2011, of which more than half occurs in the South Shan and more than a quarter in East Shan). Most of Myanmar's heroin processing also takes place in the Shan State. The next largest producing area is the Kachin province, located to the north of the Shan State (bordering India and China).



Source: Government of Myanmar - National Monitoring System supported by UNODC. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

2. How is the trafficking conducted?

East Asia gets almost all its heroin from two sources: Myanmar (about two-thirds) and Afghanistan (the remaining third). Since about 70% of the heroin users in East Asia reside in China, the two most significant flows need cross only a single border, the one between Shan State in Myanmar and Yunnan province in China (see map). There are a large number of lesser flows by land, sea, and air from these two major sources to the other countries of the region. A significant amount of heroin is re-exported from China to the rest of the region.

² There is a small amount of poppy cultivation (about one-tenth of what is cultivated in Myanmar) in Lao PDR, but most of this is consumed locally in the form of opium. A relatively small amount (less than two tons) is converted to heroin for export, mainly to Viet Nam. However, this production has more than doubled in the last five years, so the situation merits continued monitoring.



Source: UNODC elaboration based on Huifeng and Zugoing (2011) and Ting (2007)

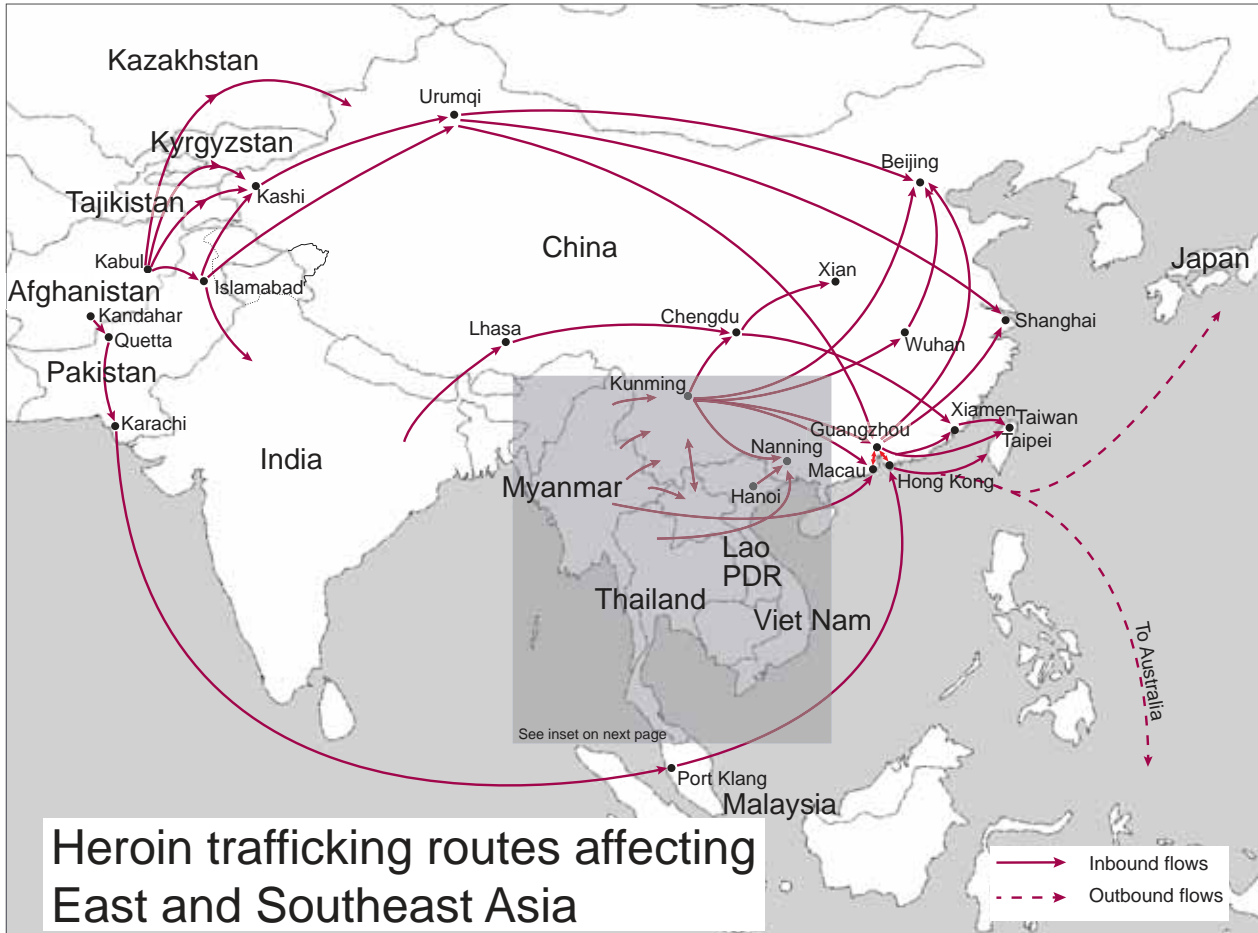
Myanmar's Shan State – which borders China, Lao PDR, and Thailand – is the primary heroin production site in East Asia. Historically, the drug has been produced in other parts of Myanmar, but success in reducing cultivation elsewhere has pushed production into Shan State, the home of a number of insurgent groups. It is not only these groups that are responsible for the heroin production, however. Rather, the insurgents also provide protection to the cultivators and traffickers and tax the trade in return. Government-backed paramilitary groups and local officials have also been found to be complicit in the areas they control.³ The flow has waxed and waned since the 1950s, but it has become a staple of the local economy and insurgent finance. As a result, it has proven extremely difficult to dislodge.

³ This has not always been the case; leaders of armed groups have been active traffickers in the past. For example, Lo Hsing-han was commander of the counter-insurgency 'Ka Kwe Ye' home guards in the Kokang area of Shan State from 1963. By the early 1970s, Lo was directly controlling the opium and heroin business to gain the reputation of one of the Golden Triangle's most prominent drug-lords. See Lintner and Black 2009: p. 25, p. 151.

they were at their zenith in the early 1990s.

Heroin is produced in laboratories close to Myanmar's borders with China, Lao PDR and Thailand. Some of this heroin is transshipped by land across Lao PDR and Thailand, and some is trafficked by sea through ports in southern Myanmar. But the largest portion crosses by land directly into Yunnan Province of China. In 2009, Chinese officials seized 5.8 tons of heroin, and 3.3 tons of this was seized in Yunnan Province. This massive total is all the more impressive because most of these seizures were actually rather small. Although larger consignments were popular in the past, most of the flow today is carried by individual couriers, a system referred to in China as 'ants moving house'.⁴

⁴ See Zhang and Chin 2008: p. 189; Zhang and Chin 2007: p. 4.



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Source: UNODC elaboration based on Huifeng and Zugoing (2011) and Zhang and Chin (2007)

The Shan/Yunnan border is close to 600 km long and highly underdeveloped. There are many places where individuals travelling on foot can cross unnoticed. These small loads are consolidated in Yunnan before being trafficked further on within China. Kunming, Yunnan’s capital, is a major hub for redistribution. Some is trafficked on by land through Guangxi to major cities such as Shanghai and Beijing. Heroin destined for overseas is generally moved overland to ports in Guangdong and Fujian provinces and from there to Hong Kong (China) and Taiwan (Province of China). The heroin flow from Hong Kong has strongly declined compared with the late 1980s and early 1990s, when large quantities were shipped to the United States and Europe. Today, most of this flow proceeds to Australia and other international markets.

The traffic between China and Myanmar flows both ways, because the processing of heroin requires precursor chemicals, particularly acetic anhydride. Globally, some two million tons of acetic anhydride are used each year in a variety of industrial

applications, including heroin processing. China is a major producer of industrial chemicals – in 2009, over 3000 tons of precursor chemicals were seized in China, including large amounts of acetic anhydride.

The flow of heroin from Afghanistan into the region is more complicated. This is because a wide range of players make use of an equally complex network of trafficking routes. Heroin travels by land, sea, and air though a variety of intermediary countries, as well as directly across the common land border. The Xianjiang Uyghur Autonomous region is the main distribution hub for heroin crossing into western China. Guangzhou is the main hub for Afghan heroin nationally, directing supplies to national consumption sites, as well as for export to Southeast Asia.⁵

Southeast Asian countries are subject both to flows of Afghan heroin moving north and flows of Myanmar heroin going south, as well as inflows to satisfy local

⁵Tanner 2011: pp. 1-2.

demand. From Shan state, Myanmar heroin enters northern Thailand and is moved into Malaysia, Indonesia and Australia. It also enters Lao PDR and is moved into Viet Nam through Huaphan province for onward trafficking to China and Australia. Lao's Oudomxay province is also used for trafficking heroin to China. Cambodia has become a transshipment hub of growing importance, and a major source of heroin shipped to Australia. Heroin from Afghanistan enters Thailand and Malaysia by air on incoming flights from India, the United Arab Emirates and Pakistan.

Despite substantial reduction in consumption since 2001, Australia remains a key target market due to high local prices – the purity-adjusted retail price (see Table 2) in Australia exceeds US\$1,000 per gram, which is among the highest in the world. The routes to Australia have become increasingly diverse: in 2000-2001, heroin entered Australia from just 10 countries, but by 2010-2011, the number was 20, of which the most prominent (by weight) were Malaysia, Pakistan, Viet Nam, Cambodia and Singapore.⁶ New Zealand has seen no significant heroin seizures since 2001. In the Pacific islands, several seizures of heroin have been reported from Fiji, Papua New Guinea and Vanuatu, including the seizure of 357 kg of heroin in Fiji in 2007.⁷ Local demand is not sufficient to justify these quantities, so vigilance is needed to ensure the Pacific does not become a transshipment zone.



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Source: UNODC

3. Who are the traffickers?

Such a wide variety of people are involved in getting heroin from the production site to the consumer that it is difficult to generalize. Over 50,000 people are arrested for heroin trafficking in East Asia and the Pacific each year. Many of these are very small-scale traffickers. Globally, the average heroin seizure in 2010 involved 0.23 kg of heroin, while in East Asia and Pacific, the amount was just 0.11 kg.⁸ Many of those who are apprehended smuggling across borders could be labeled “mules”, but for many, a more appropriate term would be “ant traffickers”, because they display more agency than mules found in other parts of the world. They often come from ethnic groups that straddle international borders (such

⁶ ACC 2012: p. 66.

⁷ UNODC EAP 2011: pp. 35-37.

⁸ This information is based on the information from 11 countries in East Asia and two countries in the Oceania region, reporting together 6.5 tons of seized heroin in close to 58,000 seizure cases.

as the Shan, Lao, Karen, Akha, Wa and Panthay peoples), and some come from families that have been involved in trafficking for generations. Though poor, many are professional providers of clandestine transportation services.

Behind these ant traffickers are the buyers and traders that run the market. Since the 1950s, these have mainly been ethnic Chinese traffickers. Chinese traders are found throughout Southeast Asia, including in Shan state. They may deal in a wide range of goods besides opium and heroin. Of course, Chinese traffickers work with nationals from a wide range of countries. Almost 6% of those arrested for heroin trafficking in China in 2010 were foreign, including prominent representation from nationals from Myanmar, Viet Nam, Nigeria and Pakistan.⁹ Traditionally, many of the key organizers of Chinese transnational heroin networks were based in Hong Kong (China) and Taiwan (Province of China).

They were commonly associated with the Triads, and trafficked heroin from the Golden Triangle to markets in the United States and Europe. More recent research has indicated that these traditional hierarchical groups are no longer prominent, and that trafficking networks are increasingly decentralized.¹⁰ Very little of the heroin used in Europe and the US comes from the Golden Triangle today.

As Afghan heroin has become more important in local markets, a new crop of traffickers has entered the scene, including Nigerian and Pakistani groups. In Malaysia, for example, Pakistani networks are active. They use Malaysia as a hub to redistribute Afghan heroin to other countries in the region, including China and Australia. In Indonesia, trafficking networks originating from India, Nepal, the Islamic Republic of Iran and Pakistan operate across the archipelago, particularly in Bali. Recent arrests indicate that international drug syndicates have recruited Cambodian, Indonesian and Thai nationals in place of the Iranians and Malaysians formerly used to smuggle heroin into Indonesia, mostly by air.¹¹ In addition, West African criminal

groups, particularly Nigerian groups, have increased their involvement in heroin trafficking though the region, making use of commercial air couriers of various nationalities. These groups are active in the Greater Mekong Subregion, Indonesia and the Philippines.

In Australia, Chinese organized crime groups reportedly use Vietnamese gang members to sell heroin sourced from Myanmar in major cities such as Sydney and Melbourne.¹² West African networks are also active in this market.

4. How big is the flow?

Estimates of the number of heroin users in the region can be produced, but they are weaker than in many other parts of the world, because many countries in the region do not conduct regular national drug use surveys. In particular, there remains substantial uncertainty about the number of users in China, although the number of government registered heroin users topped 1.1 million in 2010. For this reason, estimates of total consumption must remain highly tentative.

It does seem clear, however, that the overwhelming bulk of heroin produced in Southeast Asia is consumed in East Asia and the Pacific, because this heroin is rarely encountered outside the region today. UNODC conducts an annual survey of poppy cultivation in region, as well as periodic yield assessments. On this basis, total regional heroin production can be estimated, providing a minimum figure for regional consumption. In addition, a number of sources give indications as to the share of the total heroin supply that comes from Myanmar, including both seizure data and forensic studies. This work indicates that about two thirds of the regional supply comes from Myanmar and one third from Afghanistan. This picture can be tallied with other information about the global market in heroin, as well as local seizure totals.

These supply-side estimates can be reconciled with regional demand data, even though this information is limited. In order to produce an estimate of total regional demand, one takes the estimated number of consumers and multiplies this by the estimated amount consumed by each user annually. These figures can be further verified with local retail

⁹ UNODC Annual Report Questionnaire data.

¹⁰ Zhang and Chin 2007: pages 46, 49, 53.

¹¹ The Jakarta Post 2010 "Foreigners nabbed for smuggling 6 kgs of meth, heroin" in *The Jakarta Post* (28 September 2010). The Jakarta Post 2011 "Hundreds of Indonesians overseas jailed for drugs" in *The Jakarta Post* (2 January 2011)

¹² Berry and others 2003: p. 5.

Table 1: Estimates of potential heroin production in Southeast Asia in 2010 and 2011 in metric tonnes

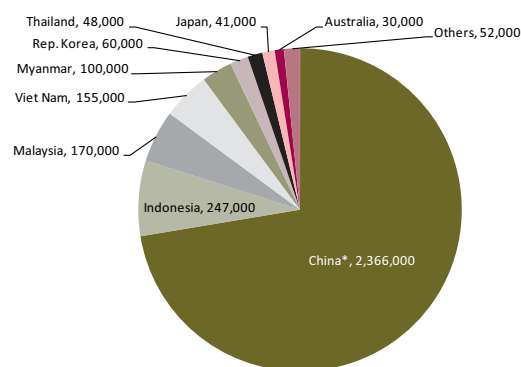
	2010	2011	2012
Opium production in metric tonnes			
Lao PDR	18	25	41
Thailand	5	3	3
Myanmar	580	610	690
Total opium production in Southeast Asia	603	638	734
- Opium seizures in East and Southeast Asia	2.2	1.9*	N/A**
- Domestic opium consumption (150-160 tons)	155	155	N/A
Opium available for transformation into heroin	445.8	480.8	N/A
Potential heroin production in Southeast Asia (10:1 ratio)	45	48	N/A

* For countries that had not – as yet – reported their 2011 opium seizures, seizures made in 2010 were used as a proxy. ** At the time of publication, information on opium seizures and domestic opium consumption was not available. Source: UNODC, Annual Reports Questionnaire and UNODC, Southeast Asia Opium Survey 2011 and UNODC Southeast Asia Opium Survey 2012.

price data. (If the per user expenditure estimates were found to be unreasonable, this would tend to indicate a faulty demand estimate.) Per user consumption rates can also be compared to what is known about heroin consumption patterns globally. Since dependent users must maintain a minimum level of consumption to avoid withdrawal, it is actually easier to profile universal consumption patterns with heroin than with some other drugs. There is a physiological maximum to the amount of heroin that users can consume without overdosing.

Starting with supply, it appears that some 48 tons of heroin were produced in Southeast Asia in 2011 (Table 1). Adding in the amounts that came from Afghanistan (about 22 tons), total demand amounted to close to 70 tons in 2011. Subtracting local seizures (equivalent to more than 4 tons if purity adjusted), would indicate a regional heroin consumption of slightly more than 65 tons of pure heroin in 2011.

How do the tentative use estimates reconcile with this supply side estimate? Based on the best readings of the data, it appears that there are about 3.3 million heroin users in East Asia and the Pacific (see Figure 2). Global analysis suggests an annual consumption rate of about 28 grams of pure heroin per user per year, which would imply regional demand of about 92 tons per year. Since these global figures also reflect consumption patterns in some of the wealthier countries, the per user rate could be adjusted downward to 20 grams per year, roughly reconciling with the supply side figures.

Figure 2: National estimates of the number of heroin users in 2010

Source: UNODC estimates

* Including Taiwan (Province of China), Hong Kong (China) and Macao (China).

The value of this market can be calculated at the wholesale and retail level – both figures are relevant because locally-based traffickers profit at both levels. Multiplying the national level consumption estimates by the local price data and adjusting for purity is a fairly straightforward exercise, although the data is tentative in many instances (see Table 2). Based on these calculations, retail sales of heroin in the region amounted to about **US\$16.3 billion** in 2011.

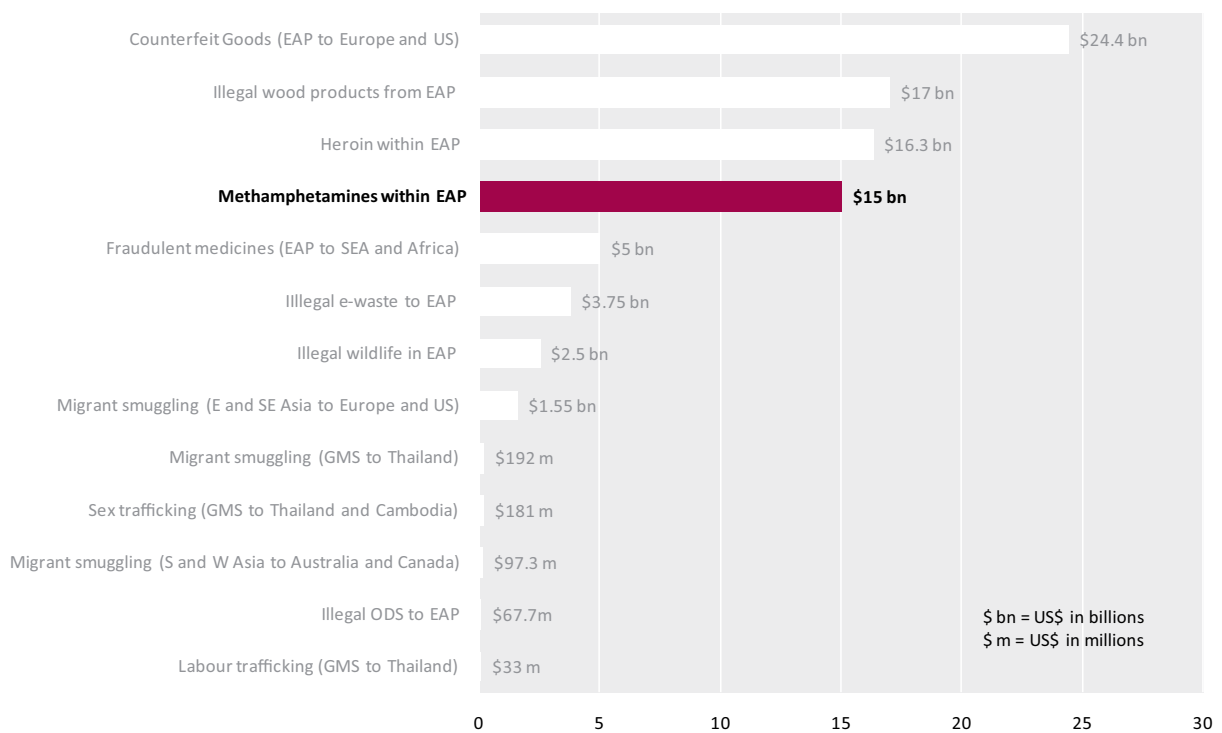
Table 2: Tentative estimate of the retail and wholesale value of heroin consumed in East Asia and the Pacific in 2011

	Consumption kg consumed	Retail level		Value in million US\$	
		Purity adj. retail price per gram in US\$	Purity adj. wholesale price per gram in US\$	Retail	Wholesale
China (all provinces)	47,316	222	169	10,496	7,985
Republic of Korea	1,192	452	413	538	493
Japan	829	1,395	270	1,157	224
North East Asia	49,338	453	213	12,191	8,702
Indonesia	4,931	213	149	1,048	735
Malaysia	3,397	222	171	755	581
Myanmar	2,006	96	64	193	128
Viet Nam	3,101	140	29	433	90
Philippines	523	222	118	116	62
Other SE Asia	1258	633	64	796	82
Southeast Asia	15,216	601	119	3,342	1,679
East Asia	64,554	545	154	15,534	10,381
Australia	602	1,069	346	645	208
New Zealand	58	2,257	674	132	39
Other Oceania	146	218	146	32	21
Oceania	806	1,181	510	809	269
East Asia / Pacific	65,360	682	194	16,342	10,650

Source: UNODC estimates based on UNODC, Annual Report Questionnaire Data

Chapter 6

Trafficking of methamphetamines from Myanmar and China to the region



NATURE OF THE THREAT

<p>1. Violence: cost to society of violence associated within drug markets. Illicit drugs often a source of funding for insurgencies.</p>	<p>2. Burden on the economy: lost productivity, absenteeism from work, accidents at work.</p>
<p>3. Burden on society: depletion of youth potential, lost school days, family breakdown.</p>	<p>4. Human rights: human rights issues related to forms of compulsory treatment and extra-judicial killings of suspected drug traffickers and users.</p>
<p>5. Cost of law enforcement: cost to the state of law enforcement.</p>	<p>6. Burden on the criminal justice system: court processes bottlenecks; overcrowding of the prison system.</p>
<p>7. Cost of treatment: cost to the state of treatment for dependent users.</p>	<p>8. HIV and AIDS: spread of HIV through injecting drug use.</p>
<p>9. Corruption: impact of drug-related corruption on the economy and political system.</p>	

1. What is the nature of this market?

East Asia and the Pacific have a long history with methamphetamine. It was first synthesized in Japan, and it became available over-the-counter throughout the region in the 1950s and 1960s. When the sale of the pharmaceutical was suspended, a street version known as *yaba* or “crazy medicine” began to appear. The popularity of *yaba* has waxed and waned over the years, but by the late 1980s the illicit manufacture and use of *yaba* was expanding significantly in the region. This history may explain why consumption of pill-form methamphetamine retains its popularity in Southeast Asia, particularly in Thailand, more so than in other places around the world.

Yaba pills are quite small and generally contain caffeine. They are traditionally consumed orally, so their effects are sometimes would be mild compared with other forms of methamphetamine. This has allowed a market to sustain itself for many years, in contrast to methamphetamine epidemics in other parts of the world which have tended to burn out quickly.

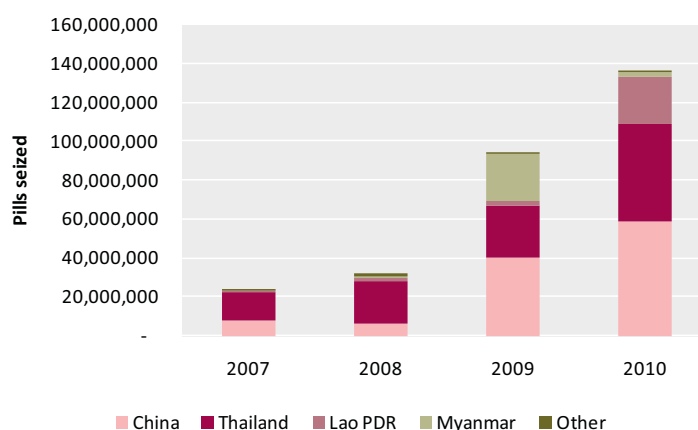
In order to directly ingest the drug, users have, in recent years, begun vaporizing the pills and inhaling the fumes. Thus, despite the fact that many users will eventually reduce pills to a powder, the pill-form of the drug retains its popularity, even though tableting involves additional expense. In this way, culture trumps practicality, as, among drug users, branding and packaging retain their appeal.

Although Thailand remains the epicentre of *yaba* use in the region, the drug is also consumed in other countries of Southeast Asia. It is possible that it was introduced and transmitted by migrants or truckers to working communities in Lao PDR and Cambodia. Outside Southeast Asia, the primary market is China. In China, use is not restricted to the border areas or urban centres – *yaba* has been seized in every province.

The growth in popularity in China of a drug commonly associated with Thailand requires some explanation. The reason may be that most of the world’s *yaba* is produced in Myanmar’s north-eastern

Shan State and its adjoining Special Regions, notably Wa (Special Region 2); an area where trafficking to China has a long and notorious history. Today, a significant amount of *yaba* is produced in China itself, a country where the primary precursor chemical (ephedrine) is commercially produced for pharmaceutical purposes.

Figure 1: Methamphetamine pills seized, by location, in East Asia



Source: UNODC EAP 2011: p. 14

Yaba has traditionally been a “working-man’s” drug. It is used by truckers and manual labourers to enhance physical performance, and it retains its attractiveness for this purpose. The drug is also used today in urban club settings. The vaporization of the pills is a relatively recent innovation in the use of the drug, and it may change the threat posed by *yaba* use. High levels of methamphetamine use can result in a range of negative outcomes, including psychosis.¹

In addition, those who make *yaba* can also make crystal methamphetamine, a far more potent and addictive form of the drug. And while *yaba* use has remained largely confined to China and Southeast Asia, crystal methamphetamine has spread to virtually every country in the region.

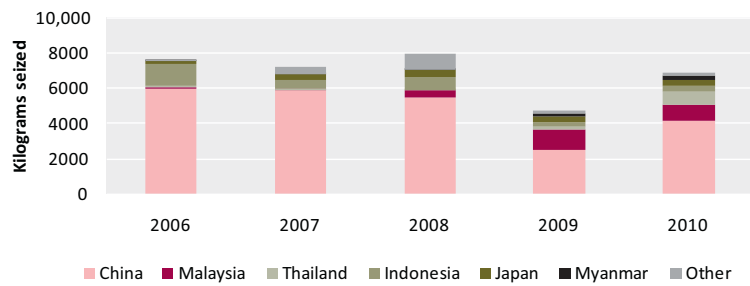
Crystal methamphetamine seems to have made its debut in the region in the Philippines in the 1970s, but did not begin to really take off until production started in Myanmar in the early 2000s. Since much larger amounts of methamphetamine are consumed

¹ See for example, Cruickshank and Dyer 2009.

in crystal use than in *yaba* use, crystal methamphetamine is relatively expensive. In some countries, this places the drug beyond the reach of all but the club-going elite. In other countries, there is a broader base of consumers. Without the need to press the drug into pill form, producers both large and small have sprung up across the region. Large labs have been detected in China, Indonesia and the Philippines.

Virtually every country in the region consumes crystal methamphetamine, some at very high levels. Within a few years, it has emerged as the most problematic drug for at least seven countries² in the region. The problem is most intense in the countries of Oceania and the Greater Mekong Subregion where the levels of methamphetamine used are the highest in the world and comparable to peak levels of cocaine use in the United States in the 1990s. In parts of China, methamphetamine has begun to displace heroin as the most problematic drug.

Figure 3: Crystal methamphetamine seizures in East Asia and the Pacific



Source: UNODC EAP 2011: p. 15

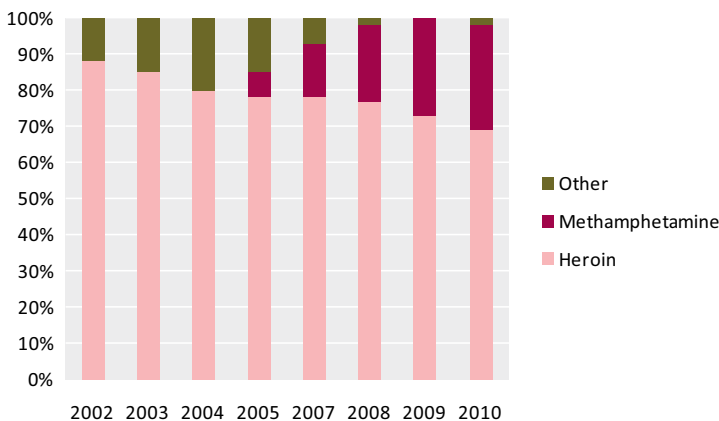
2. How is the trafficking conducted?

Methamphetamine can be produced wherever the precursor chemicals are present. The required precursor chemicals are available, to a greater or lesser degree, in every country in the world. Where commercial quantities of ephedrine are not available, over-the-counter decongestants have proven a perfectly acceptable substitute, although extracting the active ingredient is more labour intensive.⁴ Since 2008, many countries in the region have seized large quantities of decongestants, most of which have originated from China, India, the Republic of Korea and Thailand.⁵

As a result, there is no inherent need for cross-border trafficking of the finished product. Over time, every country with a consumer base has the potential to become self-sufficient. And they will, unless other countries are able to produce the drug cheaply enough to cover the cost of trafficking and still remain competitive.

There is evidence of domestic production in most of the countries of this region, but two countries have advantages that allow them to undercut local prices. The first is Myanmar, where political instability in Shan State and the Special Regions adjoining China has provided cover for large-scale drug manufacturing. The second is China, where ephedra, the herbal basis for ephedrine, grows in great quantities. As a result, Myanmar and China are the two major producers for export to the region.

Figure 2: Primary drugs of abuse for registered drug users in China



Source: China National Narcotics Commission³

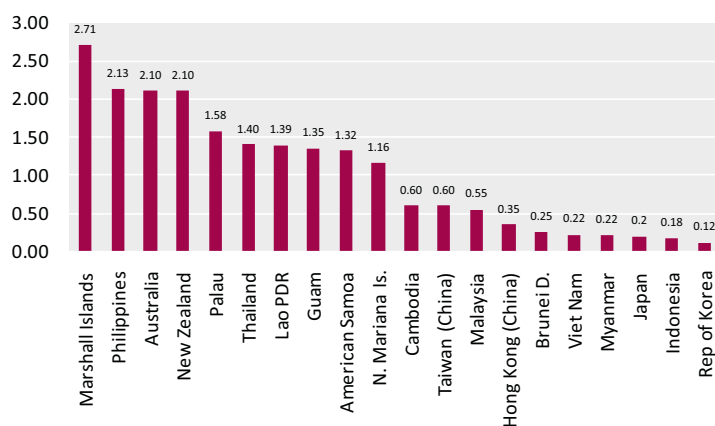
² According to the UNODC DAINAP database, Brunei Darussalam, the Republic of Korea, Lao PDR, Cambodia, Thailand, the Philippines and Japan all rank methamphetamine as the most common primary substance of abuse among those treated in 2009.

³ Presentation: Drug treatment and HIV/AIDS prevention in China, June 2011, Hanoi, Viet Nam.

⁴ The process is more labour-intensive due to the effort required to transform the ingredients from their capsule form.

⁵ Drug Abuse Information Network for Asia and the Pacific (DAINAP).

Figure 4: Share of the adult population that used methamphetamine in 2010



Source: UNODC Delta Database

In Myanmar, methamphetamine production is strongly associated – in Shan State and other areas of the country – with non-state armed groups. It is clear that armed ethnic insurgents tax any economic activity in their areas of control, and that those with power in these regions often have links to such insurgent groups. The instability that has beset this region makes all manner of criminal activity possible.⁶ It is clear that particular armed groups are directly participating in the manufacture and trans-border smuggling of methamphetamines.

Most methamphetamine manufacture in Shan State takes place in small, mobile facilities located in border areas near China and Thailand. It is important to note that Myanmar has no domestic pharmaceutical industry. Domestic production of methamphetamine in this area thus relies exclusively upon the acquisition of diverted precursors and licit pharmaceutical preparations. These come from neighbouring countries such as India, China, Thailand and the Republic of Korea.⁷ Were it not for these illicit third-country diversions, Myanmar's ATS 'industry' could not exist. Much of the *yaba* production from Myanmar goes directly to Thailand, while the crystal methamphetamine is channelled throughout the region.

⁶ Recent developments which may have a positive impact on this situation include signed ceasefire agreements and a six-year drug interdiction programme which has been agreed between the government and the South Shan Army.

⁷ UNODC EAP 2010: p. 22; UNODC EAP 2011: p. 139.

In 2010, Thai authorities estimated that some one billion methamphetamine pills and significant quantities of crystal methamphetamine had been trafficked into the country from Myanmar.⁸ About 80% comes through the northern provinces of Thailand and the remaining 20% through Lao PDR and Cambodia.⁹ Some is simply walked across the border at green crossings (areas away from the formal border crossing points), while the remainder enters concealed in vehicles transiting at formal border crossings. The drugs are also trafficked along the Mekong River to a number of countries, including China.¹⁰ There is also some maritime

trafficking from ports in southern Myanmar into southern Thailand, Malaysia and Indonesia. Finally, a small number of couriers have been arrested for attempting to smuggle methamphetamine out from Myanmar to the Philippines via commercial air flights.¹¹

Cambodia continues to serve as a transit country for drugs produced in Myanmar, most of which enter Cambodia from its north-eastern border with Lao PDR.¹² Drug traffickers, in particular those from China and West Africa, traffic drugs out of Cambodia via international airports in Phnom Penh and Siem Reap.¹³ There is also evidence of methamphetamine production in Cambodia.¹⁴

In China, most of the methamphetamine production labs seized have come from a block of provinces in the centre of the country: Sichuan, Henan, Hunan, and Hubei.¹⁵ Labs have also been found in Guangdong, close to Hong Kong (China). Most

⁸ UNODC estimates in addition to informal communications with Thailand anti-narcotics officials.

⁹ In 2010, law enforcement authorities detected 113 cases of methamphetamine smuggling from Lao PDR to Thailand. Source: 'Synthetic Drug Trafficking Trends in the Asia Pacific Region 2010', Regional Intelligence Liaison Office for Asia and the Pacific (RILO), presented at the Global SMART Regional Workshop, Bangkok, 18-20 July 2011. In addition, formal UNODC communication with the Office of the Narcotics Control Board of Thailand (ONCB), August 2010.

¹⁰ UNODC EAP 2011: p. 99 and p. 104.

¹¹ See Myanmar country report in INCSR 2011.

¹² 'Country Report: Cambodia', National Authority for Combating Drugs (NACD), presented at the Thirty-Fourth Meeting of Heads of National Drug Law Enforcement Agencies, Asia and the Pacific (HON-LAP), Bangkok, 30 November – 3 December 2010.

¹³ See Cambodia country report in INCSR 2011.

¹⁴ UNODC EAP 2011: p. 8.

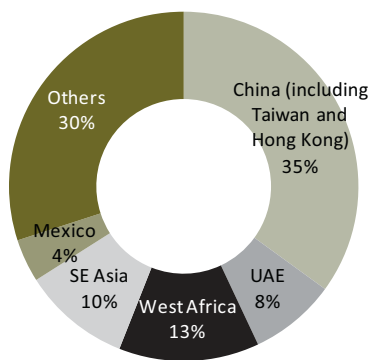
¹⁵ ADEC China 2011

Chinese production is consumed domestically, but both Japan and the Republic of Korea say that most of their methamphetamine comes from China.¹⁶

In Indonesia, a large portion of the methamphetamine is manufactured and consumed domestically. The methamphetamine markets in Australia and New Zealand are largely supplied by domestic manufacture, although some import has also been detected.

The level of methamphetamine use is of concern in some of the Pacific Islands, countries without the resources to manage the problem. Some Pacific islands are also used to trans-ship precursors and finished products. Seizures of precursors and attempted diversion of pharmaceuticals have been reported by authorities in Fiji, French Polynesia, Nauru, Papua New Guinea, Samoa and Tonga. Several islands, including Fiji, French Polynesia, Guam, Samoa and Tonga, reported methamphetamine seizures in 2009 and 2010. Methamphetamine production has also been detected in the Pacific since 2004, when a lab was discovered in Fiji. Smaller-scale operations have been seized in Guam and in French Polynesia, and there are indications that manufacture may be spreading to other islands.¹⁷

Figure 5: Origin of air flights with methamphetamine couriers detected in Japan in 2010



Source: National Police Agency of Japan¹⁸

¹⁶ Annual Reports Questionnaire

¹⁷ The annual prevalence of ATS (excluding ecstasy) in Oceania (including Australia and New Zealand) is 2.1%. This is the highest prevalence of ATS anywhere in the world. By comparison, annual prevalence in East and Southeast Asia is 0.6% (see UNODC 2012 p.25). In addition, the Pacific Island States and territories, with available data, report high prevalence rates of amphetamines-group substances. The Marshall Islands report the highest annual prevalence rate among Pacific Island States and territories (2.7%) (see UNODC EAP 2011 pp. 28-29).

¹⁸ ADEC Japan 2011

Methamphetamine is also imported to the region from other countries including the Islamic Republic of Iran, Mexico, and several countries in West Africa. Much of this movement involves commercial air couriers moving relatively small amounts of the drug to the highest value markets, such as Japan.

In addition to methamphetamine, many other synthetic drugs are trafficked throughout the region. The technical capabilities of some East and Southeast Asian countries have grown faster than their governments' ability to regulate them. Precursors, tableting and "cooking" equipment are relatively easy to access in this region, opening the potential for East and Southeast Asia to become a world supplier of synthetic drugs.

3. Who are the traffickers?

A wide range of players are involved in the many domestic and transnational methamphetamine markets affecting the region. These include full-time professional criminals, like those formerly or currently involved in heroin markets, as well as people considerably closer to mainstream society. High-ranking state officials and military personnel in several countries have been prosecuted for corruption related to the methamphetamine trade.¹⁹

Myanmar's law enforcement efforts have achieved considerable results in recent years in terms of both seizures and arrests. However, the efforts have been constrained for a number of reasons. According to the government, law enforcement agencies have been restricted in their ability to undertake interventions in the Special Regions because of the inaccessibility of the areas controlled by the ceasefire groups.²⁰ Other limiting factors cited include the constantly changing modus operandi of the traffickers, the lack of security checkpoints and the collusion of some local officials. The lack of equipment to detect and identify drugs and precursor chemicals has also been identified as a limiting factor.

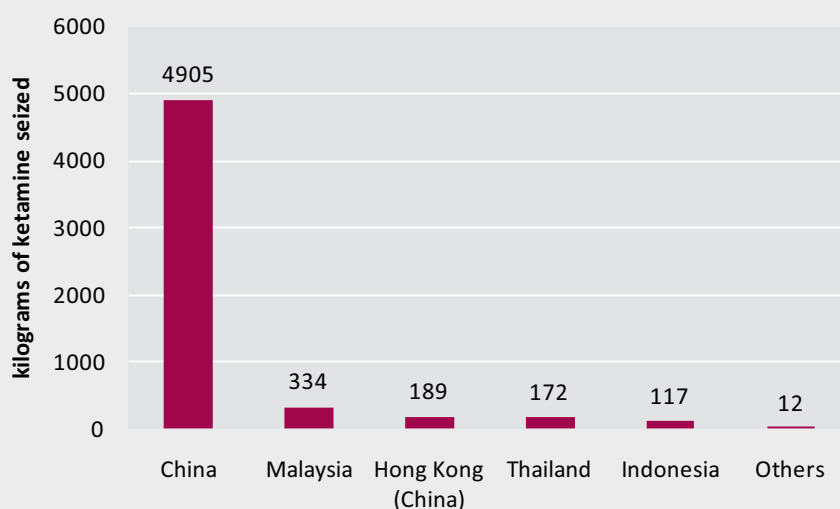
¹⁹ See, for example, Bangkok Post, Suspect ties top military officer to drugs gang. 26 January 2012; The Phnom Penh Post, Drug cop arrested. 23 May 2011; B. Kongkea and K. Yuthana, Moek Dara taken into custody. The Phnom Penh Post, 17 January 2011.

²⁰ UNODC EAP 2010: p. 4.

Ketamine

Ketamine is a veterinary tranquillizer that is not presently restricted under international control. It is not an amphetamine-type stimulant, but it is nonetheless a synthetic drug, and a major concern for parts of the region. In humans, it produces immobility and an intense hallucinogenic experience. Because it can be produced legally, very large amounts have been diverted from China and India for recreational use. Active in doses of 100 milligrams, recent seizures represent tens of millions of dose units. Between 2006 and 2010, an average of 5.4 mt of ketamine has been seized in China annually.²¹

Figure 6: Kilograms of ketamine seized in East Asia in 2010



Source: DAINAP²²

Ketamine use is most common in Hong Kong (China), where it is consumed in low doses in the club scene. Ketamine users accounted for some 38% of all registered drug users in Hong Kong in 2010. Among registered drug users below the age of 21, ketamine users comprised 84%.²³

China tightened its controls on ketamine supplies to Hong Kong (China) in 2004, and traffickers began to source the drug in southern India, trafficking it in via Southeast Asia. In late 2007, traffickers began to source from China again, this time sourcing from clandestine laboratories and making low-volume yet high-frequency shipments.²⁴ In 2009, China reported that nearly 9 mt of the primary precursor for ketamine (hydroxylamine hydrochloride) had been seized in the country.²⁵

Ketamine is also used in Malaysia, in Viet Nam (mainly along the border with China) and to a lesser degree, in Thailand. Most of this supply comes from India, particularly Chennai in southern India.²⁶ The substance is trafficked into these countries by commercial air couriers and by sea routes by Indian nationals.²⁷ Some ketamine is first trafficked to Bangkok and then further trafficked overland by commercial bus into Malaysia, with some smaller quantities trafficked onward to Singapore.²⁸

²¹ Drug Abuse Information Network for Asia and the Pacific (DAINAP)

²² Drug Abuse Information Network for Asia and the Pacific (DAINAP)

²³ 'Fifty-ninth Central Registry of Drug Abuse, 2000-2009', The Central Registry of Drug Abuse (CRDA), Statistics Unit, Security Bureau, Government Secretariat, Hong Kong, China, February 2011.

²⁴ ADEC Hong Kong 2011

²⁵ NNCC 2011

²⁶ HONLAP Thailand 2010; ADEC Malaysia 2010

²⁷ HONLAP Malaysia 2010

²⁸ ADEC Malaysia 2011

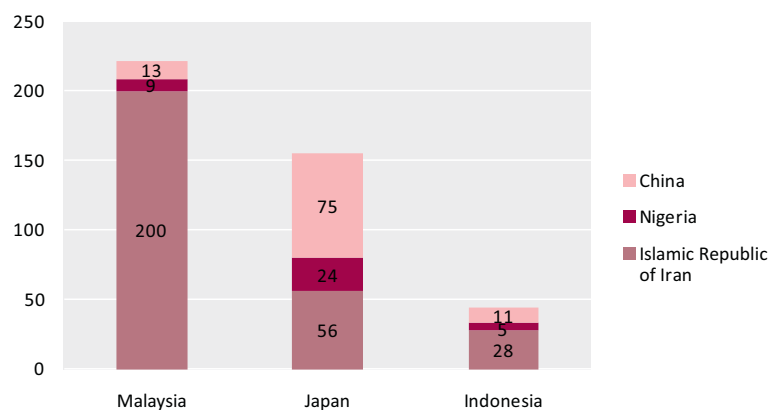
There is a relationship between methamphetamine production and the non-state armed groups, including both rebel groups and the pro-state militias. Production also occurs in areas nominally controlled by the government, and there have been persistent allegations of military involvement.²⁹ It appears that conflict provides cover for drug production and trafficking, but that armed groups on both sides profit from it mainly through taxation.

Ethnic Chinese have been implicated in methamphetamine markets inside Myanmar, as well as in a number of countries in the region.³⁰ Ethnic Chinese who live in Thailand, Malaysia and Taiwan (Province of China) have been arrested for attempting to traffic methamphetamine from Myanmar to several countries in the region.³¹ In China, most of the investors and organizers for crystal methamphetamine clandestine laboratories are based in Hong Kong (China), and Taiwan (Province of China).³² In addition, much of the large-scale methamphetamine manufacture in Indonesia, Malaysia and the Philippines is organized by ethnic Chinese networks.³³ The Philippines reports that a criminal network based in Hong Kong (China) has been importing chemists for large-scale manufacture since 2004.³⁴

Between 2005 and 2010, a total of 233 foreign nationals were arrested in the Philippines for their involvement in the drug trade, of which 125 (54%) were ethnic Chinese. Most of these were involved in methamphetamine.³⁵

Aside from ethnic Chinese, there are two groups from outside the region who feature prominently in methamphetamine markets in East Asia and the Pacific: Nigerians and Iranians.

Figure 7: Nationals of China, Nigeria, and the Islamic Republic of Iran arrested for ATS trafficking in Malaysia, Japan, and Indonesia in 2010³⁶



Source: Annual Reports Questionnaire³⁷

A much wider range of nationalities has actually been involved in drug couriering and these nationalities tend to shift over time, as traffickers seek to employ those most likely to avoid suspicion, and thus detection. Large numbers of Philippine nationals – women in particular – have been arrested worldwide during the past couple of decades,³⁸ and Vietnamese have become a popular choice more recently.³⁹ The nationality of the courier may bear no relationship to the nationality of the trafficker. Couriers are simply vessels for transporting drugs.

Nigerian trafficking networks

Nigerian drug trafficking networks are found throughout the world. Most of the traffickers hail from the southeast corner of Nigeria (the former Biafra) and are generally of the Igbo ethnic group.⁴⁰ Since the Biafran War, Igbo have sought their fortune abroad, often arriving in new countries penniless and building a life for themselves out of nothing. Most traffickers see small-scale dealing as a way out of poverty.⁴¹

New arrivals sell drugs on the street until they have a sufficient stake to perform small-scale importation by couriering drugs on commercial air flights. When

²⁹ UNODC EAP 2010: p. 17-19.

³⁰ For example, see, inter alia, PDDB 2011 and PDEA 2011; NACD 2011; and China country report in INCSR 2011.

³¹ Myanmar country presentation, Central Committee for Drug Abuse Control of Myanmar (CCDAC), presented at the Regional Seminar on Cooperation against West African Syndicate Operations, Bangkok, 9-11 November 2010.

³² China country report in INCSR 2011.

³³ For example, see, inter alia, 'Indonesia: Situation Assessment on Amphetamine-Type Stimulants', UNODC 2013 (forthcoming); PDEA 2010; ADEC Malaysia 2010.

³⁴ IDEC Philippines 2011

³⁵ ADEC Philippines 2011

³⁶ The assumption is that these arrests are in and of themselves an indication of significant national involvement in ATS trafficking, and not the result of specific profiling or other measures.

³⁷ The Japanese data simply refer to "Africa" without specifying a nationality, and amalgamates Taiwan, Province of China with China.

³⁸ PDEA 2010a: p. 13.

³⁹ IDEC Viet Nam 2011

⁴⁰ Leggett 2001

⁴¹ Leggett 2001

they have made enough money, they can recruit others to courier for them. They then become wholesalers, with new arrivals working under them. They operate many business enterprises in parallel, licit and illicit. Once sufficient money is made in drugs, most move on to full-time licit activities.⁴²

Most of the Nigerians arrested are in the early phases of their drug careers when they are involved in street dealing or couriating themselves. More advanced Nigerian traffickers are rarely detected as Nigerians, because over time they purchase or otherwise acquire the passports of other nations, particularly other African countries. Later they can employ couriers of any nationality. In 2010, a number of drug couriers from countries in the Middle East, Central Asia and Eastern Europe were arrested in the East Asia-Pacific region for trafficking methamphetamine on behalf of Nigerian drug organizations.⁴³

Today, Nigerian drug trafficking groups have been detected in almost every country in the region, and are particularly active in China, Indonesia, Japan, Malaysia and Thailand.

- In Japan, 39 “African” couriers were detected between 2007 and 2010, most of whom were identified as Nigerian.⁴⁴
- The number of West African couriers arrested in Malaysia significantly increased between 2009 and 2010, from 49 to 73, with Nigerian nationals accounting for 78% of the total.⁴⁵
- In Thailand, 22 Africans were arrested between 2010 and February 2011 carrying some 38 kg of crystal methamphetamine among them.⁴⁶
- In China, from 2004 through October 2010, a total of 418 West African were arrested for drugs, and two-thirds were identified as Nigerians.⁴⁷

Ironically, it is possible that Chinese syndicates first introduced methamphetamine to Africa.⁴⁸ In the early 2000s, Chinese organized crime groups were active in the Western Cape of South Africa, dealing in a range of commodities but particularly in abalone, a shellfish endangered in South Africa that has been harvested illegally by local gang members.

⁴² Leggett 2001

⁴³ ADEC UNODC WAN 2012

⁴⁴ Annual Reports Questionnaire

⁴⁵ ADEC Malaysia 2012

⁴⁶ IDEC Thailand 2011

⁴⁷ HONLAP China 2010

⁴⁸ Steinberg 2005

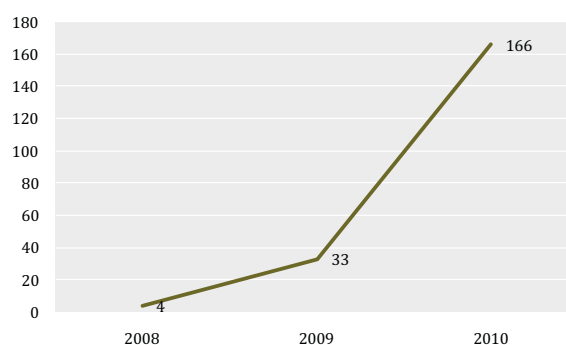
Shortly after this commercial link was established, the local gangs began dealing in methamphetamine, a drug which was new to South Africa. In just a few years, methamphetamine became the most problematic drug in the Western Cape.⁴⁹

Nigerian nationals dominate the small-scale importation and street sale of drugs to South Africa, as they do in many countries. Around 2008, the first shipments of methamphetamine from South Africa to East Asia and the Pacific were detected. Today, most shipments come from West Africa. Methamphetamine production facilities have been discovered in a number of West African countries. In 2009, only 7.4% of seizures of methamphetamine trafficked to Japan were estimated to have originated in Africa; by mid-2010, however, this proportion had risen to 36%.⁵⁰ In addition, significant diversions of precursor chemicals have been seized in Africa.⁵¹

Iranian trafficking groups

The importation of methamphetamine produced in the Islamic Republic of Iran is a new phenomenon, and one that requires more investigation. The Iranian government first reported manufacture in their country in 2008, when four production facilities were seized. Iranian groups were first detected in

Figure 8: Number of methamphetamine labs seized in the Islamic Republic of Iran



Source: ARQ submitted by Islamic Republic of Iran 2011

⁴⁹ South African Community Epidemiology Network on Drug Use (SACENDU)

⁵⁰ ADEC Japan 2011

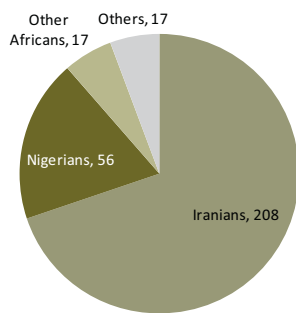
⁵¹ The International Narcotics Control Board (INCB) identified Africa as the region with the greatest number of diversions or attempted diversions of ATS precursor chemicals in 2008. For example, a single shipment to Uganda of 300 kg of pseudoephedrine was seized upon arrival in 2008. However, only 2 cases of diversion were reported in 2009: 1.25 mt of ephedrine to the Central African Republic and 1 mt of pseudoephedrine to Kenya (UNODC SMART 2010, p. 4). In Australia, in 2009-2010, authorities seized 17 kg of crystalline methamphetamine in air cargo from South Africa, as well as 22.8 of pseudoephedrine shipped from Egypt in March 2010, and 18 kg of ephedrine powder shipped from Egypt in May 2009. See ACC 2011 pages 24 and 111.

East Asia and the Pacific in 2009,⁵² appearing at once in several countries attempting to air courier methamphetamine in both liquid and crystal form. By 2010, there were also indications that Iranian drug organizations were attempting to establish illicit methamphetamine manufacturing operations in Japan, Malaysia and Thailand.⁵³

Part of the problem is easy availability of precursors in the Islamic Republic of Iran. In 2010, The Islamic Republic of Iran ranked fourth in the world for licit pseudoephedrine imports.⁵⁴

Iranian groups are particularly active in Malaysia, Indonesia, Thailand, and Japan; largely the same countries where West Africans are most prominent.⁵⁵

Figure 9: Drug traffickers from outside East Asia arrested in Malaysia in 2010



Source: Royal Malaysian Police

For reasons that may be related to cultural or diaspora linkages, the main destination in Southeast Asia for Iranian drug trafficking organizations is Malaysia. A total of 228 couriers from the Islamic Republic of Iran were arrested in Malaysia in 2009-2010 for attempting to smuggle crystal methamphetamine into and through the country.⁵⁶ In Indonesia, the top two nationalities arrested for methamphetamine trafficking in 2010 were Iranians and Malaysians.⁵⁷ In 2010, 82 Iranians were arrested at Suvarnabhumi International Airport in Bangkok, Thailand and 166 kg of crystal methamphetamine was seized.⁵⁸

⁵² UNODC EAP 2011: p. 9.

⁵³ UNODC SMART 2010: p. 8.; Official communication with the Royal

⁵⁴ INCB Precursors 2010

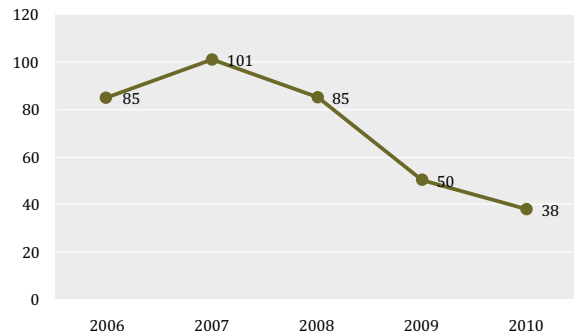
⁵⁵ UNODC EAP 2011: p. 9.

⁵⁶ ADEC Malaysia 2011

⁵⁷ Annual Report Questionnaire for 2010, Indonesia.

⁵⁸ IDEC Thailand 2011a

Figure 10: Number of Iranians arrested in Japan for methamphetamine



Source: Japan National Police⁵⁹

The situation in Japan is different because Iranians have been active in Japanese drug markets since the mid-1990s. The number of Iranians arrested in Japan has decreased sharply in recent years for unknown reasons. In 2010, only one Iranian methamphetamine manufacturing organization was detected in Japan.⁶⁰

4. How big is the flow?

Calculating the volume and value of drug markets is a process of triangulation. For plant-based drugs like heroin and cocaine, the strongest leg of the triangle is production data. Every year, UNODC performs crop surveys in the major opium poppy and coca producing countries. Once the number of hectares under cultivation is determined, this is multiplied by regional yield figures to produce a production estimate. This output can then be tallied with seizure figures and what is known about demand, the other two legs of the triangle.

The situation is more complicated with synthetic drugs like methamphetamine because production is much less centralized and “observable”. The precursor chemicals are used for licit purposes all over the world. Missing the production side of the triangle, methamphetamine estimates are based on seizures and demand-side data. Unfortunately, nationwide drug use surveys are carried out only irregularly in many countries in the region, and have never been conducted at all in China. Unlike heroin, the amount of drugs used per consumer varies tremendously. So, in East Asia and the Pacific, the methamphetamine “triangle” tends to have only one side.

⁵⁹ UNODC SMART 2010: p. 8.

⁶⁰ ADEC Malaysia 2011; ADEC Malaysia 2012

The easiest way to estimate the size of this illicit market is therefore to look at the seizures and factor into this an interception rate. In East Asia and the Pacific, this can be done in considerable detail, because most countries in the region report seizures. Both *yaba* and crystal methamphetamine markets can be calculated separately. Seizures can be reviewed across time, and this can be balanced with the best estimates of demand on a per-country basis.

As discussed above, the *yaba* market is largely confined to the Greater Mekong Subregion. It is made and consumed in Myanmar and China, then exported to Thailand, with lesser amounts being consumed in the transit countries of Lao PDR and Cambodia, and then Viet Nam and Malaysia. This is reflected in the seizure statistics. China and Thailand account for 80% of the seizures in 2010 – adding Lao PDR and Myanmar brings the share to 99%. Seizures in Myanmar are relatively low, but the state has limited capacity to enforce the law in the areas where most of the production is taking place. Nonetheless, these four countries – China, Thailand, Lao PDR, and Myanmar – have accounted for upwards of 90% of the seizures of *yaba* since at least 2006.

Although there is substantial year-on-year volatility due to the large size of some seizures, the five-year average in China and Thailand is almost identical: about 25 million pills seized per year. Survey data suggest about 600,000 annual users in Thailand, so assuming a similar interdiction rate, roughly the same number of users would be found in China. Surveys in Lao PDR suggest the same rate of use as in Thailand, but with a much smaller population, amounting to about 40,000 *yaba* users. Combining these three key consumer markets together yields a consumer estimate of about 1.25 million users.

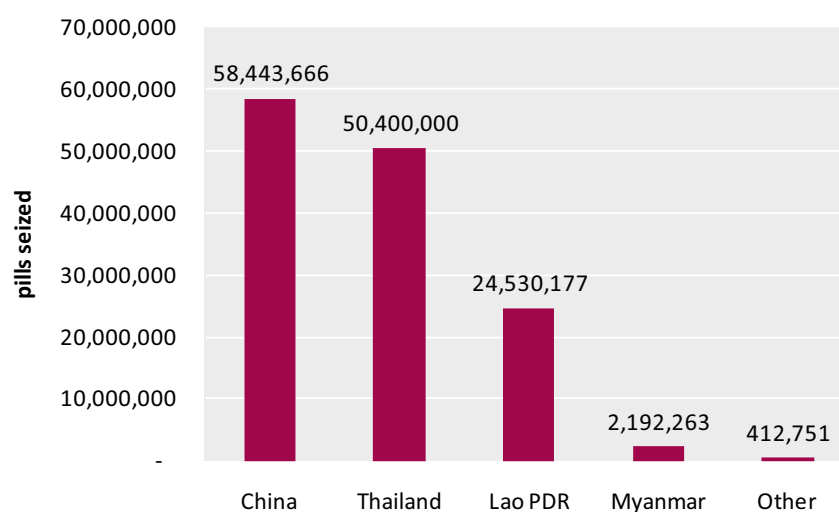
In 2010, a total of around 136 million pills were seized throughout the region. Dividing these seizures among the 1.25 million users results in about 110 pills being seized per user in 2010. With a 10% interdiction rate, this would suggest a total market

flow of 1.4 billion pills per year, or fewer than 1000 pills per user per year after seizures. Like all methamphetamine, *yaba* produces physiological tolerance to its effects, and so use levels vary considerably between casual users and addicts. Field observations suggest that this estimate constitutes a reasonable rate of use.

If use rates were higher, the costs would soon become prohibitive. Pills are priced at around US\$5 per pill in China and US\$7 per pill in Thailand, suggesting an average annual expenditure of US\$5,000 per user in China and US\$7,000 in Thailand, on the assumption that 1.4 billion pills are consumed annually. Higher consumption volumes would quickly push the average outlay per user to unreasonable levels.

Multiplying 1.4 billion pills by local prices results in a gross income for traffickers of around US\$8.5 billion.

Figure 11: Number of *yaba* pills seized in 2010



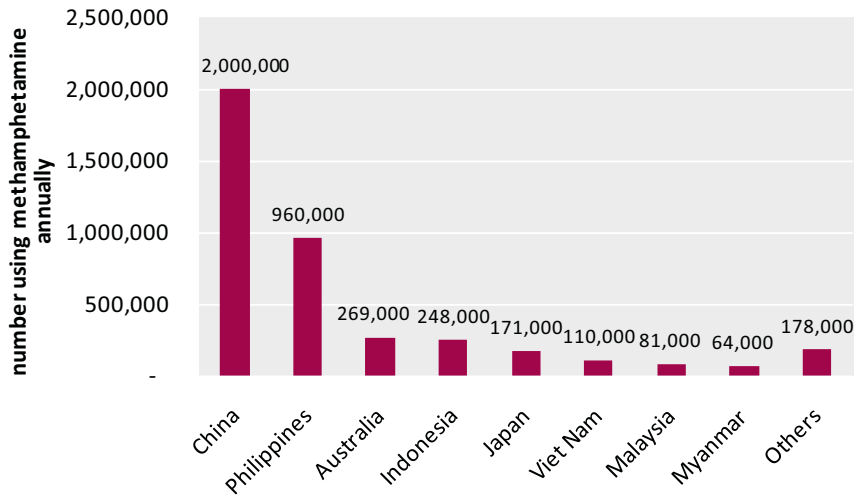
Source: UNODC SMART Drug Abuse Information Network for Asia and the Pacific (DAINAP)

The crystal methamphetamine market is trickier, given the large number of countries producing and consuming. Once again, the biggest barrier to an accurate estimate is the lack of use survey data for China. Based on the survey data available, prevalence is greatest in Australia, New Zealand and parts of the Pacific, but lower prevalence in China would still indicate a much larger number of users due to China's population size.

Since surveys rarely differentiate between *yaba* and crystal methamphetamine, it is important to

exclude national markets where most of the consumption is *yaba*. Thailand has around 600,000 “methamphetamine users”, but the majority appear to consume *yaba*. Although crystal methamphetamine is present, and seizures have risen remarkably recently, it was only rated by the Thai government as the ninth most problematic drug for the country in 2009. Lao PDR seizes little crystal methamphetamine, so most use is likely to be *yaba* in that country as well.

Figure 12: Estimated number of crystal methamphetamine users in East Asia and the Pacific



Source: Calculations derived from UNODC and government estimates

After excluding these countries and based on available survey data, the number of crystal methamphetamine users in East Asia and the Pacific outside of China is estimated to be around two million, with the Philippines accounting for much of this total.

This user estimate can be compared to the seizure data. For unknown reasons, 2009 was an anomalously weak year for seizures, but regional totals have been otherwise very consistent over the past five years – between seven and eight mt seized per year. China has accounted for between 50% and 80% of the crystal methamphetamine seizures during this period.

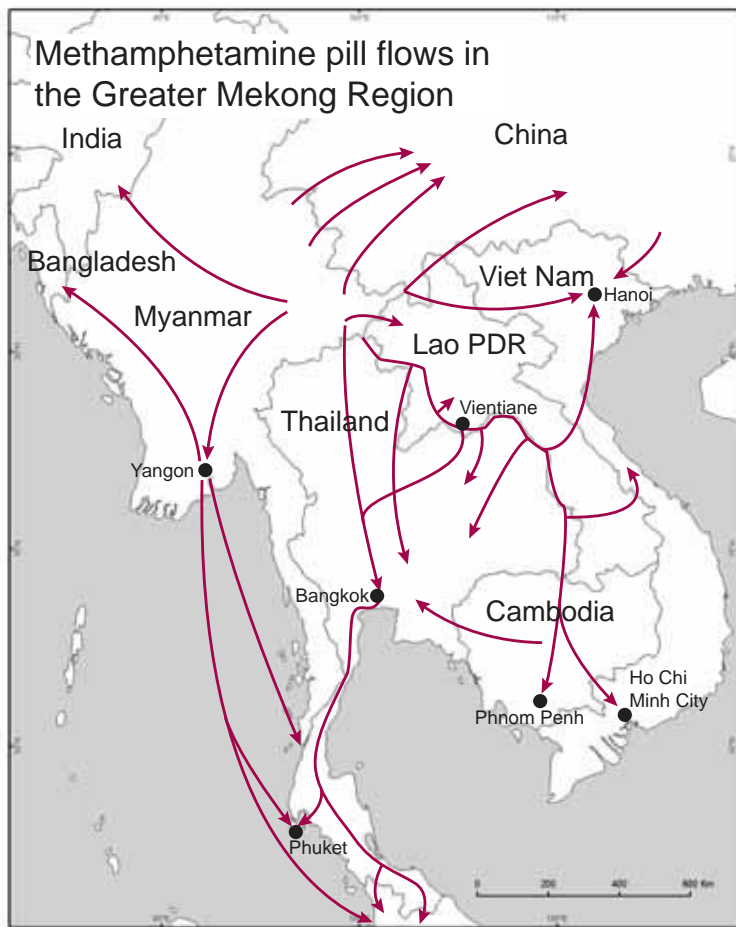
Methamphetamine is produced in China both for local consumption and for export, but if Chinese consumption were roughly equal to its share of regional seizures, then there would be around two million methamphetamine users in China. This would suggest an adult prevalence of about two-tenths of one percent, on a par with Japan. China provided treatment for over 33,000 methamphetamine users in 2010, which would indicate about 1.7% of annual users received treatment. Given that many may be casual users, this is actually a remarkably high rate, comparable to that in Canada.⁶¹ All this suggests at least roughly five million users in East Asia and the Pacific.

Combining the user estimates with the seizure totals, the countries of the region seized about 1600 milligrams per user in 2010. Assuming a 10% intercept rate, this would indicate each user on average consumed about 15,000 milligrams per year. A dose unit is in the order of 50 milligrams for those without a tolerance, so this is equivalent to one dose unit per day on average. Casual users will use less, while dependent drug users will use much more.

Street prices vary from US\$80 per gram (in China) to US\$500 per gram (in Japan and Australia). At the low end, using an average of 45 milligrams per day will cost a user US\$1,300 per year, and more than five times that in the more expensive markets. Again, higher rates of use would quickly become unaffordable.

In summary, an estimated 5 million users consume crystal methamphetamine and 1.25 million users consume *yaba* in East Asia and the Pacific. They consume an estimated 68 mt of crystal methamphetamine and 1.4 billion *yaba* pills annually. The *yaba* market generates about US\$8.5 billion and the crystal methamphetamine market US\$6.5 billion, for a combined market of around **US\$15 billion** in 2010.

⁶¹ According to the 2010 Annual Reports Questionnaire, there were 1710 methamphetamine addicts in treatment in Canada, out of an estimated 104,788 users, or about 1.7%.



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC Global SMART Programme



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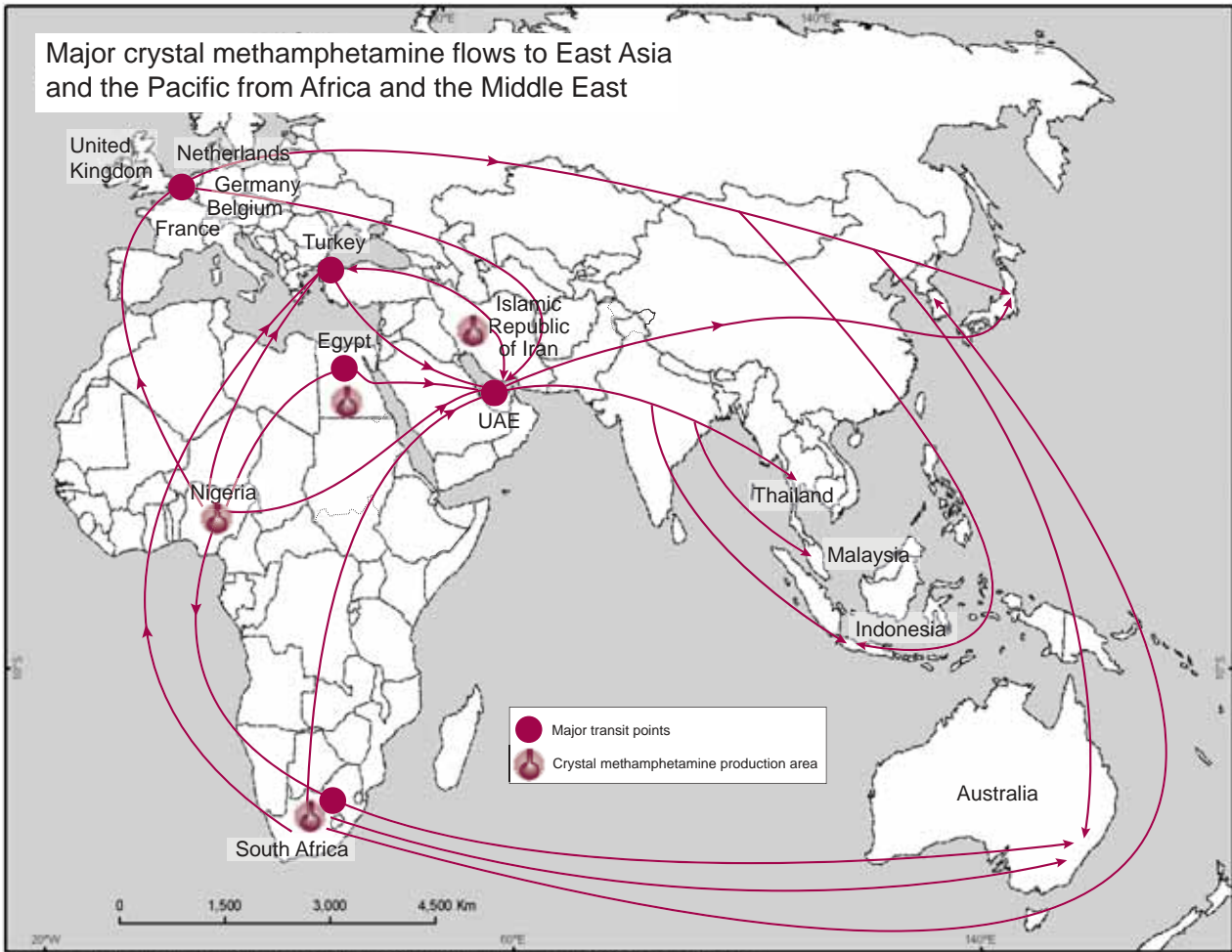
Source: CCDAC

Methamphetamine pill flows in Myanmar



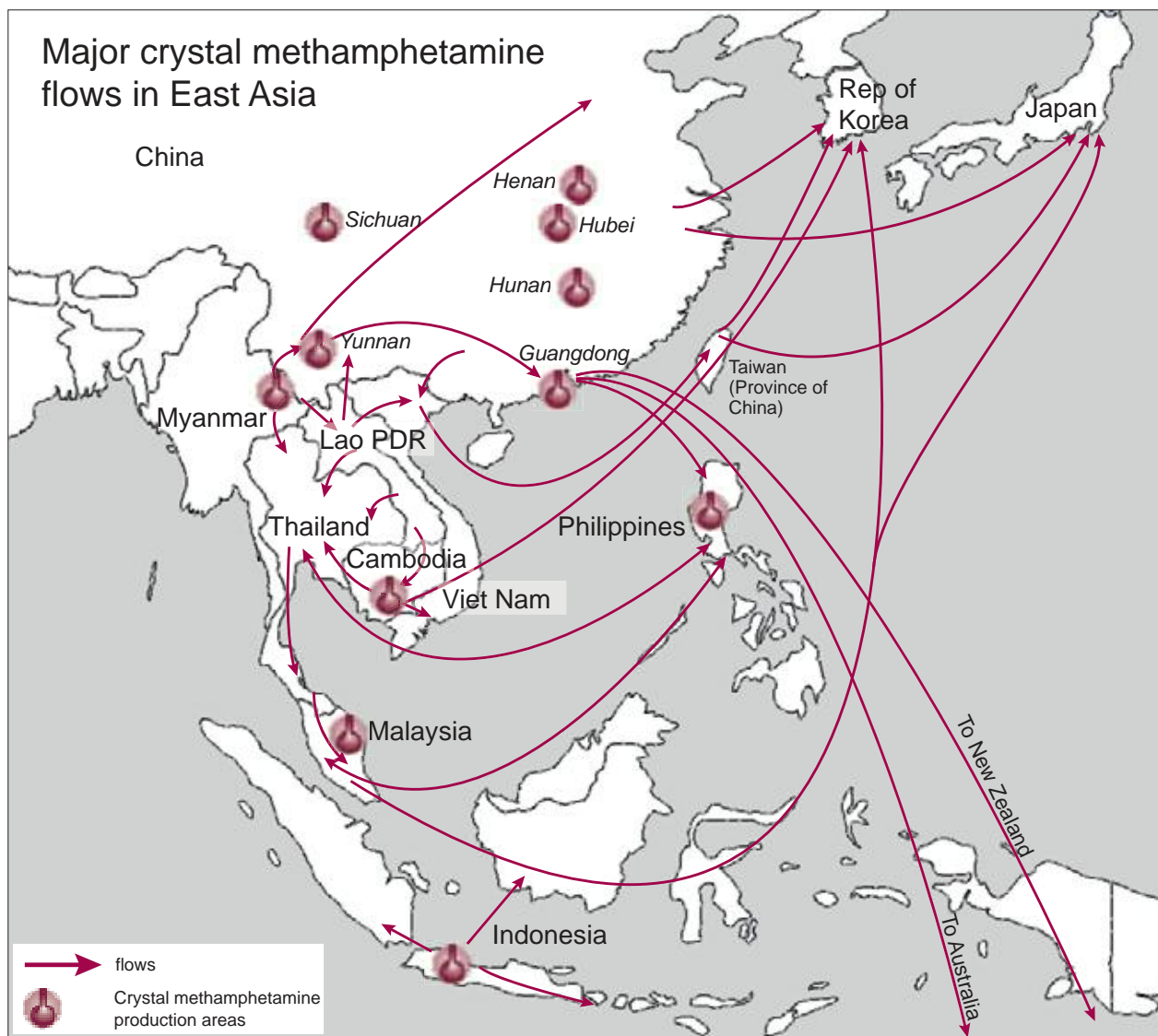
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: CCDAC; UNODC Global SMART Programme



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Source: UNODC Global SMART Programme



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Source: UNODC Global SMART Programme; WDR 2012

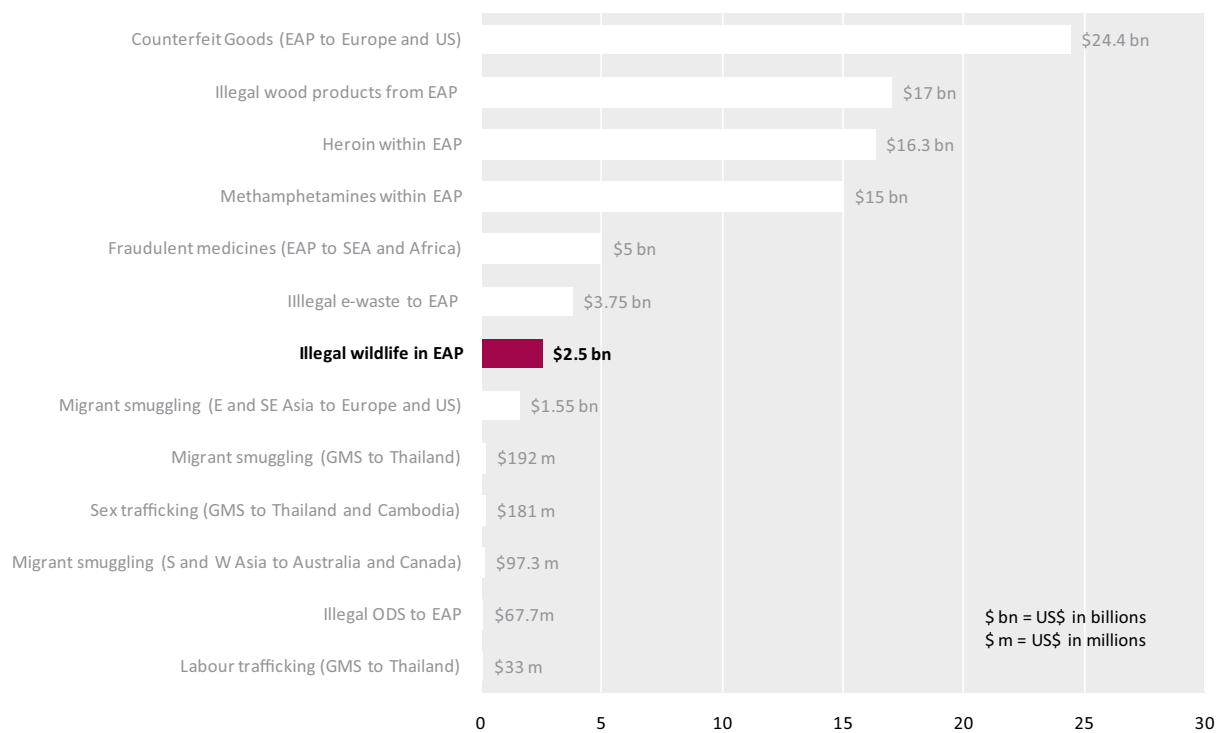


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Source: UNODC Global SMART Programme

Chapter 7

The illegal wildlife trade in East Asia and the Pacific



NATURE OF THE THREAT

<p>1. Extinction of species: regional extinction of tigers, rhinos and other Asian species, extinction of African species (rhinos and elephants), severe depletion of marine wildlife, disruption of ecological processes.</p>	<p>2. Socio-economic impoverishment: state revenues loss, reduced livelihood options for rural communities, spread of disease and damage to public health.</p>
<p>3. Corruption: undermines rule of law and accountability.</p>	

1. *What is the nature of this market?*

The harvesting of natural resources is basic to every day human life. The global exchange of wild plants and animals provides us with food, pharmaceuticals, building materials, decorative objects, clothing, cultural and religious items, and pets. In 2008, the combined global value of legally traded commodities derived from wild plants and animals was approximately US\$24.5 billion.¹

The supply of wildlife is not infinite and its trade requires tight and rigorous regulation. While the illegal trade in wildlife is a major threat to biodiversity, it provides a significant source of profit for criminals. By distorting and undercutting legitimate commerce, it can cause economic and social disruption.² Governments impacted by illegal wildlife trade are deprived of direct and indirect sales and tax revenues on import and export goods – goods which would normally be state-controlled natural resources. Furthermore, the high level of corruption underpinning this illegal activity poses a serious threat to national governance.

Where the illegal wildlife trade is allowed to continue, it can also undermine sustainable development and poverty alleviation objectives because it depletes the natural assets upon which rural communities depend for their livelihoods. In Cambodia, Indonesia, Lao PDR and Viet Nam, plant and animal products provide subsistence to the rural population with food, energy, materials for housing, medicines and income. Lack of access to this capital erodes vital coping mechanisms for a large part of rural communities in the region.

In East Asia, population growth and burgeoning affluence has led to rising demand for exotic and luxury products, including wildlife products.³ China is the region's largest economy and simultaneously the largest consumer market for wildlife. Most wildlife is consumed as food or as ingredients in traditional medicines.⁴ One study in Guangdong, China found that rising income accounted for

80% of the increase in shark fin consumption in that province.⁵ Another recent survey on Chinese attitudes found that respondents were motivated to consume wildlife for ostentatious reasons, such as displaying social status and respect for guests, as well as for perceived health benefits.⁶

Traditional medicine attracts a wildlife trade driven by often-unverified beliefs about the medicinal properties of rare plants and animals or their parts and derivatives. Examples include: orchids, tiger parts and rhino horn. In Asia, traditional medicine is tied very closely to cultural values and traditions that have been practiced for thousands of years. The World Health Organization estimates that 80% of the population in some Asian and African nations is dependent on traditional medicine for primary health care.⁷ Believed to be expanding at a rate of 10% per annum⁸, the market for traditional medicine is linked to illegal wildlife trade as it involves the consumption of products from endangered animals and their parts and derivatives.⁹

Although the medicinal properties of most traditional medicines using ingredients from endangered wildlife have been scientifically refuted, these medicines continue to be used. This use poses an enormous challenge to both policy makers and enforcement agencies. The most dramatic example of such misconceptions is the use of **rhino horn**, whose demand has recently grown exponentially in Viet Nam, after the spread of uncorroborated claims that rhino horn medicine cured a Vietnamese official of cancer. Today, a kilo of rhino horn is valued at approximately that of a kilo of gold. As a result, the survival of rhinos is under unprecedented pressure.¹⁰

¹ These estimates have been developed by TRAFFIC on the basis of an analysis of data contained in the 2009 UN COMTRADE (UN Comtrade 2009) and in the 2008 FAOSTAT (FAO 2008).

² Liddick 2011: p. 5.

³ TRAFFIC 2008

⁴ The World Bank 2005

⁵ Clarke 2003

⁶ TRAFFIC 2010: p. 9.

⁷ WHO 2008

⁸ Liddick 2011: p. 46.

⁹ Hayman and Brack 2002

¹⁰ Van Strien and others 2008. Two of three species of Asian rhinoceros, which were previously found across Southeast Asia, South Asia and in China, are close to extinction. Sumatran Rhinoceros which were previously found across Southeast Asia and South Asia are now critically endangered with less than 275 in the region. The Javan Rhinoceros is now among the rarest animals in the world. Due to poaching in Viet Nam, Javan rhinoceros have disappeared from mainland Southeast Asia with an estimated 40-50 individuals remaining now only in Indonesia.

Increasing wildlife trade is driving a broad range of wildlife species towards global extinction. The threat to iconic species like tigers, rhinoceros, elephants, and tuna is well-known globally. Yet, there are many more mammals, reptiles, marine species and plants that have declined drastically. Unfortunately, for these species, there is very limited public awareness. Consequently, protection is weak. A description is provided below of the species which account for the bulk of the illegal trade volume of wildlife in Southeast Asia and the Pacific.

Bear bile and gall bladders are used for the purposes of traditional medicine in East Asia and East Asian diaspora communities around the world.¹¹ But while the trade in bear bile is illegal in most parts of the region, the cross-border trade in raw bear bile, live bears and manufactured bile products remains widespread.¹² This is in violation of national laws and CITES regulations.¹³

Pangolins, also known as scaly anteaters, are nocturnal mammals native to Africa and Asia. The demand for pangolins as ‘luxury’ wild meat and for traditional medicine is driven by increasing consumer affluence mainly in China, Hong Kong (China), Taiwan (Province of China) and Viet Nam. The illegal international trade in Asian pangolins and their scales currently constitutes the principal threat

¹¹ Phillips and Wilson 2002

¹² According to recent research, bear bile medicines were found to be available in all the countries of mainland Southeast Asia and most countries in Northeast Asia, including China, Hong Kong (China), Japan, the Republic of Korea and Taiwan (Province of China). Whole gall bladders sold for US\$50 in Myanmar but as much as US\$2,000 in Hong Kong (China). In Thailand, gall bladder was found to be sold for US\$0.1 per gram compared to US\$110 per gram in Japan. Based on seizures of more than 7 kg of bear bile and more than 10,000 bear bile products between 2000 and 2010, the majority of seized products originated in China. Recent research has also indicated that the main producer countries of bear bile products in the region include China, Japan, Malaysia, Myanmar and Viet Nam. In the Republic of Korea, 60% of bear bile products on sale reportedly originate from Russia. In Hong Kong (China), all bear bile products were reported to have originated in Japan. See Phillips and Wilson 2002; Foley and others 2011; UNEP-WCMC 2012.)

¹³ Varying national and international laws and agreements are in place to regulate wildlife trade at sustainable levels. The most encompassing of these – the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) – specifies whether flora and fauna can be (a) traded freely (in which case they are not listed under CITES); (b) traded in volumes that are not detrimental to the survival of species in the wild (in which case the species are listed on Appendix II of CITES), or (c) are indicated as protected in which case no or extremely limited trade is allowed (Appendix I of CITES). Other than CITES, most national environmental legislation is fairly weak across the region, with low penalties – usually a fine – for violations.

to this CITES-protected species.¹⁴ Recent seizures indicate that since pangolins have become rare in the region, brokers and traffickers are sourcing from Africa in order to meet the growing Asian demand.¹⁵

Reptiles traded as food items account for the majority of illegal wildlife trafficked from Southeast Asia to China. In 2011, Thai officials in Prachuab Khiri Khan seized more than 2,000 monitor lizards from Malaysia en route to China with an estimated retail value of US\$60,000.¹⁶ Freshwater turtles form a large part of the reptile trade¹⁷, and a significant portion of Asia’s freshwater turtles are now endangered.

All wild orchid species are protected by CITES. Worldwide, **orchids** are traded in high volumes. Southeast Asia is a major supplier to the retail trade which is estimated to be worth US\$9 billion per year. In 2000, orchid exports from Thailand alone amounted to more than US\$250 million in total sales, mostly in domestically-propagated cultivars rather than wild-collected plants. However, countries like Lao PDR have a substantial trade which is based on wild collection.

Illegal wildlife trade is by no means restricted to land-based species. Substantial volumes of protected **marine wildlife** are being illegally traded to supply regional and global demand, with extremely high profit margins for traders.

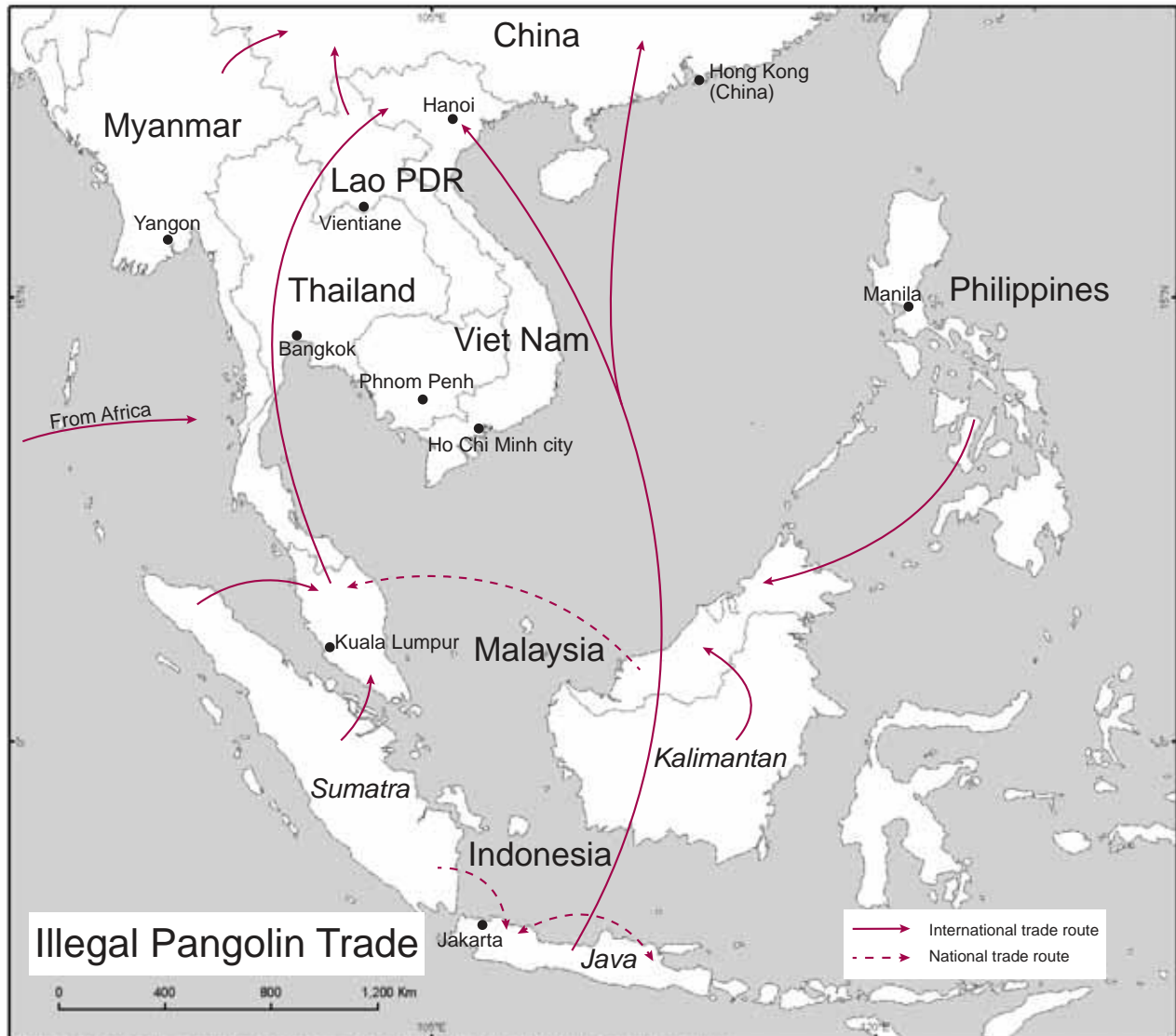
International demand for **shark** meat, fins and medicinal products is the driving force of a lucrative trade that is often illegal and is endangering a growing number of shark species around the world. Trade in CITES-listed shark species mainly consists of parts of Whale Shark, Basking Shark and Great

¹⁴ Duckworth and others 2008; CITES 2000. Since 1975, Asian pangolins have been listed as protected species in all but one of their range states and have been listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In 2000, Parties to CITES prohibited international trade in Asian pangolins, for primarily commercial purposes, by establishing zero export quotas for each species.

¹⁵ The estimated annual demand for pangolins in China alone is over 150,000 pangolins. Based on the estimated price of around US\$1,550 per pangolin in 2007, the estimated annual market value is more than US\$176 million in China (Pantel and Chin 2009).

¹⁶ The Nation 2011 “2,000 Monitor Lizards Seized”, *The Nation*, 8 April 2011

¹⁷ In 2010, Malaysian Customs officials confiscated 4.3 metric tons of reptiles near the Thai border. Among the specimens were 28 turtles listed as endangered on the IUCN Red List, and 400 other turtles listed as vulnerable (Erickson-Davis 2011).



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration based on Challender 2012

White Shark.¹⁸ Similar to the consumption of other illegal wildlife, the consumption of shark fins is driven by wealth, social status and traditional beliefs.¹⁹ The main consumers in the region include China, Hong Kong (China), Taiwan (Province of China), Malaysia, Singapore and Thailand. The EU and the US also import significant quantities to supply demand among the East and Southeast Asian diaspora.²⁰ Despite efforts to properly regulate the

trade, there remains no comprehensive international agreement to protect sharks.²¹

Marine turtles are heavily traded in East Asia and the Pacific in spite of CITES protection. Almost 30,000 illegal items made from critically endangered Hawksbill turtle were found on sale in Viet Nam in 2002.²² This trade also supplies illegal export markets for tortoise-shell (Bekko) items in China and Japan. The depletion of turtle numbers off the coast of Viet Nam means that traders are now going further afield – to places such as the Philippines and the Pacific – in order to obtain turtles for the shell-processing industry.

¹⁸ Large fins of a Basking Shark or a Whale Shark are reported to be up to US\$ 57,000 for a single large fin (Clarke 2004).

¹⁹ Vannuccini 1999

²⁰ In 2004, research based on analysis of major Asian trading centers for shark fin indicated that 50% of the global trade passes through Hong Kong (China). (Clarke 2004). Fins of particularly desirable (and protected) species are amongst the most expensive seafood products in the world, previously retailing for up to USD740/kg in Hong Kong (China) (Clarke 2002: p.88).

²¹ Lack and Sant 2008

²² Van Dijk and Shepherd 2004

The demand for **coral and aquarium fish** in China, Europe and the United States is also being supplied by source countries in the Pacific.²³ Around 2,000 species of coral are listed in Appendix II of CITES. However, the high profits from the illegal trade in coral and fish has led to an increasing involvement of large trading businesses, particularly Asian-based businesses.²⁴ Collecting for the aquarium industry yields high profits compared with other types of near-shore wildlife harvesting.²⁵

Seahorses are mainly used for traditional medicine preparation but are also demanded by the aquarium trade. Since 2004, all seahorse species have been listed under Appendix II of CITES. However, a substantial trade in seahorses continues. Annually an estimated 20 million seahorses are harvested from the South China Sea and the Gulf of Thailand, mostly for export to China.²⁶

2. How is wildlife trafficking conducted?

In East Asia and the Pacific, the illegal wildlife trade encompasses a broad spectrum of commodities. It is best understood as a collection of generally different trade chains, each with its own smuggling methods, trafficking routes and markets. These trade chains may include both domestic and international specialists involved in storage, handling, transport, manufacturing, industrial production, marketing and retailing of wildlife products.

Internet, e-banking and efficient transport systems give dealers and smugglers unprecedented access to new markets.²⁷ Transport infrastructure (such as new roads opening up forested areas) provides better access to previously remote areas. This facilitates extraction and trade of wildlife products. Open borders and better infrastructure have both also permitted inflows of poachers and traders to areas where wildlife can be sourced.²⁸

Wildlife is transported by land, air or sea in different ways. Traffickers often use the same routes as legal importers, but falsify certificates, exploit regulatory loopholes, take advantage of poor capacity in law enforcement agencies or obtain genuine documents corruptly. Concealment methods are limited only by the relative bulk of shipments and the ingenuity of the smugglers. On airlines in the Pacific and Asia, wildlife traffickers have been caught squeezing birds into tubes, packing animals like tiger cubs into hand luggage and hiding eggs in specifically designed clothing. By land, transportation is carried out in special hidden compartments in cars, vans and trucks, and by employing couriers to take larger loads across borders in separate and smaller containers. Bears traded illegally in Viet Nam have even been transported as patients in ambulances and in vehicles carrying fake government plates.²⁹

A common method for smuggling includes fraudulent paperwork or mixing protected species with legal shipments of look-alike species. Wildlife “laundering” also occurs when wild-collected plants and animals are passed off as captive bred.³⁰

Countries in East Asia and the Pacific can play one or more roles (source, transit and destination) in the illegal international wildlife trade. Indonesia remains a key source country because it retains more intact forests than its Southeast Asian neighbours. Its forests are critical to the sustainability of species. As indicated by a staggering number of seizures between 2007 and 2011, New Zealand has become a source for criminal networks trading into Europe, but also as a destination country for endangered species coming from Southeast Asia and the Pacific Islands.

Major trans-shipment countries in Southeast Asia are Malaysia, Singapore, Thailand and Viet Nam. Viet Nam is both a major consumer country and

²³ Olivier 2003

²⁴ Green and Shirley 1999: p. 70.

²⁵ Balboa 2003. Another study has found that live coral exported from Palau for the aquarium trade is sold at around US\$3 per kg compared to coral sold locally for construction material at less than US\$0.02 per kg (Graham 1996: pp. 13-18.)

²⁶ Gray 2004

²⁷ The World Bank 2005: p. 4.

²⁸ TRAFFIC 2008: p. 6.

²⁹ SFNC 2003.

³⁰ For example, in 2004 and 2005, the origins of more than 3,000 wild Malagasy chameleons were intentionally mis-declared by Thai wildlife dealers to obtain CITES import permits in order to enter the chameleons in the pet trade. Thailand is not alone in facing problems with mis-declarations of protected reptiles. Many reptiles are exported from Indonesia to the European Union (EU) under paperwork declaring them to be captive-bred specimens. There are serious discrepancies, however, between the numbers of reptiles exported and the numbers of reptiles that purported breeding facilities in Indonesia are actually producing, or have the capacity to produce. These discrepancies suggest that large numbers of wild-caught reptiles are being mis-declared on CITES permits exported from Indonesia as “captive-bred”. See Nijman and Shepherd 2009.

an important trade conduit to China. In 2000, the estimated revenue generated by the illegal wildlife trade in Viet Nam totaled US\$67 million, more than 12 times the value of the legal wildlife trade in that country.³¹ By some estimates, 3,500 to 4,000 tons of illegal wildlife (foodstuffs and forest products) are trafficked in and out of Viet Nam each year.³²

Thailand is mainly a consumer and trans-shipper of pets and high-value luxury items. The trade is driven by its growing economy with accompanying increased purchasing power. It is facilitated by the country's major international transport hubs. Ivory trade into Thailand is an ongoing problem and the enforcement of the existing regulation has proven to be difficult. Once imported, illegal ivory from Africa is either re-exported or processed and passed off as local and legal products.³³ The increase in sales of illegal wildlife on the internet and the mushrooming of smaller markets in provincial cities in the outskirts of Bangkok poses a challenge to law enforcement efforts.³⁴

In markets across Southeast Asia, illegal wildlife is often openly sold in otherwise legal market contexts. In Indonesia, Pramuka market in Jakarta is one of the region's largest wildlife markets, specializing mostly in exotic birds from Asia and around the world. Pasay City in Manila is the focus of trade in rare and endemic species from the Philippines.

In Myanmar, international border crossings with Thailand and China (such as Three Pagodas Pass, Tachilek, Mong La and Golden Rock) also function as wildlife markets. The trade includes big cats and bear parts. Keng Larb in northeast Shan State, is becoming a new center for transnational wildlife trade, mainly by river to China, Lao PDR and Thailand.

The demand for illegal tiger parts (skins for trophies, penises, meat and bones for medicinal products) is increasing, particularly in China. Buyers of tiger parts are principally mainland business elites, public officials and the military, supplied by dealers in illicit medicinal products.³⁵ While India remains the world's largest supplier of tiger products, Indonesia,

Nepal, Thailand and Viet Nam have emerged as increasingly significant players in the trade over the last decade. Globally, there were 463 recorded seizures of tiger products from 2000 and 2010, including significant seizures in cities across China, Indonesia, Lao PDR, Malaysia, Thailand and Viet Nam.³⁶

Wildlife traffickers will change routes opportunistically to take advantage of new infrastructure, reduce transaction costs or avoid detection by authorities. For example, ivory shipments leaving Africa may take a multitude of different international routes on their way to East Asia. As a consequence, enforcement along any one route may simply serve to divert or displace future shipments.³⁷

The data analyzed in the Elephant Trade Information System (ETIS) show increasing frequencies of large-scale ivory seizures around the world. In recent years, ivory hauls of one metric tonne (mt) or more have occurred with increasing frequency, suggesting the growing involvement of African-based but Asian-run organized crime syndicates in the trade. Within Southeast Asia, large ivory seizures in Malaysia between 2010-2011 indicate that the country was a major trans-shipping hub in this chain. These shipments were likely bound for China, as that country has major ivory processing centers. As noted above, shipments have been made under false pretences, mislabeled as recycled plastics and mixed with scrap plastic materials.

The ability to move huge volumes of ivory at a time (even up to 7 mt) is indicative of the sophisticated criminalization of this trade. The sophistication has been driven by increased requirements for finance, investment in facilities for storage and staging purposes, and the ability to exploit well-organized trading links and networks between source countries and end-use markets. Furthermore, organized crime groups typically employ the tactics of collusion, corruption and protection to subvert the effectiveness of government regulators and law enforcers at important trade transit points such as border crossings, airports or seaports.

³¹ The World Bank 2005: p. 105.

³² Nguyen 2008: p. 109.

³³ Lohanan 2002: pp. 231-238; Stiles 2009.

³⁴ This trend has also been analyzed for specific species, see Todd 2011.

³⁵ EIA 2010

³⁶ Verheij and others 2010

³⁷ ETIS 2011

As outlined above, China is the largest consumer in East Asia and the Pacific of wildlife for food, for traditional medicine and other purposes such as ornaments. In 2010, Chinese Customs made 933 seizures of wildlife.³⁸ An analysis of the seizures suggests that illegal wildlife not only enters mainland China, but is also exported to neighbouring provinces of Hong Kong (China) and Taiwan (Province of China), as well as Japan and the Republic of Korea. According to the official data, Beijing and Guandong accounted for 80% of the total number of seizures in 2010, mainly due to the high level of connectivity of these two towns by air and sea ports. The vast majority of these seizures relate to imports. In particular, the number of seizures increased during national holidays, indicating that the trade correlates with vacation travel. Ivory represented 80-90% of such seizures, equivalent to an average of two ivory seizures a day. In 93% of the cases, the smugglers were Chinese, travelling from East Africa and the Middle East and detected at airports. The official data shows few seizures in the Tibet Autonomous Region and in provinces directly bordering Myanmar, Lao PDR and Viet Nam, although different sources indicate that those areas are exposed to large amounts of illegal wildlife entering China.³⁹ In comparison with other East Asian countries, sentencing for wildlife trafficking in China is severe. Between the years 2000 and 2010, prison sentences for the illegal trafficking of tiger parts ranged from five years to life imprisonment.



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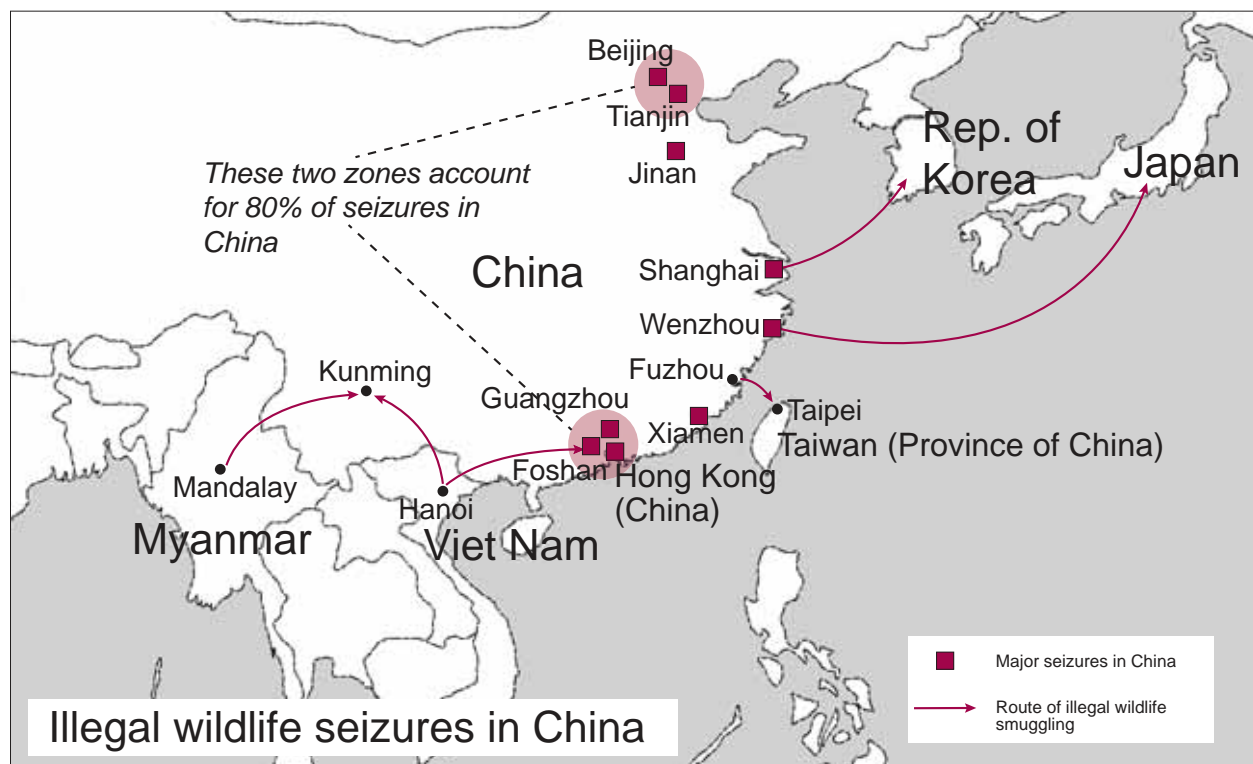
Source: Oswell 2010: p.7

The growth of internet commerce, including illicit transactions contributed to the growing illegal wildlife trafficking trade in the region. The most commonly traded item is ivory. But the trade also includes many protected animal and plant species including tiger parts, birds and primates. Online traders disguise illegal items by using misnomers or by advertising items as imitations but certify product authenticity in the item description. In some cases, wildlife items, including rhino horn and tiger products, are advertised as historical artifacts, with sellers claiming to have documentation showing their provenance. Over the course of one week, the International Fund for Animal Welfare found over 7,000 CITES-listed specimens and their derivatives available on-line in 11 countries, advertised for a total of US\$3.8 million.⁴⁰

³⁸ China Customs 2011

³⁹ UNODC 2010

⁴⁰ Todd and Place 2010



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Source: UNODC / China Customs 2011

3. Who are the traffickers?

The illegal wildlife trade is a lucrative business that involves a diverse range of actors, from rural harvesters, professional hunters, intermediate traders, wholesalers and retailers to final consumers and users.⁴¹ Illegal wildlife trade chains may be as simple as individual consumers making direct contact with specialty suppliers or it may involve networks of global scales. Long-distance movements of high-value wildlife require the involvement of a wide range of brokers, middle-men and shippers who are not necessarily wildlife traders but rather experts in the contraband of illegal goods, including drugs. Individuals involved may include domestic and international specialists in storage, handling, transport, processing, packaging, exporting, marketing, security and retailing. Various participants may handle 'official' expenditures (such as purchasing permits and paying fines), and 'unofficial' expenditures (bribes). They may also provide loans against future delivery of wildlife.⁴²

The involvement of organized networks dealing in illegal wildlife in other crimes (e.g., drug trafficking,

human trafficking, etc.) is difficult to ascertain. While there are sporadic reports of convergence of wildlife crime with drug trafficking and alleged human trafficking, such incidence at this stage is considered occasional and largely opportunistic. In fact, the trade in wildlife is very specialized and it requires skills – such as species identification and animal handling – that are not immediately transferrable to other crime areas. Furthermore, many specialized wildlife traffickers tend to engage in this business because it has potential for high profit margins with low-risk involvement. Nevertheless, large scale trafficking operations in high-value wildlife (such as ivory, rhino horn and tiger parts) do require a range of brokers and middle-men who may be involved in other forms of contraband. For them, wildlife trade may not be the primary illicit activity, but rather an additional income at relatively low risk.

The illegal wildlife trade is probably best understood as a collection of specialized sub-disciplines – each one accompanied by its own smuggling methods, trafficking routes and markets. These are not generally centrally controlled by a single leader, but they do involve informal reciprocity. Different types of wildlife crime are structured via myriad arrangements that vary from loosely organized small groups to large networks that control some or all

⁴¹ TRAFFIC 2008

⁴² Nijman 2010

facets of trade.⁴³ The level of violence and force used to commit wildlife crime – especially in the poaching phase – varies significantly according to the market value of the trafficked species.

In East Asia and the Pacific, illegal wildlife harvesters are predominantly rural poor people engaged in the trade to supplement otherwise low incomes. Poachers will often operate on an individual or ad hoc basis as a result of specific requests from a trader or a middleman.⁴⁴ Survey data indicates that the majority are adult men (women are involved in 20% of cases and children in less than 10%), working with small networks of family members or associates, who have links to middlemen, markets or distribution centers. In many cases poor rural people are dependent on this income for their subsistence. This fact, coupled with specialization and exclusivity in trade chain relations, renders them particularly at risk of exploitation by unscrupulous traders or middlemen.

Within East Asia, ivory trafficking has been orchestrated by Chinese nationals. In 2008 and 2009, there were 134 seizures (16 mt of ivory) which led to the arrest of several Chinese nationals in Africa. Another 25 mt of ivory originating from Africa (487 seizures) were seized en route to China.⁴⁵

The involvement of Vietnamese and Thai nationals has been reported in cases of rhino horn trafficking from South Africa. Their role ranges from the fraudulent procurement of trophy hunting permits to the smuggling of horns. Organized individuals are reported to take advantages of legal loopholes, such as in the case of ‘trophy hunts’, through which it is possible to obtain valid CITES licenses for the export of a single horn. In such case, individuals with no experience in hunting and firearms use have been reportedly hired as agents to procure special permits and export horns to Viet Nam.⁴⁶

4. *How is the money handled?*

Most interdictions and investigations of wildlife crime in East Asia and the Pacific have not been accompanied by efforts to understand and address associated monetary flows. Consequently, little is known about criminal financing and money handling in the trade.

⁴³ Pires and Moreto 2011

⁴⁴ Hoare 2007

⁴⁵ Milliken and others 2011

⁴⁶ Milliken and others 2009

Typically, harvesters are paid upon sale of the illicit wildlife good. In some cases however, harvesters are paid advances by traders ordering particularly valuable species. It is important to highlight that harvesters are rarely paid a monthly wage to hunt or gather wildlife on behalf of middlemen or traders.⁴⁷ Evidence suggests that harvesters are typically connected with intermediary traders or middlemen. These buying agents may receive wildlife products directly from individual harvesters, or engage with harvesting communities to acquire specific wildlife products.

The value added over the course of the wildlife marketing and processing chain can be substantial. It tends however, to be unequally apportioned among trade chain participants.⁴⁸ The value of animals and wildlife products typically increase by 25-50% as they pass consecutive links in the supply chain. This is particularly true in the case of rare medicinal and luxury items (tiger parts, rhino horn and ivory). An item worth just US\$20 at the time of its capture can be worth up to US\$100 at point of export, US\$600 at import in the destination country, and can be sold to a specialist retailer at US\$1,100.⁴⁹

Internet-based trade is another matter. A proliferation of online chat rooms and forums dedicated to exotic pets, coupled with new bank transfer mechanisms like Paypal, have resulted in a steadily growing illegal mail order trade in live animals. There is potential to trace the perpetrators if appropriate enforcement recourses are dedicated to the problem

5. *How big is the flow?*

From a methodological standpoint, providing precise estimates of the volume and value of the illegal wildlife trade is simply not possible at this point in time. The trade is highly diverse and the available data is very limited. Common sources of information for conducting such an analysis are market surveys and seizure data. However, both of these sources are flawed to some degree. Market surveys provide relevant information on the kind of species that are more commonly traded as well as their related

⁴⁷ TRAFFIC 2008: p. 26.

⁴⁸ Neumann and Hirsch 2000

⁴⁹ Hayman and Brack 2002: p. 11.

Illegal wildlife trafficking in the Pacific

The Pacific is increasingly becoming a source and transit region for illegal wildlife trafficking. Due to the diversity of terrestrial and marine species in the Pacific, depleting wildlife stocks in Southeast Asia and the limitations of law enforcement to address wildlife trafficking in Pacific states, this expanding trend is expected to continue. The trade poses a high threat to biodiversity both in the Pacific and on a global scale. Wild species that exist nowhere else in the world are often made up of small populations. These species are therefore disproportionately sensitive to decreases in population numbers. Due to such rarity, species found exclusively in the Pacific are popular in pet markets, particularly in Europe, Japan, New Zealand and the United States. As an example, in 2010 three traffickers, with alleged links to the illegal trade in iguanas in Fiji, were intercepted in New Zealand with 16 jewelled geckos.

The illegal wildlife trade includes reptiles, birds, marine species and wild orchids.⁵⁰ The Oceania Customs Organisation (OCO) reported 55 seizures of wildlife products in 2010. CITES data for the Pacific Islands report 374 seizures from 2005 to 2009. Most seizures were reported by Fiji with 56 and 76 seizure cases destined for New Zealand and the United States respectively.

The Solomon Islands is reported to be a wildlife laundering hub for other Pacific countries. Available research data suggests that huge volumes of CITES-listed birds are laundered through the Solomon Islands into the global wildlife trade. Large volumes of birds were found to be exported from the Solomon Islands in the 2000s mostly to

Malaysia and Singapore. The majority of CITES-listed species are native to Indonesia or Papua New Guinea rather than the Solomon Islands, but no documented exports of these species were available. The large quantities of captive-bred birds produced and exported from the Solomon Islands imply that breeding facilities housing thousands of breeding pairs must exist in the Solomon Islands. However, the Solomon Islands State of the Environment report from 2008 does not include captive-breeding of birds.⁵¹

The illegal wildlife trade in the Pacific region is reportedly well organized by opportunistic criminal networks and unscrupulous traders. New Zealand is a source, transit and destination country for the illegal wildlife trade. Between 2007 and 2011, more than 13,000 seizures of prohibited wildlife took place in New Zealand, mainly at airports.⁵² Different enforcement operations in 2011 – during which couriers of German nationality were arrested – suggest the existence of an emerging market in Europe for New Zealand lizards, specifically geckos.

The extent of the illegal trade in flora and fauna in the Pacific region remains largely unknown. Several Pacific countries are not parties to CITES, including the Cook Islands, the Federated States of Micronesia, the Marshall Islands, and Tonga. Also, some Pacific countries which are parties to CITES do not systematically submit data as required by CITES. Without the country data required by CITES, a comprehensive assessment of wildlife trafficking in the Pacific is not possible. Enforcement efforts within the region have been severely hampered by the lack of government endorsement of CITES recommendations and calls for action against the illegal wildlife trade.

⁵⁰ Based on data from the Wildlife Enforcement Group, Agriculture and Forestry Conservation Department, New Zealand Customs Service.

⁵¹ Shepherd and others (in press).

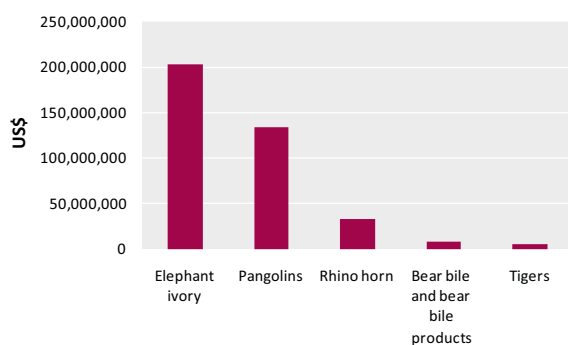
⁵² Information provided to UNODC by New Zealand Customs and the Department of Conservation.

prices. Nonetheless, they do not capture the size of the phenomenon either in terms of aggregate volumes and values or in terms of geographic coverage. On the other hand, seizure data provides useful information on the volumes of the illegal wildlife trade, but the official data often fails to meet requirements of quality, consistency and regularity in the collection and recording phase.

Based on existing literature, and on the selection of the limited data sources in this area, a conservative estimate for the illegal trade in selected mammal species to and within Southeast Asia and the Pacific is close to US\$400 million, with more than half of this trade involving ivory products (see chart below).⁵³ Surprisingly, the value of the black market for relatively unknown species – such as pangolins – dwarfs the value associated with the rarer, emblematic species, like tigers, which nevertheless provide a highly profitable niche for organized crime networks.⁵⁴

Although precise information is not available, it is often reported that traffickers can obtain around US\$50,000 from the sale of one wild tiger or up to US\$60,000 per kilogram of rhino horn. According to analysis conducted within UNODC, the profit margins for this trade have reached values that can

Figure 1: Value of the illegal wildlife trade in East Asia and the Pacific



Source: UNODC

⁵³ These estimates have been developed by UNODC on that basis of limited information collected through existing publications, media and consultations with NGOs. The sample of mammals analyzed is limited to those for which studies and information exist. Incomplete data in relation to seizures and conservative estimates in relation to prices make these estimates only partially reliable and reduced to a bare minimum value.

⁵⁴ Prices for tiger parts, rhino horns and ivory products have spiked in the recent years, as a result of increased demand and a dwindling (and finite) supply.

be compared with other forms of transnational organized crime such as methamphetamine and heroin trafficking.

Contrary to common misconceptions, the largest black market in wildlife products in the region is not related to mammal species or reptiles but rather to marine wildlife, such as live reef fish for food, ornamental reef fish and corals. This market – which does not include off-shore illegal fishing – is estimated to generate an income of approximately US\$850 million for the criminal enterprises involved.⁵⁵

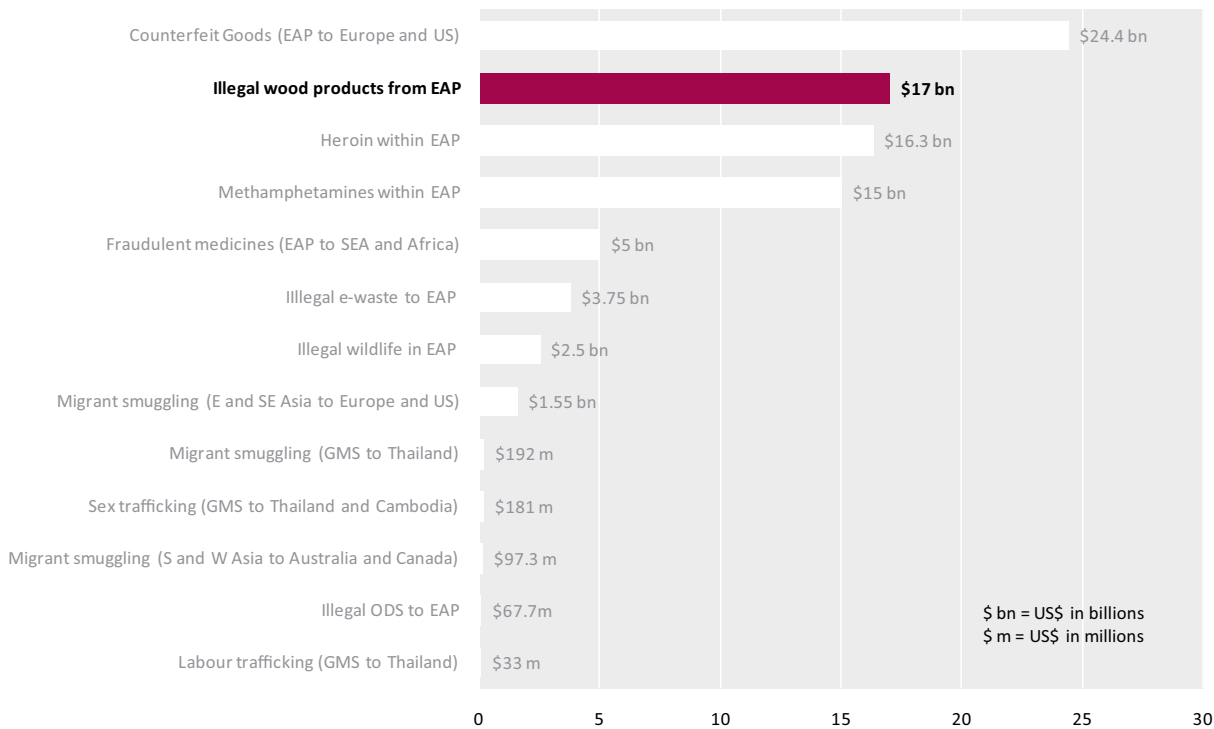
Existing studies by NGOs, as well as recent UNODC surveys among the law enforcement community, reveal that the range of wildlife illegally traded in Southeast Asia and the Pacific is significantly broader than the species mentioned above. This includes snakes, turtles, monkeys, orchids, lizards, slow loris, aloe vera, geckos and many more. Data for this trade remain extremely scattered and susceptible to miscalculations and gross oversights. A review of some of the most credible information (derived mainly from a few market surveys) indicates a market value in these species ranging from US\$500,000 to US\$1 million. Nevertheless, this value is based on isolated market “observations” at given locations (for instance some specific wildlife markets) and at given times (for instance over a period of a few days/weeks). Such observations do not therefore capture the real size of the phenomenon neither in terms of annual revenues nor in terms of regional coverage.

Based on the above analysis and in consideration of the fact that the actual value of the illegal wildlife trade in the region should encompass more species, more countries, and highly volatile prices at retail level, a conservative estimate values the regional illegal wildlife trade at **US\$2.5 billion** a year, excluding illegal timber and off-shore fishing. This amount includes wildlife that it is either traded in a completely clandestine manner as well as wildlife that is concealed, mis-declared and/or disguised within legal shipments.

⁵⁵ These estimates have been developed by UNODC and TRAFFIC on the basis of information gathered through Oko 2011; Wabnitz and others 2003; and Monticini 2010. Final calculations are based on the assumption that 75% of the total amount of global trade in ornamental reef fish and live reef fish for food is illegal at catch or trade stages.

Chapter 8

Illicit trade in wood-based products from the region to the world



NATURE OF THE THREAT

<p>1. Severe forest loss: deforestation, degradation of forests, loss of biodiversity, flooding and soil erosion.</p>	<p>2. Emission of greenhouse gases: a significant percentage of CO₂ emissions come from deforestation.</p>
<p>3. Impoverishment of marginalized communities: rural poverty, loss of state revenues from legitimate trade.</p>	<p>4. Institutional corruption: endemic corruption in the forestry sector (complicity of individuals along the entire production chain, e.g., forest concessions, harvesting), political corruption, compromised justice system.</p>

1. What is the nature of the market?

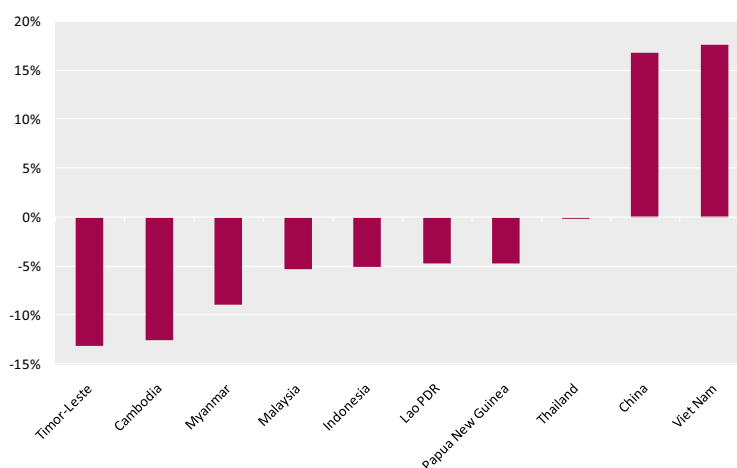
Economic growth and globalization have drawn immense amounts of resources from rural East Asia and the Pacific. Among these are wood-based products, including timber and paper. Since 2005, the annual global trade in wood-based products measures around 1.3 billion cubic meters, with an import value of around US\$350 billion per year.¹ About half (45%) of the value of the trade is in timber products (logs, plywood and furniture) and the remainder in paper products (wood chips, pulp and paper).²

The demand for wood-based products has led to extensive forest degradation in some countries. Large areas of mainland Southeast Asia, as well as Indonesia and the Philippines, have been logged to the extent of commercial exhaustion. Forests in Papua New Guinea and the Solomon Islands are being rapidly exhausted due to extensive and unsustainable logging activities.³ The key to re-establishing sustainable forest management in the region is good regulation (including reciprocal legislation in importing countries), good forest governance (including effective law enforcement) and pricing which reflects social and environmental costs (especially of production). Both approaches respect the rights of affected forest peoples and land management, prevent the loss of biodiversity and environmental services, the latter of which is central to sustainable forestry. Unfortunately, every regulation creates an opportunity for organized criminal networks to profit.

The news is not all bad. Some of the biggest consumers or suppliers of wood-based products, such as China and Viet Nam, are afforesting – with monoculture – at a rapid rate. In 2000, only 38% of

Viet Nam was under forest cover, but by 2010, 45% was under forest and tree cover. Between 2000 and 2010, China added almost 23 million hectares of tree plantation. Conversely, many countries lost upwards of 5% of their forest cover during that same period and much bio-diverse forest has been replaced by tree plantations.

Figure 1: Share of forest cover lost between 2000 and 2010



Source: FAO 2010⁴

Large quantities of wood-based products flow within countries from rural to urban areas. They also flow within the region, and outwards from East Asia. This trade is reflected in large volumes of exported timber and paper products. As in all industrial matters, China is both the largest importer of wood-based raw materials and the biggest exporter of wood-based products in the region. In 2010, China exported over US\$33 billion in wood-based products to various regions around the world.

Alongside the legal global trade in wood-based products comes illegal trade. The majority of the illegal trade is carried out by formal business enterprises operating through fraudulent methods. Corruption is often at play. The illegal trade in wood-based products differs significantly from some other forms of trafficking in illicit goods, consumers remain largely unaware of the illegal origins of what they are buying.

Illegal wood-based products largely originate in Southeast Asia, mainly Indonesia and Malaysia. Some move directly to consumer countries, both within and outside the region. Others are processed

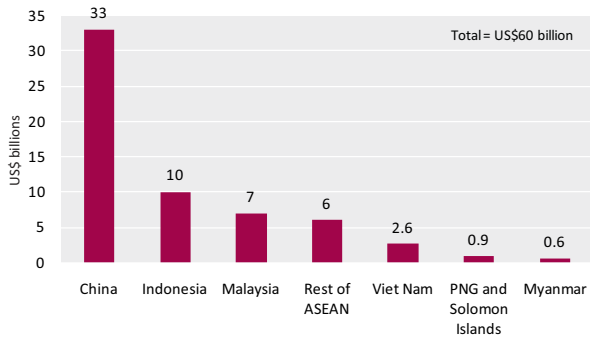
¹ Round wood equivalent (“RWE”) volume is a measure of the quantity of logs used in making a given volume of product. It has been estimated from source data by, for example, multiplying source data in units of volume by (in cubic metres per cubic metre): 1.8 for sawn wood and 2.3 for plywood, or source data in units of weight by (in cubic metres per tonne): 2.8 for wooden furniture, 3.5 for paper and 4.5 for wood-based pulp. The factors in cubic metres per cubic metre are similar to those used by the UN Food and Organisation and the International Tropical Timber Organisation.

² Based on data obtained from UN Comtrade 2012.

³ Shearman and others 2008

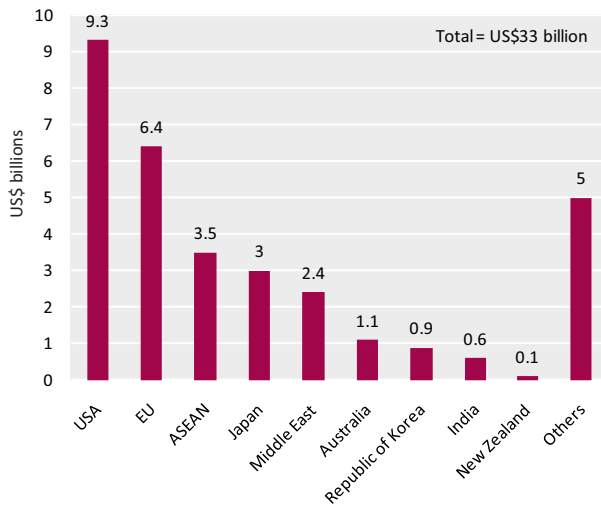
⁴ FAO 2010

Figure 2: Formal exports of wood-based products in 2010



Source: Official statistics of the exporting countries and UNODC

Figure 3: Formal exports of wood-based products from China in 2010



Source: Official statistics of the exporting countries and UNODC

further within the region, mainly in China and Viet Nam, before being exported. In addition to supplies from many countries outside the region, China imports large quantities of both legal and illegal timber from Myanmar, Papua New Guinea, Sarawak (Malaysia) and the Solomon Islands, as well as pulp and paper from Indonesia. Smaller but nevertheless substantial volumes of illegal logs or sawn wood are supplied to China and Viet Nam primarily from Cambodia, Lao PDR, Myanmar and Sarawak (Malaysia). The key point is that the legal trade might contain illegal wood-based products. The illegal trade is embedded within the legal trade.

Although the problem persists, progress is being made. China is importing a growing share of its wood-based products from relatively safe sources, including sources outside the region. In addition,

the Indonesian and Malaysian authorities have made efforts to reduce exports of timber through fraudulent documentation or via free trade zones. Finally, recent efforts by consumer countries, such as the US and the EU, to prohibit the supply of illegal wood-based products is anticipated to result in further progress.

2. How is the trafficking conducted?

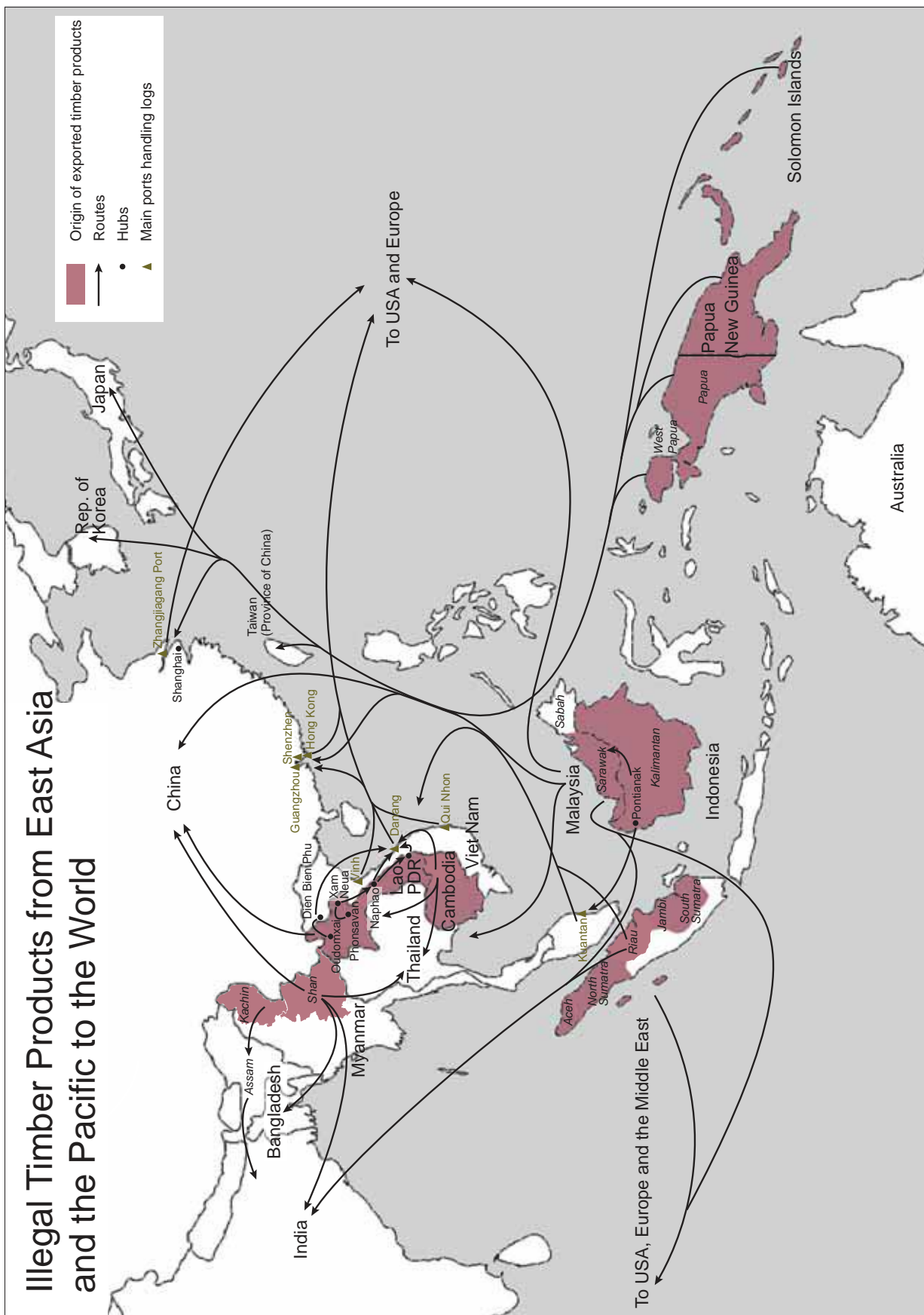
Because illegal timber and all other illegal wood-based products can be moved easily within the formal trade through corruption and fraudulent documentation, wood-based products are rarely moved in an entirely clandestine way. In Southeast Asia and the Pacific, the majority of illegal timber enters the formal trade in its country of origin before it is formally exported. Clandestine trade or smuggling of logs or sawn wood still occurs between some of the countries in the region, particularly in species which command high prices.

Given the limited infrastructure in many supplier countries, this movement is likely to take place through the same channels as the licit trade, along the same highways to the same seaports, often by the same transportation agents, and sometimes mixed with licit timber. To move sufficient volumes through the front door, corruption is almost always part of the process.

As a result, illegal logging is rarely done through shadowy chainsaw gangs. More often, the logging is conducted by companies with a public face, often with international shareholders, who are already involved in the licit trade. Logging becomes illegal when the permits are acquired through bribery, or where protected species are involved, or where the harvesting takes place outside the agreed concession. For example, in 2011 in Papua New Guinea, a Malaysian company was ordered by the National Court to pay almost US\$100 million to forest communities for extensively logging outside its concession area some years earlier.⁵ In Sarawak (Malaysia), it has been reported that concessionaires frequently ignore relevant laws in their logging operations.⁶

⁵ Hance 2011

⁶ Lawson 2010; Auditor General of Malaysia 2008: pp. 68-91.



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC

Document fraud can also facilitate illegal logging. Logging and concession permits may be forged, or simply bought from corrupt officials, thus rendering any activity based on these authorizations illegal. Authorities may also issue documents to logging enterprises that are ineligible to receive them, such as those that do not submit proper forest management plans. Fraudulent paperwork can also be used to falsely certify the origin of timber, re-certifying the origin of logs from acceptable sources.

Logs can also be laundered from unauthorized logging areas to legal logging zones, or to mills that process logs from authorized areas. In some cases, illegal logs may be laundered transnationally.⁷

In addition to timber⁸, the production and trade of illegal pulp and paper has for several years been alleged to be associated with a wide range of illegalities. Much of this is supplied from Indonesia to China, perhaps made partly from legally produced pulp or pulpwood. Shipping companies are increasingly concerned about complicit association with the illegal trade.⁹

Transnational movement of illegal wood-based products may require bribery of port authorities to ensure passage of illegal shipments, or to avoid taxes. Enterprises and brokers exporting illegal wood-based products through formal supply chains may also use fraud to facilitate their business activities. For example, transfer pricing between enterprises and brokers enables wood-based products to be sold at below-market prices to minimize taxes and duties. Enterprises or brokers may also falsely declare products as “certified” or in line with technical standards.

The existence in this region of two large free trade ports like Hong Kong (China) and Singapore has also the effect of transferring the burden of the shipment inspection to the destination country, such as China. When shipments containing illegitimate wood products are received from the origin country with fraudulent documentation, ports authorities in the transit country often have little incentive to inspect the shipment if the container is only in

transit. As a result, if inspections at the origin are not duly conducted, a Free Trade Zone can become unknowingly a consolidation hub for legal and illegal timber. In such cases, the burden to interdict the illegitimate movement of such wood products will fall almost exclusively on the authorities in the destination country.

3. *Who are the traffickers?*

The production and trade of illegal wood-based products involves a wide range of actors and enterprises along the supply chain from source forests to consumer markets. Small-scale loggers, national and multinational logging and wood-processing enterprises, brokers with related white-collar agents, and shipping companies play different roles in the illegal production and trade, often through their licit commercial activities.

In the region’s tropical forests, small-scale loggers require no more than a chainsaw, transport and connections to a market. While large-scale logging enterprises account for most of the logging in the some countries of the region, small-scale loggers have been prominent in countries such as Indonesia and the Solomon Islands, where forest is largely exhausted. Generally, small-scale loggers will work for cash on behalf of individual businesses, or even state officials, who have established connections to bigger markets. There are some cases in which forest communities have sold trees to small-scale illegal loggers for immediate income, in anticipation of entire community forests being illegally logged by large-scale loggers without offering compensation. In 2011, Cambodian forest communities reportedly set fire to illegally cut logs in protest of the economic consequence on their forest-based livelihoods of large-scale illegal logging.¹⁰

Large-scale enterprises involved in illegal logging, timber processing, paper and pulp manufacture operate at all levels of the formal trade. Many transnational logging and timber processing enterprises in East Asia and the Pacific depend on illegal activities, such as the illegal exploitation of concessions or forest conversion, to conduct their operations. Some of these timber enterprises and

⁷ Global Witness 2003: pp. 64-65.

⁸ This refers to non-manufactured wood-based products (not processed furniture etc.).

⁹ See for example Maersk 2011; Landrot and Lo 2007.

¹⁰ Al Jazeera 2011, “Cambodians fight illegal logging”, *Al Jazeera Asia-Pacific News*, 12 November 2011

their associates have diversified into palm oil,¹¹ which has caused concern about the legality of the large volumes of timber which derive from forests converted into other land uses, such as palm plantations, particularly in Indonesia and Sarawak (Malaysia). Less established enterprises also pursue lucrative opportunities in logging and forest conversion, but given their lack of experience in logging, concerns have been raised about the legality of some of their activities.¹²

In Sarawak, for example, a few large-scale logging enterprises dominate the timber industry, which mainly exports timber to China, India, Japan, Republic of Korea and Taiwan (Province of China). Weak forest governance and corruption related to Sarawak's timber industry has been widely criticised.¹³ Several of these Sarawak-based enterprises also have international timber business interests in Papua New Guinea and the Solomon Islands, and as far afield as Africa and South America.

Regional brokers are used by enterprises to act as intermediaries in the chain of ownership of timber between exporting and destination countries. These brokers have been known to operate from the main trading hubs in the region such as Hong Kong (China) and Singapore.¹⁴ In the early 2000s, before Indonesia stepped up its efforts to combat the illegal logging trade, Indonesian illegal timber entered Singapore to be laundered through Free Trade Zones for formal transportation to China, India and Malaysia.¹⁵ One watchdog agency reported at that time that Singaporean businesses including traders, shipping agents and banks, were directly involved in the laundering of timber.¹⁶ The role of these intermediaries was said to include bribery and falsification of documents.¹⁷ Since 2005, the activities of such brokers have declined due to decreasing levels of illegal trafficking of logs and sawn wood from Indonesia.

Official corruption plays a central role in the supply of illegal wood-based products from East Asia and the Pacific to consumer markets. In the

Solomon Islands, for example, collusion between state officials and the timber industry has resulted in the blurring of legal and illegal trade in relation to formal export-oriented log production. According to Transparency International, Government ministers continue to have substantial discretion over logging activities with limited accountability.¹⁸ In some cases, senior ministers have direct interests in logging concessions.¹⁹ Parts of the logging industry may not strictly follow government policy or laws related to forest governance in such circumstances.²⁰ Law enforcement remains ineffective against this alliance between the logging industry and politicians.

Similarly, Papua New Guinea's logging industry is associated with widespread corruption. High-level officials allegedly have personal interests in specific enterprises in the country's export-oriented logging industry, which primarily supplies exports to China. In 2004, one of the logging companies operating in Papua New Guinea was expelled from the New Zealand Timber Importers Association due to its complicity in illegal logging and unsustainable forest management.²¹ In 2006, the Government commissioned a review of the logging industry and it concluded that none of the operations evaluated complied with national laws or regulations.²²

Available data from prosecution cases in Indonesia show the nature of the complicity between the timber and pulp industries and government officials in the past. In 2007, the Governor of East Kalimantan Province, along with two government officials and the executive of a logging company, were convicted for authorizing illegal logging. An Indonesian parliamentarian received an eight-year sentence for accepting bribes for the approval of forest conversion in designated "protected" zones in South Sumatra and Riau in 2008.²³ In 2008, the Government Regent in Pelalawan district (Riau Province) received an 11-year sentence. The Head of the Forestry Official in Riau received a five-year sentence for issuing logging concessions permits to 15 logging companies that conducted illegal logging activities between 2002 and 2003.

¹¹ For example, KTS, Rimbunan Hijau, Samling, Shin Yang, Ta Ann, and WTK, which are all based in Sarawak. See Faeh 2011, and also Colchester and Chao 2011.

¹² Colchester and Chao 2011: p. 14.

¹³ Lawson 2010; Auditor General of Malaysia 2008: pp. 68-91.

¹⁴ EIA/Telapak 2005: pp. 10 and 19.

¹⁵ EIA/Telapak 2003: p. 6.

¹⁶ EIA/Telapak 2005: pp. 10 and 19.

¹⁷ EIA 2003: p. 1.

¹⁸ Transparency International 2011: p. 4.

¹⁹ Transparency International 2009: para. 11-12. See also, Fraenkel 2008: p. 155.

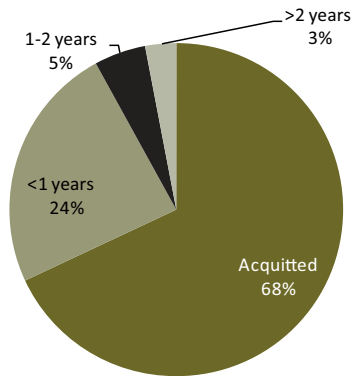
²⁰ 20% of production should be transformed prior to export. See Gay 2009: p. 211.

²¹ NZGP 2004

²² Forest Trends 2006: pp. 30 and 33.

²³ Wardany 2009

Figure 4: Verdicts (in prison terms) for illegal logging cases in Indonesia, 2005-2008



Source: Indonesian Corruption Watch 2008²⁴

Despite recent strong law enforcement efforts in Indonesia, very few of those involved in the past have received substantial sentences. Of the 49 government officials and high-level timber entrepreneurs charged between 2005 and 2008, as many as 35 or around 71% were acquitted.²⁵ The high rate of acquittal led the Indonesian President's task force on judicial corruption to re-open a number of high-profile cases in 2010.²⁶

Corruption and collusion linked to the illegal timber trade is not limited to politicians and state officials in the region. In recent years, official businesses involving military officials from countries in the region are reported to have been associated with illegal logging. In fact, in some countries, the state or state officials, particularly military officials, are party to logging enterprises. The Indonesian military had formal business interests in timber and pulp production for many years.²⁷ Despite strong efforts by the Cambodian authorities to minimize illegal logging, individual Cambodian politicians and military officers reportedly continue to be involved in illegal logging activities.²⁸ Furthermore, in Cambodia the level of violence associated to the illegal trade of timber seems to have escalated in April 2012 when a renowned environmental activist was shot dead by – allegedly – a military police officer, while

investigating a case of illegal logging.²⁹ In Viet Nam, state-owned and military enterprises are allegedly involved in the illegal supply of timber, and have links to high-level state officials, including military officers, in Cambodia and Lao PDR.³⁰

4. How big is the flow?

Many of the countries in East Asia and the Pacific play prominent roles in the vast global trade in illegal wood-based products. Nonetheless, due to the important role that corruption plays in timber trafficking, very little illicit wood or wood-based products are seized. For example, in 2008, Malaysian authorities reported seizures of only 80,000 cubic metres of illegal logs,³¹ while in 2007 Indonesian authorities reported seizures of only 20,000 cubic metres of sawn wood.³² These seizures represent only a fraction of a percent of the wood-based products that Malaysia and Indonesia formally export.³³

Since nearly all illicit timber is introduced into the licit commercial stream, any estimate of the illicit trade must be based on the declared trade statistics. Official assessments of the illegal trade may also underestimate the scope of the illegality. In general, official trade assessments confine the meaning of “illegality” to criteria such as the diameter or species of the tree, whether the tree was felled in an authorised area or whether quotas were exceeded. Such official assessments generally estimate illicit timber to comprise 1% or 2% of the formal trade.

There have been independent assessments of the proportion of illegal wood-based products for several countries in the region. These include estimates in 2004 by Seneca Creek and Wood Resources International³⁴ and research conducted in 2005 for the New Zealand government.³⁵ Both these only considered logs, sawn wood and plywood. The proportions of illegality suggested in these reports

²⁹ See David Boyle and May Titthara, “Slain activist Chut Wutty's death still a mystery”, Phnom Penh Post, 27 July 2012. Accessed on 8 August 2012 at: <http://www.phnompenhpost.com/index.php/2012072757667/National-news/the-chut-wutty-mystery.html>.

³⁰ EIA 2008: p.15 ; EIA 2011: p. 9.

³¹ FAO 2012a

³² FAO 2012b

³³ Lawson and MacFaul 2010: pp. 34 and 37.

³⁴ Seneca Creek / WRI 2004. Although the research method used a narrow range of low-value wood-based products, these estimates have been widely accepted as reliable in relation to illegality in the timber industry, including the World Bank and Interpol. See Interpol 2010b.

³⁵ Turner and others 2007: p. 23.

²⁴ Indonesian Corruption Watch 2008: pp. 5-6.

²⁵ Indonesian Corruption Watch 2008: pp. 5-6.

²⁶ EIA/Telapak 2010: p. 1.

²⁷ HRW 2006: pp. 64-65; HRW 2010b: pp. 7 and 13; Also see, EIA/Telapak 2005: p. 8.

²⁸ Global Witness 2010

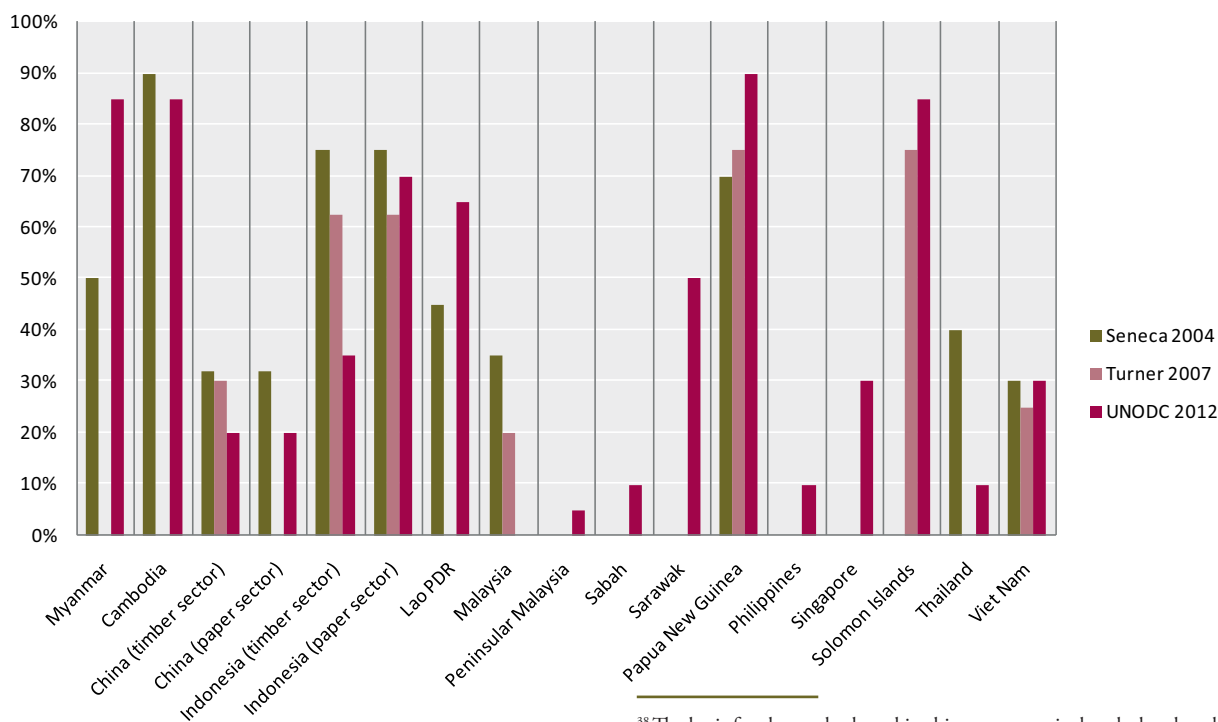
might now be out of date, but few similar efforts have been made since.³⁶ They thus serve as a basis for comparable estimates today.

In 2010, UNODC provided an assessment of the volume and value of illicit timber exported from Southeast Asia to the EU and the rest of Asia.³⁷ It was estimated that around 10 million cubic meters were exported, with a value of some US\$3.5 billion. The current assessment differs from most earlier estimates in that, furniture, paper and pulp are considered.

Looking at bilateral trade flows for each type of wood-based product and estimating the illegal

share for each flow, a new estimate for 2010 can be produced (see the figure below – showing this UNODC TOCTA's new estimate of the proportion of illegality in value terms for East Asia and the Pacific).³⁸ Overall, it is estimated that the export value of illegal trade from and within the region in timber sector products is equal to approximately US\$11 billion, while the export value for paper and pulp products is equal to US\$6 billion. Based on these estimates, 30-40% of the total quantity and export value of wood-based products exported from the region in 2010 derive from illegal sources. This is in keeping with previous estimates of the share of the market that involves illegally sourced wood.³⁹

Figure 5: Recent estimates of the proportion of illegality in the formal trade of wood-based products from regional countries in East Asia and the Pacific



Source: Seneca 2004; Turner 2007; UNODC estimates 2012

³⁸ The basis for the method used in this assessment is that declared trade is not necessarily legal. Consequently, realistic estimates of the proportion of illegal products in the formal trade are needed to calculate volumes and values. The estimates used take into account illegality in the minor clandestine trade but also the sustainable management of logging concessions, land-use designation, corruption and fraudulent methods. In the processing of wood-based products, the practice of combining illegal imported wood materials with legal wood materials that renders subsequent export products illegal is also factored in to production estimates in relevant source and processing countries. The proportions of illegal trade in this assessment derive from the totals of bilateral trade in specific products. The data presented for 2010 is a UNODC estimate based on the export value in US dollars.

³⁹ It has been estimated that 20% to 40% of global timber comes from illegal sources. In 2008, the World Wildlife Fund estimated that 40% of the wood-based products entering the EU from Southeast Asia and China were from illegal sources. The World Wildlife Fund has also placed the illegal timber content of China's imports at between 30% and 45%. See WWF 2008: p. 17 and WWF 2010.

³⁶ Lawson and MacFaul 2010: pp. 34 and 37.

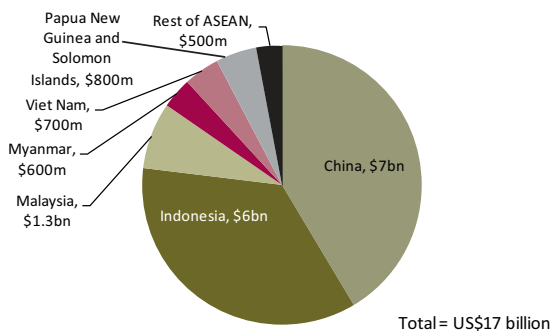
³⁷ UNODC 2010: pp. 161-169.

The estimates above suggest that approximately 58 million cubic metres of illegal wood-based products were exported from and within the region in 2010. Such quantities translate into an estimated export value of illegal trade close to US\$17 billion for 2010. The total includes around US\$2.4 billion that was imported by the US, around US\$2.3 billion by the EU, around US\$2 billion by Japan, and around US\$2 billion by ASEAN countries.

Wooden furniture and paper together account for almost 50% of the export value of illegal wood-based products from and within East Asia and the Pacific.

As one might be expect, the data indicates that the major flows of illegal wood-based products from the region are from China, Indonesia and Malaysia to the EU, the US, and Japan. The illegality associated with much of those exports from China derives from imported wood-based raw material, particularly from Indonesia. China is the leading destination for most of the illegal logs exported from many countries around the world, including Papua New Guinea and the Solomon Islands. Viet Nam imports a smaller quantity of illegal timber from the region,

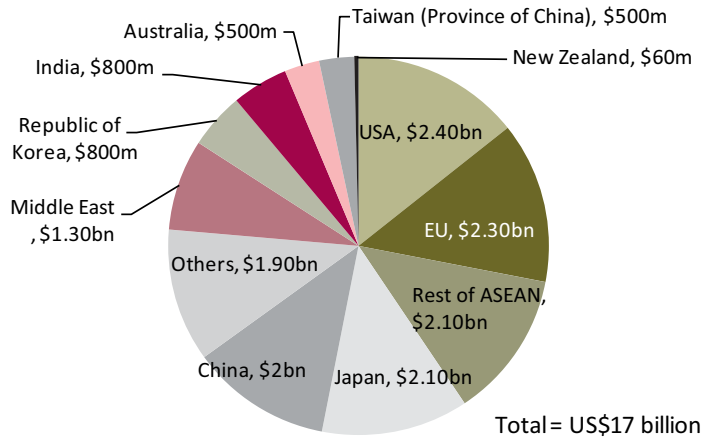
Figure 6: Exports of illegal wood-based products within and from East Asia and the Pacific



Source: UNODC estimates

mostly from Cambodia, Lao PDR and Myanmar.⁴⁰ Japan imports most of the illegal plywood which is exported from Indonesia. China and Indonesia are

Figure 7: Imports of illegal wood-based products from East Asia and the Pacific

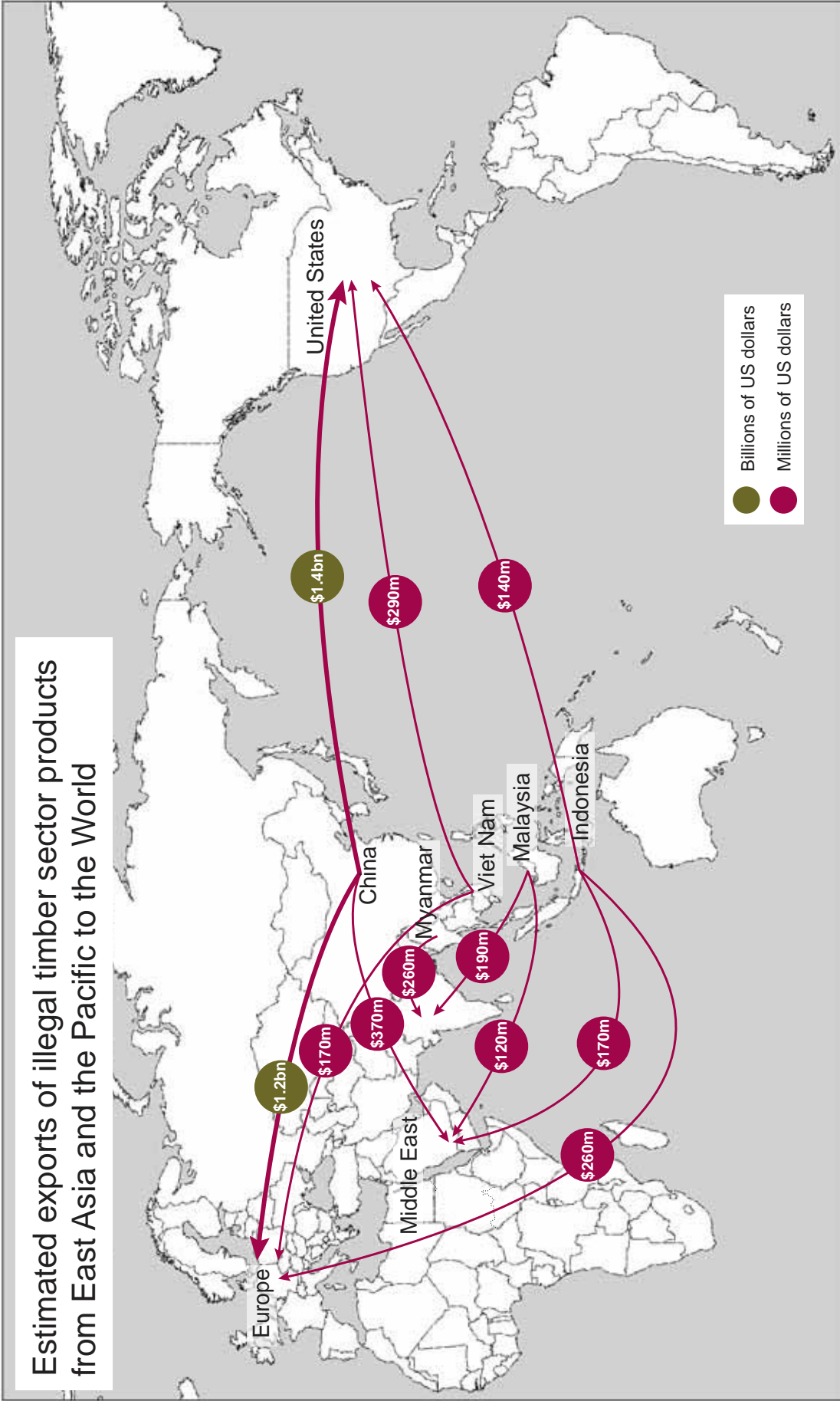


Source: UNODC estimates

the only suppliers of illegal paper sector products in the region.

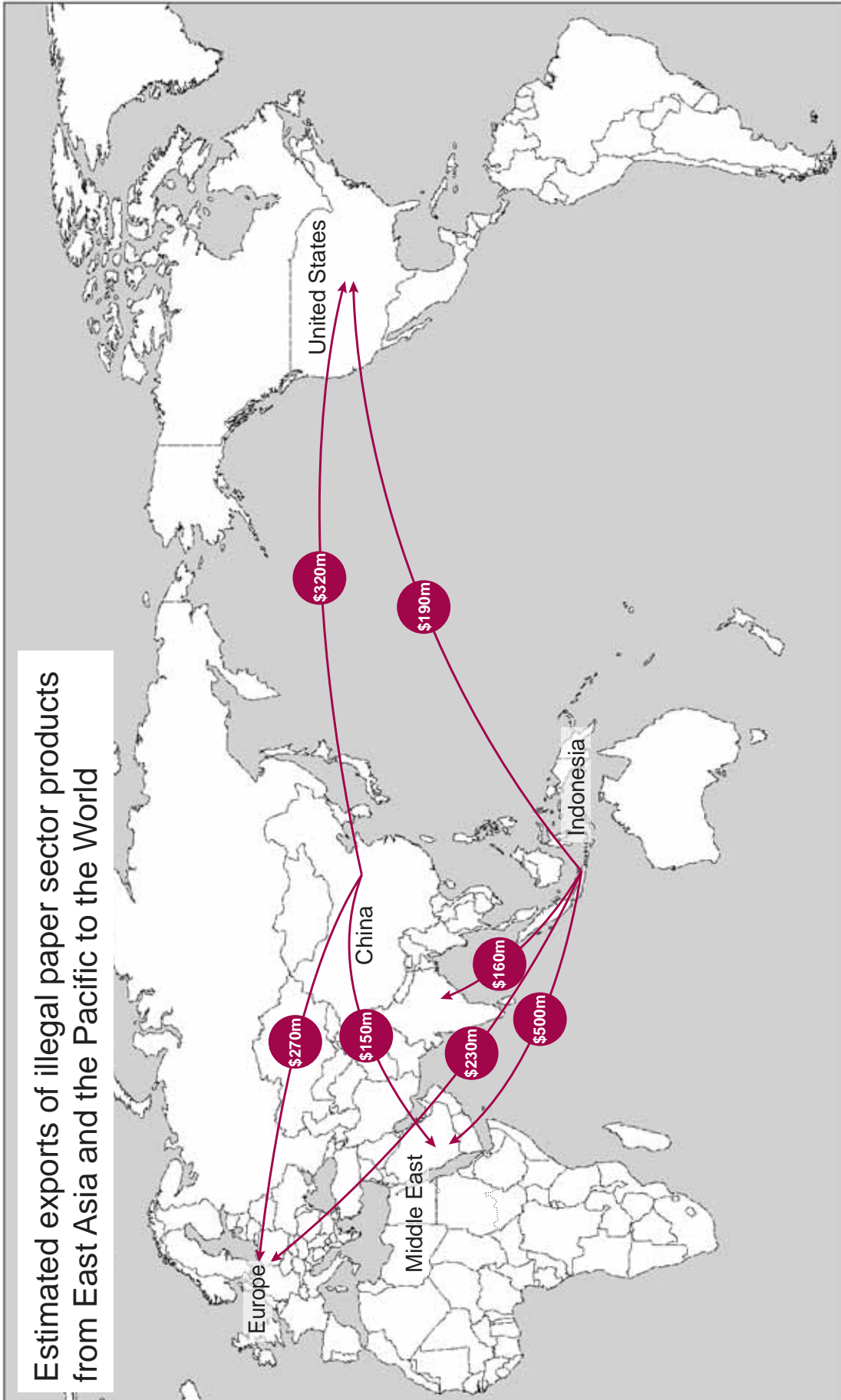
The assessment of available data leads to the conclusion that the regions of East Asia and the Pacific account for approximately 70% of the global illegal timber exports reaching the markets either in the form of tropical timber products or other wood-based products. The alarming estimation conveys a regional specificity demanding that any sustainable solution to reduce the size of the global illegal trade in wood products must urgently address regional forestry authorities and the institutions of the criminal justice system.

⁴⁰ This assessment assumes that all the illegal logs and sawn wood that are imported into Viet Nam are either re-exported or exported subsequent to transformation.



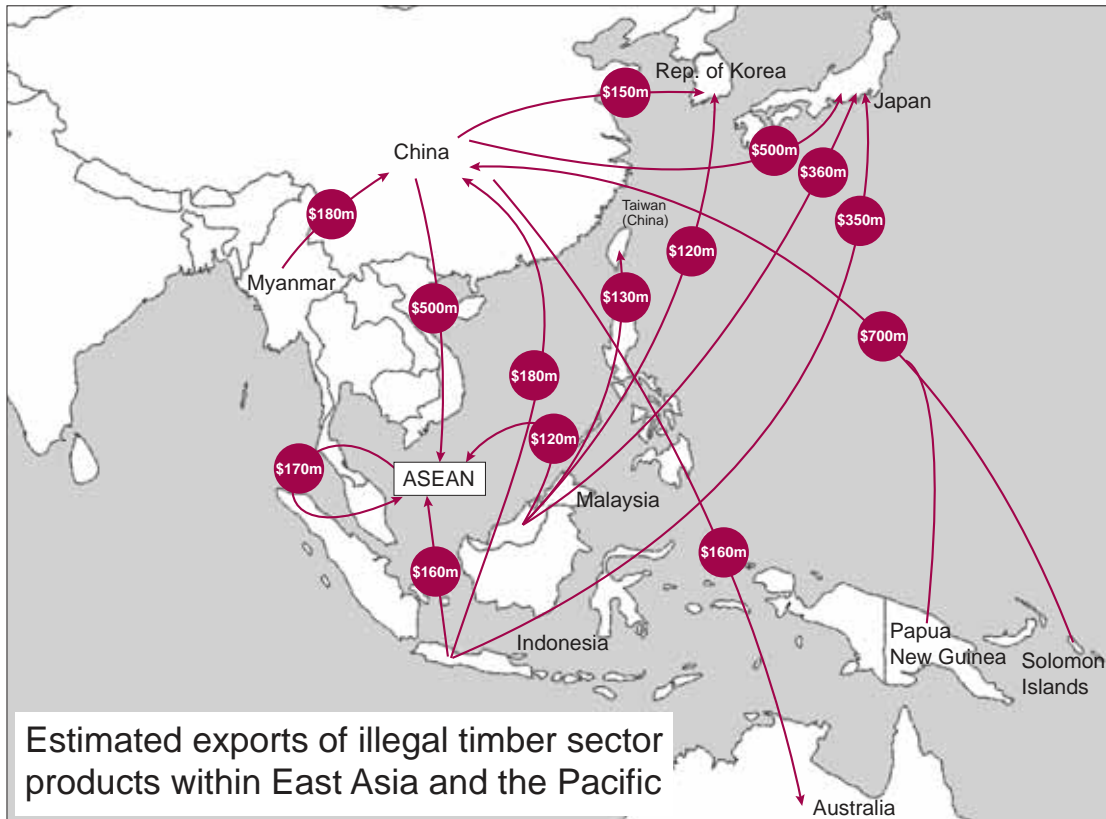
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC estimates



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC estimates



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 Source: UNODC estimates



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 Source: UNODC estimates

Chapter 9

Illicit trade in electrical and electronic waste (e-waste) from the world to the region



This chapter has been developed with the kind contribution of the United Nations Environment Programme.

NATURE OF THE THREAT

<p>1. Environmental disruption: pollution of soil and water systems, emission of greenhouse gases, thinning of ozone layer, negative impact on marine and forest ecosystem by ultraviolet radiations.</p>	<p>2. Negative impact on human health: toxic metals and ultraviolet radiations affecting immune, respiratory and digestive systems, including high risk of skin cancer and eyes diseases.</p>
<p>3. Socio-economic impoverishment: increase costs for public health, reduced agriculture productivity, food insecurity and poverty.</p>	

1. What is the nature of this market?

Electrical and electronic waste (e-waste) is the fastest growing waste stream in the world. Globally, the United Nations Environment Programme (UNEP) estimates that up to 50 million tons of e-waste is generated every year, with only 10% of it being recycled.¹

Broadly, the term e-waste covers a host of electronic items, such as personal computers, televisions, mobile phones, and printers, as well as electrical goods like refrigerators and air-conditioning units. The growth in e-waste is a consequence of the digital economy and rapid innovation in consumer electronics, as continuous product developments lead to a rapid turnover of electronic devices. Consumption in emerging markets is rising rapidly. For example, sales of personal computers in China reached 40 million units in 2008. This was second only to the United States. In the same year, 190 million new mobile phones were sold in China.² China generated an estimated 1.7 million tons of e-waste in 2006. This volume is predicted to rise to 5.4 million tons by 2015. In 2012, it is estimated that 190 million personal computers and 74 million televisions will become obsolete in China.³ All this will require management of e-waste, whether through direct re-use, reclamation, resource recovery, recycling or disposal operations. An emerging factor that creates incentives for recycling of e-waste is the scarcity of precious and rare earth metals contained in electronics. Therefore the recycling and recovery market becomes an important element impacting both the legal and illegal transboundary movement of e-waste worldwide.

Despite such growth in China, the main generators of e-waste are still the developed countries in the European Union (EU) and the US. Since 2008, the EU has produced on average 6.5 million tons of e-waste each year. This figure is set to almost double to 12 million tons by 2015. In terms of per capita e-waste generation, the UK rate is 15 kg per year, and Germany 13.3 kg, while Japan generates 6.7 kg and China 1.7 kg.⁴

¹ UNEP 2010. This figure tallies with business research findings of 53 million tons of e-waste produced in 2009, of which only 13% was recycled. See also: ABI Research 2010.

² Foreign Policy 2009, "E-waste: There's an app for that", *Foreign Policy*, 23 September 2009

³ Chi and others 2011

⁴ Ongondo and others 2011

The e-waste trail often begins in Europe, the United States and Japan, where discarded electronic and electrical equipment is collected by recycling operations. There are two main ways in which old equipment can be discarded. First, private consumers dispose of used equipment at municipal waste collection sites. The second is where businesses contract a specialized waste company to collect and treat defunct equipment. In principle, discarded equipment is then tested in order to separate working items from non-working items. The latter (e-waste) should be dispatched to specialized recycling facilities. In reality, the e-waste is often diverted onto the black market due to a lack of sufficient auditing and oversight. The motivations are numerous: first, avoid the cost of legitimate recycling, and, second, receive payments for the scrap equipment. Further, the trade of used electronic and electrical equipment can be driven by the re-use value of products and waste exported to developing countries. In such situations the equipment (whether in working or – less likely – non-working condition) can fetch prices far above their intrinsic material value.⁵

Globally, trade in hazardous and other wastes, including e-waste is regulated under the Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (1992). The Convention was developed in response to a series of scandals in the 1980s involving the dumping of toxic waste in developing countries. Currently, 178 countries are parties to this Convention, including almost every country in East Asia and the Pacific.⁶

A raft variety of international, regional and national agreements, as well as legislation and other measures further regulate or restrict the trade in hazardous and other waste in general or e-waste in specific. Within the EU, the Waste Electrical and Electronic Equipment (WEEE) Directive seeks to promote recycling to reduce the amount of e-waste being dumped in landfill sites. Under the EU's Waste Shipments Regulation, transfer of e-waste to countries which are not members of the Organisation for Economic Cooperation and Development (OECD) is prohibited. China banned the import of used electrical and electronic equipment in 2000. In many other Asia Pacific countries, specific national

⁵ Secretariat of the Basel Convention, December 2011.

⁶ Only one country has not yet acceded to the Basel Convention. <http://archive.basel.int/ratif/convention.htm#10>.

Overview of Pollution Crime

There are many forms of transnational organized environmental crime, and as the world becomes increasingly connected through trade and regulation of this trade, new forms will continue to emerge. One of the two main subsets of environmental crime is crime related to the illicit harvesting of natural resources, notably wildlife and timber resources, which were addressed in the two previous chapters.

The other main subset is pollution crime, notably the smuggling and dumping of hazardous wastes, including electrical and electronic “e-waste”, and the trade in ozone-depleting substances (ODS). The international trade in these products is regulated by global treaties, and substantial legal markets do exist.

East Asia plays a prominent role in the illegal trade of both e-waste and ODS. The region is a major recipient of illicit e-waste. It is also the largest producer of ODS. It is estimated that up to 10 million tons of e-waste are traded illegally into and around the region every year, with a potential value of at least US\$3.75 billion. Approximately 3,660 tons of ODS are illegally traded from and within the region every year, with an estimated value of up to US\$68 million per year.

These crimes are of international concern. The world is one vast ecosystem, and the release of ODS anywhere in the world impacts our common ozone layer. Dumping e-waste negatively impacts shared soils and water systems, not to mention the harm caused to human health by the illegal disposal of these materials.

These materials are generally illegally disposed of in less developed countries, where criminals take advantage of lax or non-existent environmental controls or less effective enforcement – or both – in order to profit at the expense of both human and environmental health from unsound recycling and disposal practices.

Illegal trafficking of hazardous and other wastes, including e-waste, is specifically defined under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. In fact, Parties to the Convention are required to introduce national/domestic legislation to prevent and punish the trafficking.

e-waste regulations are not in place and thus, e-waste is handled under hazardous waste regulations due to the presence of toxic materials. The US, while not a party to the Basel Convention, regulates exports of equipment containing cathode ray tubes (CRTs) - mainly from computer monitors and television sets - under the Resource Conservation and Recovery Act. All of these regulations seek to prevent hazardous waste from being dumped into developing countries that lack the infrastructure and facilities to safely recycle or dispose of it.

E-waste is classified as hazardous waste due to the presence of toxic materials which can be considered either hazardous or non-hazardous waste in accordance with the Basel Convention and can have adverse impacts on both the environment and human health. For example, CRT monitors contain

up to 2 kg of lead,⁷ which is toxic to humans. Yet, in addition to being hazardous, e-waste also contains commercially valuable elements, such as copper and gold. One ton of computer scrap contains more gold than 17 tons of ore. Ideally these valuable materials should be retrieved through safe recycling practices in modern facilities. Nonetheless, environmentally-sound recycling has significant cost implications. Unscrupulous recyclers and waste brokers in Australia, the European Union, Japan and the United States effectively avoid costs and obtain income from the illicit trade. For example, Australia reportedly only recycles around 5% of e-waste collected, but exports around 60% of used computers that are collected through recycling schemes.⁸

⁷ See “Why do CRT monitors contain lead?” in How Stuff Works. Available: <http://computer.howstuffworks.com/question678.htm>.

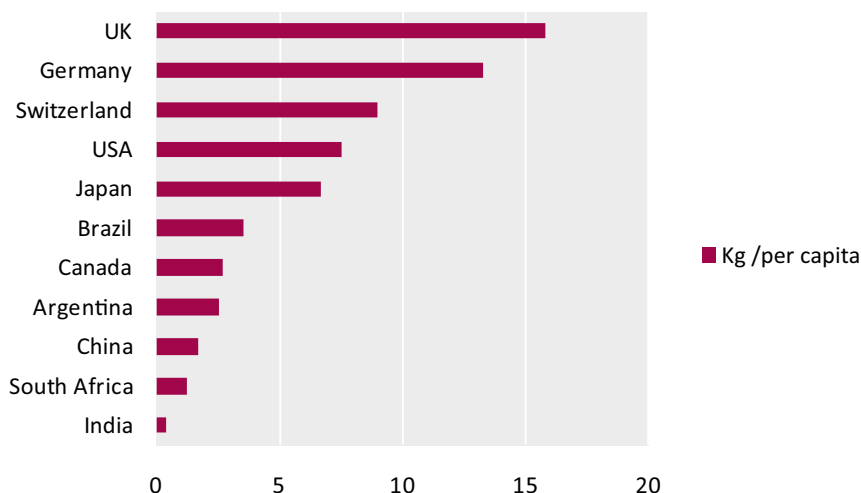
⁸ Agence France Presse 2011, “Australia starting to groan under the weight of a growing mountain of electronic waste”, *Agence France Presse*, 27 May 2011.

It costs up to US\$18 to safely remove lead from one CRT monitor in the United States.⁹ It is estimated that illegal disposal of e-waste such as CRTs provides an economic saving of between 200% and 400% of the cost of legitimate recycling.¹⁰ This has led to modern recycling facilities failing to obtain the predicted volume of e-waste. In the UK, the recycling industry anticipated an annual volume of 1.5 million tons of e-waste for processing, yet the actual quantity received was only a third of this.¹¹ Similarly, a recycling plant set up in Hangzhou, China, has an e-waste processing capacity of 700 tons a year, but only dismantles 90 tons.¹²

Another factor in the profitability of e-waste smuggling is the relatively low cost of shipping containers from the United States and European Union to China. After delivering goods from China, containers – which would otherwise return empty – can be used to transport e-waste on the return leg, leading to lower costs for cargo such as e-waste. In summary, what drives the illicit trade is a combination of two factors: the market value for commercial metals and other elements in e-waste plus the effort to avoid paying the price for safe recycling.

However, the informal recycling of illicit e-waste carries a high cost in terms of health and the environment. Outdated practices release a host of damaging pollutants. Plastic casings on cables are burned to get to the copper inside. Printed circuit boards are heated over coal-fired grills, emitting lead. Open acid baths are then used to separate out copper and gold. CRT monitors are dismantled by hand and components with no resale value are dumped near rivers. The impact on the health of the workers and the surrounding environment can be severe. In Guiyu, Guangdong province, the hub of the

Figure 1: E-waste generation, per capita (selected countries, most recent year available)



Source: Ongondo and others 2011

informal recycling system in China, the state media estimates almost nine out of 10 residents suffer from problems with their skin, nervous, respiratory or digestive systems.¹³ One study found that children in Guiyu had levels of lead in their blood 50% higher than those in neighbouring villages.¹⁴ Water, air and soil in the area is polluted by toxic heavy metals and persistent organic pollutants that enter the food chain.

2. How is the trafficking conducted?

In East Asia and the Pacific, the illicit trade appears to be driven by recycling for metals to be used in manufacturing. Within the region, China is the main destination for e-waste, despite the fact that the country banned the import of used electronic and electrical equipment in 2000. Globally, it is estimated that 80% of e-waste is shipped to Asia (including India) – with 90% of that amount destined for China.¹⁵ The main sources of e-waste reaching China are the European Union, Japan and the United States. Such shipments are in breach of the law in the countries of export as well as in China. Secondary centres for e-waste trade in the region include Indonesia, Thailand and Viet Nam.¹⁶

⁹ Interpol 2009

¹⁰ Thompson and Chainey 2011

¹¹ The Guardian 2009, "Dirty Deals", *The Guardian*, 9 July 2009.

¹² Chi and others 2011

¹³ Reuters 2007, "China's e-waste capital chokes on old computers", *Reuters*, June 11, 2007.

¹⁴ USGAO 2008

¹⁵ Ongondo and others 2011

¹⁶ Report of the Regional Workshop on the Environmentally Sound Management of E-wastes, Siem Reap, Cambodia, March 2007.

In China, the bulk of illicit consignments of e-waste are shipped via Hong Kong (China), with increasing imports via Viet Nam. Most of the waste ends up in the southern Chinese province of Guangdong, where it enters the “informal” recycling sector. The main demand in this sector is for CRT monitors and printed circuit boards.

In Guangdong province, the main centre for the informal recycling of e-waste is Guiyu, with secondary centres in Dongguan, Foshan, Shunde, and Zhongshan.¹⁷ Guiyu alone processes over one million tons of e-waste annually.¹⁸ Informal recycling is characterised by low-cost, labour-intensive practices with no regard for health and environmental impact. Compared with the more capital intensive formal recycling sector, the informal centres continue to prosper. This is because informal centres can avoid the costs associated with health and environmental protection. There is a plentiful supply of waste from illegal imports as well as collections within China itself (where 60% of e-waste generated is estimated to go into the informal sector). The informal centres generate high rates of recovery. And there is a high level of downstream demand. While the price offered by the informal centres for one ton of printed circuit boards is around US\$420 in Guiyu, a modern authorised recycler in eastern China can offer only US\$250, due to their increased costs of safe treatment.¹⁹ Coupled with the aforementioned lack of national or regional regulations on e-waste and value of extracting raw materials, it is also the relatively higher financial gain from this extraction in the informal recycling sector that exacerbates the high economic interest in improper recycling and recovery of materials from e-waste.

Ultimately the products recovered from informal recycling are sold to the manufacturing sector, often via networks of brokers – both legal and informal. From Guiyu, components are sold to major electronics manufacturing centres such as Shenzhen, with copper and other metals ending up in refineries.²⁰ The Chinese government has been promoting more modern recycling parks and attempting to improve practices in the informal sector – such as replacing coal-fired grills with

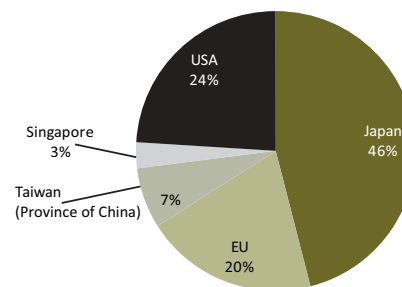
¹⁷ Shinkuma and Huong 2009.

¹⁸ Ongondo and others 2011.

¹⁹ Shinkuma and Huong 2009.

²⁰ Chi and others 2011.

Figure 2: Sources of seized CRT in Hong Kong (China), March – October 2007



Source: RILO-AP 2007.

electric heaters, but the resilience of the informal recycling sector continues to be a key factor driving demand for illicit e-waste.

The flow map of e-waste in the East Asia and Pacific region reflects the pivotal role of China as the main recipient from developed countries around the world. But China is also a growing generator of its own e-waste. It is also the region’s largest manufacturer with high demand for components and metals.

One of the most comprehensive insights into the illicit e-waste trade comes from the results of Project Sky-Hole Patching, initiated in Asia and the Pacific by the World Customs Organization (WCO) and UNEP. This operation was carried out in 21 countries under the aegis of the WCO’s Regional Intelligence Liaison Office for Asia-Pacific and instigated by China Customs. The first phase began in September 2006 and focused on ozone-depleting substances, with hazardous waste movements added from March 2007. The aim of the project was to foster regional cooperation between customs agencies through intelligence sharing and interception of illegal shipments.

Over eight months (March-October 2007) Hong Kong Customs intercepted 98 illegal shipments of hazardous waste from 25 countries, predominantly the European Union, Japan and the United States.²¹

²¹ The main type of e-waste seized was cathode ray tube computer monitors and televisions. In total, 1,100 tons of CRTs and televisions were seized, equivalent to 36% of all hazardous waste intercepted by weight. In terms of source countries, 200 tons of CRTs came from the United States, 380 tons of CRTs and 94 tons of televisions came from Japan, 250 tons of CRTs came from the EU (170 tons from Belgium, 47 tons from Italy and 34 tons from Germany), 56 tons of CRTs from Taiwan (Province of China) and 28 tons of CRTs from Singapore. Source: RILO-AP 2007.

As well as confirming the major role played by OECD countries as the source of most e-waste shipped to the East Asia Pacific region, analysis of the Hong Kong (China) seizures also confirms the port's role as a transit hub for e-waste shipments bound for other destinations, mainly inland China and Viet Nam.²²

In addition to trade via Hong Kong (China), a significant second route has grown over the last few years to supply the informal recycling sector of southern China, via northern Viet Nam. This "backdoor route" has developed in response to improved enforcement in Hong Kong (China) and capitalizes on unclear regulation in Viet Nam over the imports for limited periods of time of e-waste for re-export. It is estimated that up to 90% of e-waste arriving at Vietnamese ports is destined for re-export.²³ The northern port of Haiphong dominates this trade. Containers of e-waste, predominantly CRTs, arrive at the port from the United States, the European Union, Japan and Hong Kong (China), and are transferred by road to storage facilities in the area around Mong Cai town, approximately 150 kilometres away in the province of Quang Ninh. Mong Cai is located across from the Chinese province of Guanxi, with a river forming the international border. CRTs are loaded on small boats which ferry them across the river to the Chinese town of Dongxin. The boats usually travel at night and the CRTs are covered with canvas. A single boat can carry around 800 CRTs. A field survey carried out in 2010 estimated that up to 100,000 tons of e-waste and scrap lead acid batteries are smuggled between Mong Cai and Dongxin each year.²⁴

There is also an indication of transboundary movement of e-waste between Africa and Asia. In fact, precious metals contained in printed wiring boards (PWBs) collected in West Africa are sold

²² The role of Hong Kong port as a central hub for e-waste trafficking is confirmed by information gathered by the Basel Action Network tracking shipping containers of used CRTs leaving the United States in contravention of the country's regulations. From 2008 to 2010 the organisations tracked 179 containers of which 110 were bound for Hong Kong (China), 15 for mainland China and 12 for Viet Nam. A follow-up survey by the Basel Action Network traced consignments of CRTs which had evaded customs control in Hong Kong port to temporary storage facilities in the New Territories area of Hong Kong (China), from where the e-waste was taken across the border by trucks to mainland China. Source: Basel Action Network, *Illegal Global Trafficking in Hazardous Waste*, 4th MEA-REN Workshop, Beijing, China, 21-22 September 2010.

²³ Huynh 2010

²⁴ Yoshida 2010

below world market prices to traders that organize exports to recycling facilities in Asia.²⁵

The main smuggling methods used for shipping containers of e-waste are concealment and mis-declaration. Enforcement against illegal trade is complicated by the legitimate trade in used electronic goods such as computers, which helps bridge the "digital divide" between developed and developing countries. The high variability between national legislations including their difference in definition of e- and hazardous waste further drives the transboundary movement of waste. For example, if a used computer is in working condition, it is not classified as hazardous waste and thus not covered by the Basel Convention. Although some countries such as China prohibit imports of all used electronic and electrical equipment (even those in working condition), the legal trade in such items provides a convenient cover for smuggling of e-waste. One concealment method regularly used by smugglers is to mix both working and non-working end-of-life computers within the same container. The broken e-waste computers are stacked haphazardly at the back of the container, with a layer of working equipment properly stacked on pallets and shrink-wrapped placed at the front of the container in case of visual inspection.

Other common ways to smuggle e-waste is by mis-declaring the shipping content as second-hand goods, used electronic goods, personal effects, plastic scrap or mixed metal scrap. Smugglers also use free trade zones exempt from government regulations, such as Batam island in Indonesia, to avoid confiscation of e-waste shipments.

3. *Who are the traffickers?*

A variety of actors are involved in e-waste trafficking. They range from legitimate recycling firms to so-called "waste tourists", with an array of middlemen and brokers in between. From the location, where end-of-life waste electronic and electrical equipment is discarded to the site of informal dismantling, the e-waste often passes through the hands of several players.

In terms of organizational networks, e-waste traffickers tend to be more loosely connected than

²⁵ Secretariat of the Basel Convention, December 2011.

the traditional hierarchical criminal group structure. Small groups of traders and brokers will come together for a relatively short period of time, do the deal, and then disperse.²⁶

In countries such as the UK, the sub-contracting of recycling operations is commonplace. While large companies hold the contracts from local authorities to deal with all waste, certain streams – such as e-waste – are subcontracted to smaller firms. These firms may lack the necessary recycling facilities. Such firms will collect the dumped equipment from collection sites. However, instead of delivering it to legitimate recyclers, they will export it. Such traders tend to be small firms, with a key individual appearing as a director or owner of several inter-linked entities in order to avoid detection.

In the United States, the analysis of prosecutions for the illegal export of CRTs has revealed that the culprits are seemingly legitimate recycling firms. In one case a recycling firm based in Colorado assured clients that it would dispose of broken CRTs in accordance with US law and charged them a recycling fee. Instead, the company sold the e-waste to brokers representing foreign buyers and shipped the monitors to China instead.²⁷

Widespread distribution of CRTs to the black market by recycling companies in the US was confirmed by an independent enquiry carried out by a branch of the US government. Investigators established a front company based in Hong Kong (China) and received offers from 43 recycling firms to ship CRTs to Hong Kong (China) in contravention of both US and Hong Kong law.²⁸ In addition to remote transactions via websites, buyers from developing countries, particularly African countries, are also known to travel to OECD countries as “waste tourists” to secure supplies of e-waste and arrange shipment.²⁹

The e-waste buyers in the East Asia and Pacific region are usually brokers and waste traders. Recycling in the region is characterised as a fragmented trading

business consisting of a host of informal enterprises.³⁰ According to Hong Kong customs, potential high-risk importers of e-waste tend to be small firms trading in used electronic goods or in recycling.³¹ As soon as consignments of e-waste are successfully imported, the brokers sell the scrap to the informal recycling sector in centres such as Guiyi. After the dismantling has been carried out, the valuable metals and components are then sold via to manufacturing companies or metal refineries via waste brokers utilizing strong trade networks.³²

Verifiable information on links between e-waste trafficking and other forms of transnational organised crimes is scarce. For instance, a range of contraband is known to flow from Viet Nam to China via the Mong Cai corridor described earlier. This includes e-waste and also illicit wildlife products such as ivory. However, it is not certain whether the same individuals are involved in smuggling different products. More research is required.

At the same time, it is clear that the increasing globalisation and regulation of the waste trade, including e-waste, presents significant opportunities for organised crime. A 2006 INTERPOL study of 36 court cases in Europe relating to waste pollution crime revealed the active involvement of organised crime groups.³³ The attraction of e-waste to white collar criminals and organised crime gangs is the lucrative combination of high profits and low risk of detection. The sheer number of brokers involved and the porous system for handling e-waste, coupled with the resilience of informal recycling in East Asia driving demand, pose serious challenges to effective enforcement.³⁴

4. How is the money handled?

Scant information exists on financial transactions relating to illicit trade in e-waste. Recycling companies in the United States and Europe Union divert discarded equipment to the black market and receive legitimate payments from clients for collecting e-waste and the undertaking to organise its safe recycling. These can be local authorities and commercial enterprises. Such payments are made

²⁶ Interpol 2009

²⁷ In the indictment, the recycling firm was alleged to have shipped 160 containers totalling over 100,000 CRTs to China between 2005 and 2008 firm. Source: United States Attorney's Office District of Colorado Press Release, 16 September 2011. The case is understood to have not yet gone to trial. Source: Waste Recycling News, “Charges follow 60 Minutes e-waste case”, 6 October 2011.

²⁸ USGAO 2008

²⁹ Interpol 2009

³⁰ Responsible Research 2011

³¹ RILO-AP 2007

³² Chi and others 2011

³³ Interpol 2009

³⁴ Thompson and Chainey 2011

through transparent channels such as business invoices. They are usually declared as taxable income.

Payments from buyers of e-waste are less transparent. Searches of electronic commerce sites reveal that payment terms stipulated by sellers of computer scrap and other e-waste are usually telex transfer or popular money transfer systems – such as Western Union – rather than the usual letter of credit system used for international commerce. It is likely that payments between waste brokers and informal recyclers in places like Guangdong are made in cash.

5. How big is the flow?

Although the motivation for e-waste smuggling and the major smuggling routes are clear, there is a dearth of reliable information on the scale of illicit trade in e-waste. For instance, 75% of e-waste generated annually in the European Union – equivalent to around 8 million tons – seems to remain unaccounted for.³⁵

Most information on flows of e-waste is based on seizure data and reports by media and non-governmental organisations. Official sources of information from government agencies are either incomplete or confidential. Despite the frequent request of the Secretariat of the Basel Convention to parties to provide details of cases of trafficking in hazardous waste, including e-waste, the practice of reporting is just sporadic and by no means comprehensive.

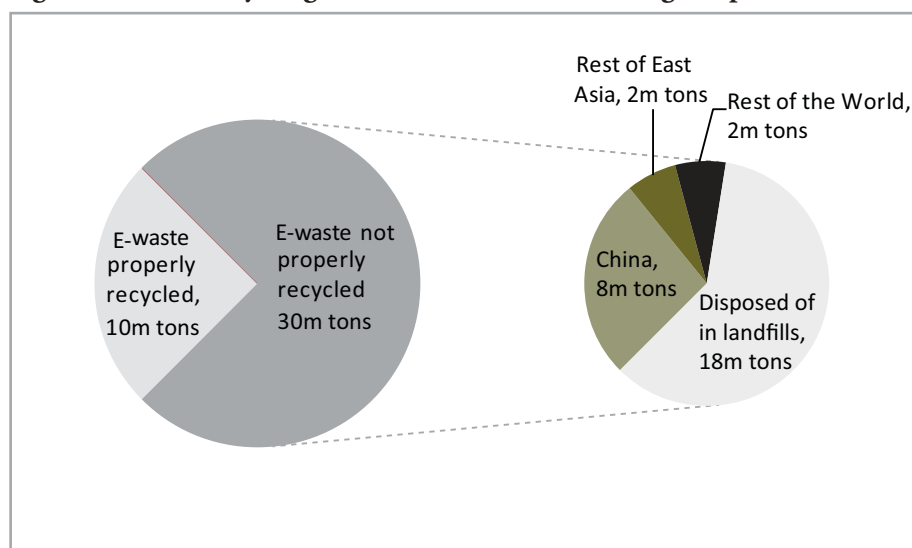
While it is possible to map the main trade flows of e-waste in East Asia and the Pacific, it is much more problematic to accurately gauge the scale of the illicit trade, both in terms of volume and value. This information is due to a range of factors, such as the use of legal trade in used equipment to provide a

cover for illicit trade in e-waste, the lack of specific customs codes, the clandestine nature of the trade, incomplete recording systems by national agencies and the fragmentation of seizure data.³⁶ Yet, some insights into the potential scale and profitability of the trade can be achieved through analysis and extrapolation of data on the volume of e-waste generated, amounts of e-waste entering legitimate recycling channels, seizure incidents, and prices paid.

Globally, the illegal trade in hazardous waste is estimated to generate revenue of US\$12 billion a year for criminal enterprises. Depending on the requirements in each country, illegal disposal is estimated to be up to four times cheaper than legal treatment.³⁷ Although e-waste only accounts for a fraction of total trade in hazardous waste it is the fastest growing category of waste. According to the UNEP, between 30 and 50 million tons of e-waste is generated every year.³⁸

Based on this UNEP estimate, an average of 40 million tons per year can be assumed for this assessment. Of this 40 million tons, various estimates range between 10%-39% of this being properly

Figure 3: Global recycling of e-waste and estimated illegal exports



Source: UNEP 2010 and UNODC estimates

³⁵ The Times 2009, "Britain's dirty little secret as a dumper of toxic waste", *The Times*, 18 July 2009.

³⁶ Thompson and Chainey 2011

³⁷ Thompson and Chainey 2011

³⁸ UNEP 2010

recycled through legitimate channels.³⁹ For this assessment it is assumed that 75% of e-waste is not properly recycled thus entering the ‘hidden flow’ – globally, that is 30 million tons per year.

Not all of the estimated 30 million tons is traded illegally, since an unknown proportion of the total is disposed of in landfills. There is no credible estimate for the split between illegal exports and landfill for major source areas such as the European Union. Further, not all electrical appliances are suitable for e-waste (e.g., washing machines) as only those appliances with the highest amounts of recoverable metals and other substances are considered valuable (e.g., consumer electronics, communications and information technology). In the EU, the latter category accounts for 40% of e-waste.⁴⁰ If 40% of e-waste is assumed to be suitable for illegal export, then this would amount to an estimated 12 million tons of illegal exports (40% of 30 million tons).

Asia (including India) is the biggest recipient of illicit e-waste, with China being the largest single destination.⁴¹ Globally, it is estimated that around 70% of the world’s scrap electronics are bound for China.⁴² If this is the case, this would translate into an estimated 8 million tons of e-waste being smuggled into China every year. For the entire region, this value could be rounded to an approximate 10 million tons of e-waste each year (taking into account a 2 million tons in internal flows via third countries such as Viet Nam).

According to existing sources, a container of CRT monitors can be sold for US\$5,000 in Hong Kong (China), which would correspond to US\$250 per metric ton.⁴³ INTERPOL reports that one ton of e-waste is valued at US\$500. Splitting the difference

yields an average figure of US\$375 per ton. If the estimated volume of 10 million tons of e-waste traded in the EAP region per year, the potential value would be \$3.75 billion.

Considering that the global market for e-waste, including legal exports, has been predicted by UNEP to be valued at around US\$11 billion by 2009⁴⁴ the scale of the estimate of US\$3.75 billion of illegal e-waste in East Asia is reasonable.

³⁹ ABI Research 2009. Most estimates provide an average of only 10% of e-waste being properly recycled. Figures from the EU indicate that 25% is recycled (based on 75% being unaccounted for). US estimates of the amount of e-waste (specifically CRTs) sent to recyclers and subsequently exported range from 61% (Interpol) to 80% (Basel Action Network), meaning that the recycling rate is 10%-39%. The average of 25% is taken for this assessment.

⁴⁰ Huisman and others 2009

⁴¹ According to the Basel Action Network it has been estimated that between 50 to 100 containers of e-waste (each container carrying an average 15 tons of e-waste) arrive from the United States to Hong Kong (China) every day (presentation to the 4th Multilateral Environmental Agreement - Regional Enforcement Network Meeting, Beijing, 21-22 September 2010).

⁴² LaDou and others 2007

⁴³ Businessweek 2008, “E-Waste: The Dirty Business of Recycling Electronics”, *Businessweek*, 15 October 2008.

⁴⁴ UNEP 2007a, E-Waste Inventory Assessment Manual, Volume 1.

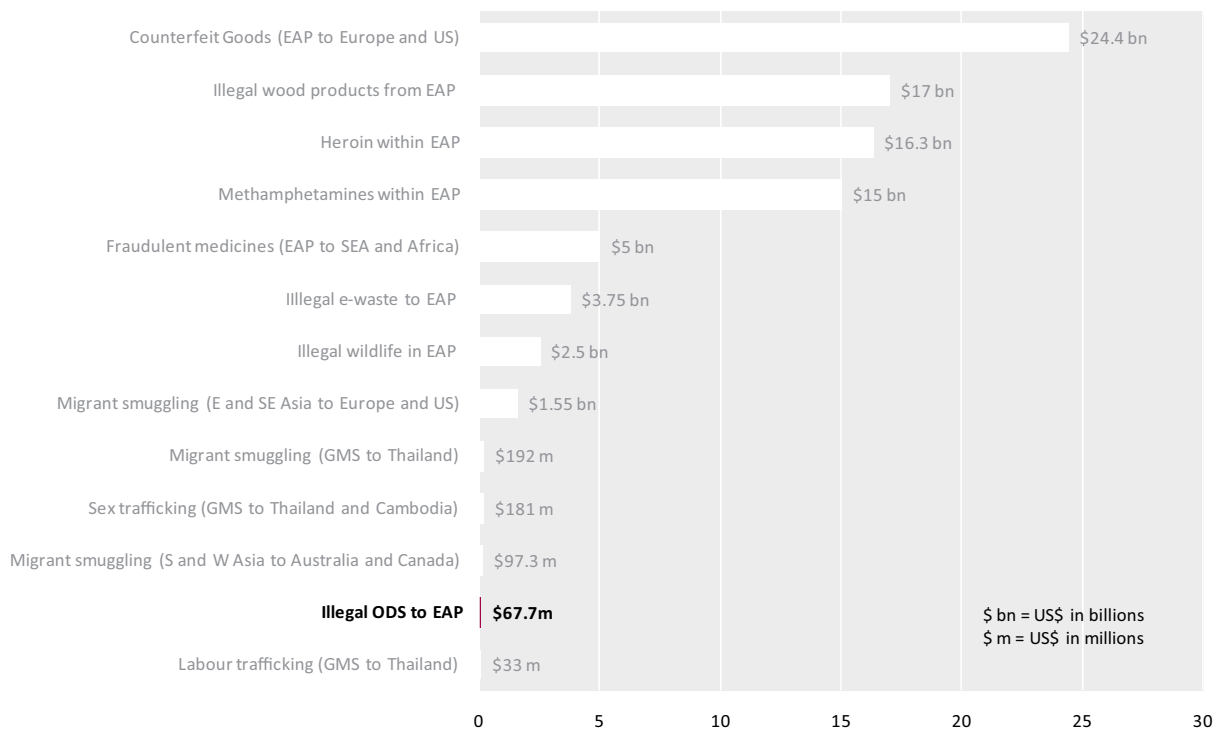


The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration based on information from EIA

Chapter 10

Illicit trade in ozone-depleting substances (ODS) from East Asia to the world



This chapter has been developed with the kind contribution of the United Nations Environment Programme.

NATURE OF THE THREAT

<p>1. Environmental disruption: pollution of soil and water systems, emission of greenhouse gases, thinning of ozone layer, negative impact on marine and forest ecosystem by ultraviolet radiations.</p>	<p>2. Negative impact on human health: toxic metals and ultraviolet radiations affecting immune, respiratory and digestive systems, including high risk of skin cancer and eyes diseases.</p>
<p>3. Socio-economic impoverishment: increase costs for public health, reduced agriculture productivity, food insecurity and poverty.</p>	

1. What is the nature of this market?

All life depends on the ozone layer to shield the planet from harmful ultraviolet radiation. In the 1980s, global concern over the thinning of the ozone layer, caused by emissions of a range of chemical gases, led to the signing of the Montreal Protocol on Substances that Deplete the Ozone Layer in 1987. This landmark multilateral environmental agreement regulates the gradual phase-out of ozone-depleting substances (ODS). These are principally chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) (which are mainly used for refrigeration and air-conditioning), halons (used for fire-fighting) and methyl bromide (used as a crop fumigant).

While the Montreal Protocol has rightly been hailed as a major success in terms of tackling ozone layer depletion, it has been partly undermined by the illegal trade in ODS. In creating a phase-out system with differing schedules between developed (Article 2 countries under the treaty) and developing countries (Article 5), the architects of the protocol unwittingly created the conditions for the emergence of a black market in ODS.

Illegal trade involves brokers diverting ODS which are produced in countries with longer phase-out schedules onto markets where ODS import and use is more strictly regulated but where demand remains steady. The first cases of illicit trade involved CFCs. Production of CFCs was halted in developed countries in the mid-1990s and imports were banned, except for used CFCs. Yet due to the large installed capacity of equipment which is reliant on CFCs, demand in the United States and in the European Union remained buoyant. While CFC production was winding down in developed countries, it was rising dramatically in developing countries, notably China and India. Such supply and demand conditions created opportunities for brokers to step in. And the illegal trade began.

In response to this threat, the Montreal Protocol put in place a licensing system for ODS in 1997 to further regulate trade. Significant efforts have also been undertaken to train customs officials and environment officials in combating ODS smuggling. Nonetheless, despite such efforts the illegal trade in ODS continues to be a threat, especially in East Asia and the Pacific, where both production and consumption of ODS is still present.

The Impact of Ozone Layer Depletion

The ozone layer is formed by a band of ozone molecules in the stratosphere. This layer effectively screens the Earth from harmful ultraviolet radiation. Chlorine and bromine particles contained in ODS react with the stratospheric ozone when emitted, causing thinning of the ozone layer. One manifestation is the so-called ozone hole which emerges over the South Pole during the austral spring. In 2011, the southern hole peaked in September, extending over 10 million square miles, the ninth biggest ozone hole on record.¹

Ozone layer depletion has a series of adverse impacts on the environment and health:

- **human health:** increased ultraviolet radiation suppresses the immune system, damages eyes including cataracts, and increases the risk of skin cancer
- **marine ecosystems:** increased ultraviolet radiation reduces the productivity of small organisms such as plankton which form the base of the marine food web
- **terrestrial ecosystems:** increased ultraviolet radiation affects the yield of a host of crops as well as impacting forest ecosystem.

In addition to damaging the ODS layer, some ODS are potent climate change gases. The Montreal Protocol has delayed global warming by an estimated 7-12 years by reducing greenhouse gas emissions by 135 billion tonnes of carbon dioxide equivalent between 1990 and 2010.

The current global demand for illegal CFCs and – increasingly – HCFCs is not for manufacturing purposes, but rather for refrigeration and air-con servicing. The phase-out process is based on the ozone-depleting potential of the different chemicals in terms of the severity of their impact on the ozone layer. The first category to be phased out was CFCs, which were widely used for refrigeration and air-conditioning. CFCs were followed by halons, then methyl bromide and then HCFCs. The latter had been seen as a transitory replacement for CFCs due to their lower ozone depleting potential.

¹ UNEP OzonAction 2001

Initially the main source for CFCs smuggled into the US was Russia, but by 1997 China began emerging as a significant source, for both CFCs and halons. The European Union's phase-out of CFCs also prompted illegal trade in ODS. The main focus of the illegal trade was CFC12, widely used for servicing refrigeration and air-conditioning. The profitability of this black market was high. One kilogram of CFC could be bought from a broker in China for US\$2. But when smuggled into the EU, the price could reach US\$15. In the US, the price could be up to US\$30.²

As the initial phase-out controls came into force in developing countries in 1999, incidences of illegal trade began emerging, especially in South Asia and East Asia. By 2005, seizures of contraband ODS had occurred in India, the Philippines, Indonesia and Thailand, with China being the main source.³ By 2006 it was estimated by UNEP that up to 14,000 tonnes of CFCs, worth up to US\$60 million were being smuggled into developing countries every year.⁴

The scale of illicit trade in CFCs has fallen in recent years, principally as a result of China – the world's largest producer in the 2000s – ceasing almost all production in 2008. By 2010 the final phase-out of CFCs occurred worldwide, although cases of illegal trade have persisted.

Yet a new enforcement challenge has arisen. There is now a growing illegal trade in HCFCs. In 2007 parties to the Montreal Protocol agreed to accelerate the phase-out of HCFCs due to the negative impacts of this class of ODS on both the ozone layer and the climate. Cases of illegal imports of HCFCs into the United States have been rising since 2009. There are concerns of a substantial risk of illegal trade in HCFCs and technology dumping occurring in developing countries once relevant phase-out deadlines begin in 2013 and end in either 2020 or 2030.⁵

The overlap between ODS and e-waste is one sub-category of electronics, known as "white goods" such as refrigerators, air conditioners and similar

equipment, which contain ODS and become e-waste when they reach end-of-life stage. Environmentally-sound management of these end-of-life products is important not only to avoid or reduce adverse health and environmental impacts but also mitigate climate change impacts.

2. How is the trafficking conducted?

The main response under the Montreal Protocol to the threat of illegal trade has been the implementation of an ODS licensing system. This was agreed in 1997 and became effective in 2000.⁶ Under the terms of the system countries are obliged to licence firms importing ODS, with a recommendation that exports are also licensed. This requires that companies wanting to import ODS obtain a licence from the national ozone unit. While the system is extremely useful for quickly identifying companies trying to illegally import ODS without a licence (so-called front door smuggling), and in managing imports through a quota system, it does not capture imports mis-labelled as non-ODS.

The effectiveness of the licensing system has also been reduced by a failure to mandate cross-checking between different countries. This leads to a situation whereby an exporting company can be licensed by its national authority to ship ODS to a customer in a second country which does not have an import licence.

China has been the single largest source of contraband ODS. These were principally CFCs until the final phase-out in 2010. It is predicted that there will be an increase in the illicit movement of HCFCs. This is because China is currently the largest producer of ODS in the world. At the peak, in 1998, China was producing some 55,000 tonnes of CFCs a year. However, after undergoing an accelerated production phase-out by 2007, only one CFC plant remained operational, producing just 550 tonnes per year.⁷ Yet while CFC production has declined, China's production of HCFCs has risen dramatically.⁸

While the bulk of ODS manufactured in China is traded legally, due to its prominence as the major

² RIIA 2002

³ EIA 2005

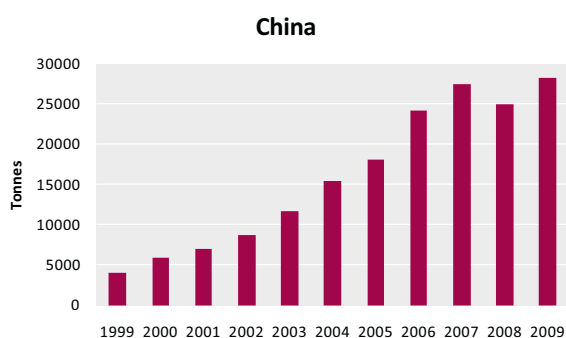
⁴ UNEP 2007

⁵ Depending on whether the state party is operating, respectively, under Article 2 of the protocol or Article 5. See also UNEP and EIA 2011.

⁶ UNEP 1999

⁷ The World Bank 2007

⁸ UNEP Ozone Secretariat Article 7 Data Reporting.

Figure 1: HCFC production in China 1999-2009

Source: Ozone Secretariat of the Montreal Protocol

producer, it is inevitable that China will remain a major source for most of the illicit CFCs and HCFCs diverted to black markets, as shown by seizure records.

Since 2005, the main destinations for illegal shipments of CFCs from China have been Thailand, Indonesia, the Philippines, as well as the Middle East. The main destinations for illicit HCFCs are the United States, Southeast Asia, Taiwan (Province of China), India, the Middle East and Europe.

In 2006, the Regional Intelligence Liaison Office for Asia Pacific (RILO-AP), at the request of China Customs, coordinated the Operation Sky-Hole Patching. Its aim was to target smuggling of ODS and hazardous waste. Between September 2006 and October 2007 the operation led to the seizure of 154 tons of ODS in 27 shipments. Thailand recorded the largest number of seizures, with 65 tons of CFCs and HCFCs. This was followed by China with 51 tons of CFCs and HCFCs, then India with 30 tons of HCFCs and the Philippines with 5 tons of CFCs.⁹ Although Sky-Hole Patching became a routine operation after November 2007, ODS seizures continued to be reported by RILO-AP members. In total, between September 2006 and November 2009, 301 cases of ODS smuggling occurred weighing 728 tons, with 99% of the contraband being CFCs.¹⁰ Seizures occurred in China, Indonesia and Thailand.

In 2010, the Sky-Hole Patching concept was adopted by the United Nations Environmental Programme and the World Customs Organisation which coordinated a six-month global enforcement operation against ODS smuggling. During the

⁹ RILO-AP 2007.

¹⁰ RILO-AP 2010.

BOX: ODS Smuggling Methods

False Labelling:

ODS are smuggled in cylinders or packaging labelled as legal products. Initially cases emerged of CFCs being packaged as HCFC-22 (at a time when HCFCs were not subject to controls). As licensing systems came into force and all ODS were flagged by customs, smugglers switched to concealing CFCs in cylinders labelled as HFC-134a, a non ozone-depleting alternative. In some instances this contraband was actually sold as HFCs due to the higher market prices compared with CFCs. Recently illicit shipments of HCFCs have been falsely labelled as HFCs.

Mis-declaration:

ODS are disguised by putting the names of other similar, legal chemicals on shipping documents and invoices. This method is often combined with “double-layering”; filling a shipping container with cylinders of illegal ODS except for a layer of the legitimate chemical stated on the Bill of Lading next to the container door. cursory inspection will fail to uncover the ODS at the back of the container.

Fake recycled material:

Trade in recycled ODS is less regulated than for virgin CFCs. Smugglers claim the material is recycled on shipping documents and permits, when in fact it is virgin chemicals. The suppliers may even deliberately add a small amount of contaminant to the virgin chemical to make it appear the material has been used, should it be tested. It is likely that smugglers will attempt to import back market HCFCs using this ruse again.

Concealment:

ODS are simply hidden in ships, cars, or trucks and moved across border. This method usually involves small quantities, but is lucrative and the overall volume can be significant.

Transshipment fraud:

Consignments of ODS ostensibly destined for legitimate end markets are diverted onto black markets. This type of fraud often involves complex shipping routes, passing through transit ports and free-trade zones where customs procedures may be more relaxed.

operation, 108 tons of illicit ODS were seized, mainly in the Asia and Pacific region (including India), with Thailand alone intercepting 26 tons of ODS.¹¹

These seizure data provides useful insight into flows of illicit ODS. In China 19 of the 21 seizures were made by customs in Shanghai, Ningbo and Hangzhou. This is due to the strong clustering of China's ODS factories in the eastern province of Zhejiang, which is also home to many ODS brokerage operations. Both Ningbo and Hangzhou are located in Zhejiang, which borders Shanghai. The bulk of illegal shipments of ODS from China are exported via Ningbo and Shanghai container ports. The vast majority of the seizures have involved consignments of ODS packaged in 13.6 kg disposable cylinders, rather than bulk isotanks. While large bulk shipments of ODS require facilities for repackaging, these small cylinders are attractive to smugglers as they can then be sold on the market relatively easily.

One puzzling aspect of the seizure data is the continuing prevalence of CFCs. Production of virtually all CFCs was halted in China by 2008, and the final global phase-out occurred in 2010. Yet CFCs continue to appear on the black market. Possible explanations include stockpiling prior to the production halt, or the existence of unregulated illicit production facilities. Several such plants have been discovered and dismantled in China.¹²

Most instances of ODS smuggling involve transport in shipping containers. Smaller vessels are occasionally used. In 2010 authorities in Taiwan (Province of China) seized 40 tons of illicit CFCs and HCFCs transported in specially adapted fishing vessels from mainland China.¹³ Smuggling by road also takes place. In June 2011 Thai customs intercepted 574 cylinders (13.6 kg each) of CFC12 smuggled across the border from neighbouring Lao PDR.¹⁴

A range of techniques are used to smuggled ODS, mainly mis-declaration, false labelling, and concealment (see Box: ODS Smuggling Methods).

¹¹ WCO and UNEP 2010

¹² RILO-AP 2010

¹³ ITRI 2010

¹⁴ UNEP Regional Office for Asia-Pacific, communication, June 2011.

Analysis of prosecutions for illegal import of HCFCs in the United States provides information on the techniques adopted. In two cases, Florida-based companies imported significant amount of HCFCs by transshipping them from China via an off-the-shelf company in the Dominican Republic to disguise the origin of the shipment¹⁵ or via Caribbean islands to avoid detection.¹⁶

Another aspect of ODS smuggling in the East Asia and Pacific is illicit trade in counterfeit refrigerants, whereby branded cylinders labeled as HFC134a (a legal refrigerant) are found to contain a mixture of chemicals, such as CFCs, HCFCs and HCs. Cases have been detected in Africa, Latin America, the Middle East and Asia Pacific.¹⁷ Contaminated mixtures found in counterfeit products can pose a threat to the safety of servicing technicians. For example, in 2011, three cases occurred where refrigerated containers exploded in Brazil and Vietnam, killing three people. While the precise causes for the explosions are still under investigation, preliminary analysis appears to confirm suspicions that the cause of the explosions was contaminated gas; a mixture of R-134a (legal refrigerant) with the counterfeit refrigerant R-40 was identified, with the latter blamed for the explosion.¹⁸

3. Who are the traffickers?

As the world's largest manufacturer of ODS, China is the origin of much of the illicit CFCs and HCFCs traded within the East Asia Pacific region and beyond. The main production facilities are clustered in the province of Zhejiang, with a group of around 10 companies dominant in the sector. While these large companies usually have export

¹⁵ A Miami-based trading company dealing in commodities including refrigerant gas was found guilty of importing 418 tonnes of HCFCs in 11 separate shipments. The firm was set up in 2007, and began illegally importing HCFCs in the same year. The company used a web of connections to sell the refrigerant gas on to distributors in Florida and beyond. Source: US Attorney's Office for the Southern District of Florida Press Release, 11 February 2010.

¹⁶ A major case came to light in 2009. A Florida-based company was found guilty of importing 29,107 cylinders containing 418 tons of HCFC-22 in 11 separate shipments with a market value of almost \$4 million. Although the shipments originated in China, the US importer transhipped the contraband via a Caribbean island to avoid detection. The head of the company was sentenced to 30 months imprisonment and ordered to return US\$1.3 million from the proceeds of the crimes. Source: US Attorney's Office District of Florida, Press Release, 11 February 2010.

¹⁷ UNEP and EIA 2011

¹⁸ UNEP ROAP 2012

sales departments and deal directly in legitimate trade with customers around the world, illegal trade usually involves smaller brokers who obtain supplies of ODS from manufacturing facilities and divert it onto the black market.

Some of these brokering operations, which are usually run by a handful of people, have been involved in trading ODS for at least a decade and specialise in refrigerants, even having facilities to decant ODS from bulk containers into smaller cylinders. Others are more opportunistic and offer ODS amongst other commodities as general import and export operations. These brokers tend to have less history in ODS trade and function as classic middlemen between producers and buyers.

In addition to Chinese-based brokers, similar operations exist in trading centres such as Singapore and the United Arab Emirates. Both of these hubs have been used to repackage and mis-declare consignments of ODS originating in China. Use of free trade zones helps to obscure the origin of the chemicals and to divert shipments.

Analysis of seizures made in the Philippines and Indonesia show that importers of ODS are often fake companies with no legal registration and fictitious addresses. One study carried out in Indonesia into imports of ODS found a host of importing companies whose stated offices in shipping documents proved to be false.¹⁹

In general most importers of illicit ODS have legitimate refrigeration businesses as well. Through networks of business contacts, these importers are able to sell the disposable cylinders of ODS onto end users in sectors such as servicing of refrigeration equipment and automobile air-conditioning.

The illegal trade in ODS also exhibits evidence of transnational criminal networks spanning different continents and nationalities. Some of the relationships between individuals in these networks are long-standing. For instance, analysis of the foiled attempt to smuggle 39 tons of “recycled” CFCs from China to Russia revealed the involvement of individuals in three countries, some of which have been conducting illicit trade in ODS since the mid-1990s.

¹⁹ Institut Teknologi Bandung 2003

4. How big is the flow?

During the first phase of illegal trade of ODS in the mid-1990s, it was estimated that up to 38,000 tons of CFCs were being traded illegally every year, equivalent to 20% of legal commerce and worth up to US\$500 million. At this time, a single shipping container of CFCs smuggled into the United States could yield profits of \$250,000 due to price differentials between the amount paid to buy CFCs in countries like China or Russia and the high market price in the United States due to import taxes.²⁰

By 2006 smuggling of ODS into developed countries in Europe and the United States had declined, but it had grown in developing countries.

The current magnitude of the flow of illicit ODS in East Asia and the Pacific can be estimated from the analysis of seizure data. The Sky-Hole Patching Operation in East Asia between 2006 and 2010 is reported to have conducted 51 seizures of illegal ODS totalling approximately 730 tons – an average of 183 tons seized per year.²¹

Based on an estimated 5% seizure rate, this would translate into 3,660 tons of illegal ODS flowing from and within the East Asia region on an annual basis.

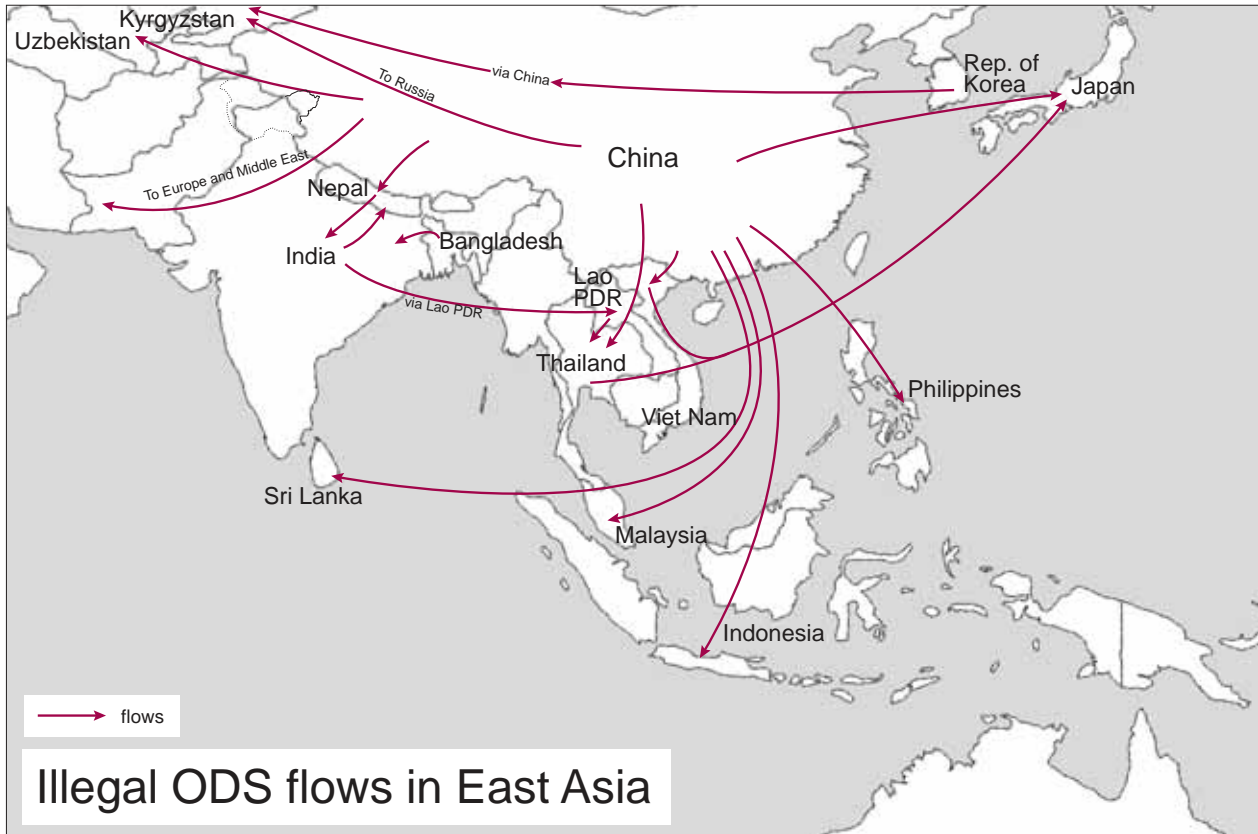
Based on a range of sources, the price of CFCs and HCFCs in China is between US\$2.5 and US\$4.5 per kg. In Europe and the United States the market price for CFCs and HCFCs from China varies from US\$9 to US\$31. An average would be US\$18.5 per kg.²²

Based on the flow volume of 3,660 tons per year from East Asia, the total value based on average gains of \$18.5 per kg is around **US\$67.7 million per year.**

²⁰ RIIA 2002

²¹ RILO-AP 2010a

²² Price for HCFC offered by Chinese companies is US\$2.5 to US\$4 per kg. (Source: EIA monitoring of e-commerce websites such as Alibaba between April 2010 and February 2012); US market price for HCFC22 is around US\$30 per kg; price paid for end-users of HCFC22 in Europe in 2009 was US\$25. The US prosecution of Kroy Corporation suggests US\$9 per kg. (Ref: US Attorney's Office for the Southern District of Florida, Press Release, 11 February 2010). Note that this figure is based on the highest global market price in US/Europe. Profitability in markets within East Asia and the Pacific such as Indonesia, the Philippines and Thailand will be substantially lower.

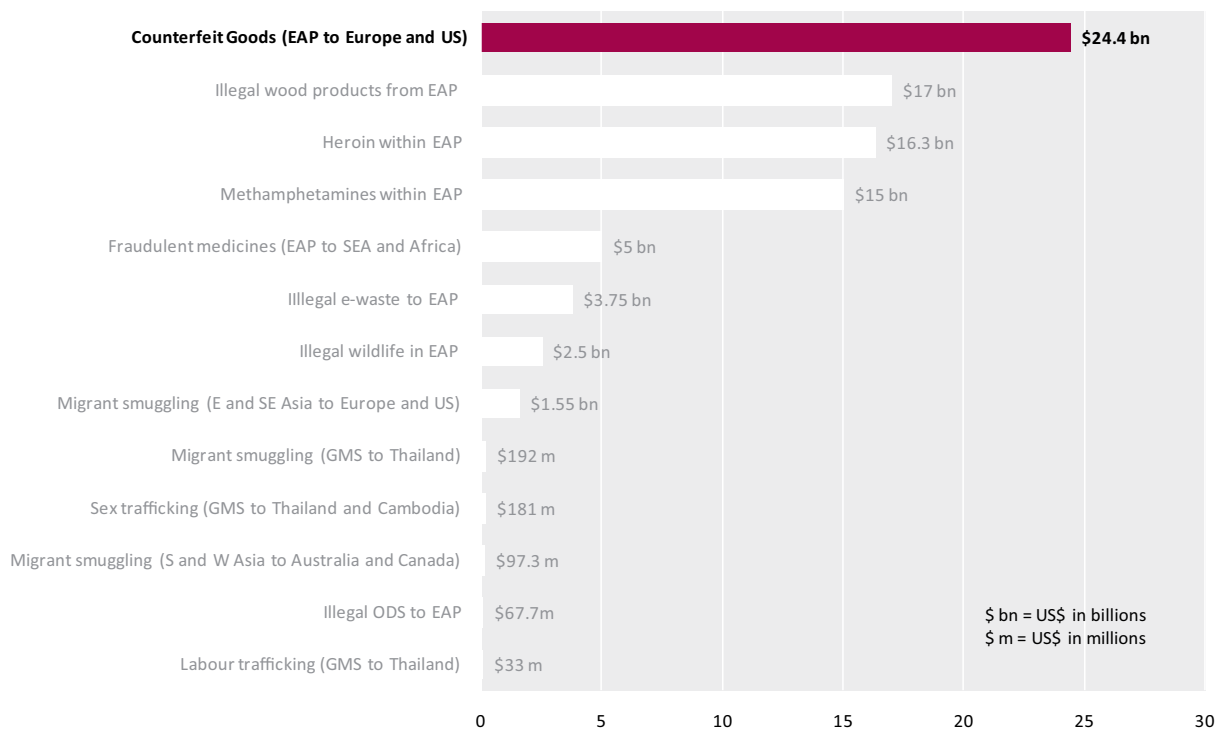


The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration based on information from UNEP 2007 and EIA 2011a

Chapter 11

Counterfeit consumer goods from East Asia to the United States and the European Union



NATURE OF THE THREAT

<p>1. Dangerous goods for sale: no – or poor-quality – controls (e.g., fake baby food; dangerous toys; tainted milk).</p>	<p>2. Exploitative working conditions: dangerous unregulated sweatshops.</p>
<p>3. Linkages to other TOC: TOC groups distributing counterfeits are often associated with other crime types, e.g., prostitution, money laundering, human trafficking.</p>	<p>4. Lost government revenues: loss of import duties; loss of sales tax; lower revenues overall.</p>
<p>5. Facilitates corruption: undermines rule of law and accountability.</p>	

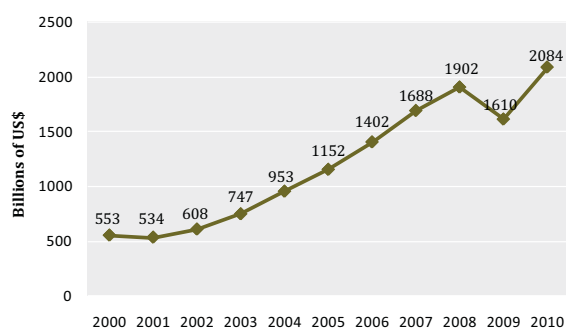
1. What is the nature of this market?

In today's fast-paced, globalized world, a significant share of manufactured goods are produced through a decentralized process, making use of a variety of specialized subcontractors. As a result, any given product can be produced by a series of collaborators, and a large number of people can access technical specifications, either directly or through reverse engineering.

Gone are the days when manufacturers could shutter their plants and guard trade secrets. Today, those who hold intellectual property rights are often situated half a world away from those who make their ideas come to life. When unauthorized copies of their products appear on the market, it is unclear where to place blame and how to enforce rights. In effect, counterfeit goods are an untold cost of the growth in offshore manufacturing.

Today's "knock offs" may be made on the same machines by the same technicians who made the originals. Some are simply over-runs, unauthorized production in excess of what is delivered to the rights holder. The products may even be improved, although more often the copies employ cheaper materials, aiming for the lower end of the market. Factory seconds may be re-sold rather than discarded. In most parts of the world, few can tell a copy from an original, so there is very little market for goods bearing the higher price.

Figure 1: Value of exports of Chinese manufactured merchandise (in billions of US\$)



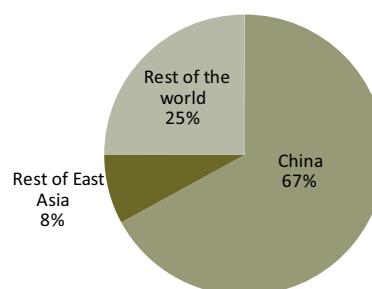
Source: WTO 2012

In a very short period of time, China has become the world's workshop (see Figure 1), producing a significant share of the world's manufactured goods. Just as China is the source of a large share of global manufactured goods, it is also the source of a large

share of counterfeits. Based on seizure data, it appears that at least two-thirds of the world's counterfeits depart directly from China, while an unknown share may be transshipped through other countries, concealing the origin. Most customs seizure statistics refer to the origin of the shipment (provenance), not the origin of the goods.

According to the World Customs Organisation (WCO), around 75% of counterfeit products seized worldwide between 2008 and 2010 were manufactured in East Asia, primarily China.¹ In that three-year period, China was the departure point for roughly 67% of worldwide seizures, although the number of items seized declined during that period. Other significant East Asian departure points for counterfeit goods include Malaysia, Thailand, Indonesia, Japan, the Philippines, the Republic of Korea, Singapore, and Viet Nam.

Figure 2: Source of counterfeit items seized by customs agencies globally, 2008-2010



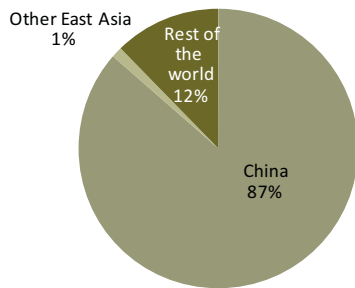
Source: WCO 2008; WCO 2009; WCO 2010

Customs seizure statistics from the United States reflect the same trends as WCO statistics, highlighting the prominence of China as a major source of counterfeit products.² According to US Customs, China accounted for 87% of the value of the counterfeits they seized between 2008 and 2010 (see Figure 3). Although European seizures are measured in volumes rather than value, the situation

¹ WCO 2008; WCO 2009; WCO 2010. Specifically, WCO data indicates that China was the departure country for 596,419,033 of 816,497,720 (73%) seized items between 2008 and 2010. WCO data on 'country of origin' was not available for this time period. However, it is believed that for most seizures involving China, that that nation is both the 'country of origin' and the 'country of departure.' The extent to which this the case for other nations is not clear. Note that these WCO statistics include counterfeit medicines.

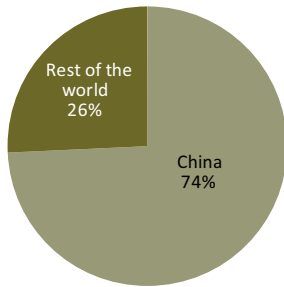
² USCBP 2008; USCBP 2009; USCBP 2010. A source country refers to the country of last known departure. Note that these US Customs statistics include counterfeit medicines.

Figure 3: Value of counterfeit items seized in the US, 2008-2010



Source: USCBP 2008; USCBP 2009; USCBP 2010

Figure 4: Source of counterfeit items seized by European Customs, 2008-2010



Source: EC 2009; EC 2010; EC 2011

in the EU is similar (see Figure 4). Seizures from China also dominate in Australia and New Zealand. WCO seizures are dominated by four categories of products: CDs and DVDs; accessories, watches, and footwear; tobacco products; and textiles.

Although statistics are not recorded for many East Asian countries, most casual observers remark on the ubiquity of counterfeits. There are several well-known markets for counterfeit goods in the region, including Chaosan in Guangdong Province of China; the Ziyuangang market in Guangzhou, north of Hong Kong (China); Mae Sot in Thailand; Mong La and Myawady in eastern Myanmar; and the Ben Thanh market in Viet Nam.

The authorities in the region are well aware of the problem, and some have undertaken aggressive campaigns to combat it.

In July 2011, China concluded a nine-month enforcement drive, leading to the arrests of more than 9,000 suspects in connection with the seizure of US\$530 million of counterfeit products, and the

Box: Counterfeit Seizures in the Pacific Islands

Between 2006 and 2010, Customs authorities in the Pacific Islands reported seizing nearly 100,000 counterfeit items, excluding cigarettes and related items. Data from the Oceania Customs Organization (OCO) for the year 2010 shows that counterfeits were more than twice as likely to enter Pacific Islands nations on the persons and in the luggage of international travellers than through all other transport methods combined, including air and sea freight. This is despite the fact that the average seizure value for sea freight counterfeit shipments was nearly three times what was entering the Pacific Islands via personal travel.³ Like the US and EU, the Pacific Islands have seen an increase in reported cases of counterfeits arriving by mail over the past five years, from just four such cases in 2006 to 21 cases in 2010.⁴

closure of almost 13,000 illegal factories. To bolster its campaign efforts, Chinese authorities instructed all central government agencies to use only legally-purchased computer software, and remains in the process of ensuring that sub-national governments and state-owned enterprises set aside budgetary finances to follow suit.⁵ While software piracy rates in China have declined in recent years, a 79% piracy rate for software purchased in China has been estimated. The use of counterfeit software by Chinese government institutions is considered by some to remain problematic despite ongoing initiatives by China to curb this practice.⁶ Another recent example of official Chinese crackdown in counterfeit goods operations are the series of raids which took place on in July 2012 on a truly nationwide scale – involving 18,000 officers across 190 cities. The resulting seizures were valued at a total estimated value of US\$182 million (equivalent to 1.16 billion yuan). Over 2,000 people were arrested and 1,100 facilities were destroyed.⁷

³ OCO 2011: p. 7.

⁴ UNODC communication with OCO, 2011

⁵ IPPC 2011; Martina 2011; PDO 2011; Xinhua News Agency 2011c, “China police raid over 13,000 dens for IPR violations”, *Xinhua News Network*, 26 July 2011.

⁶ China Daily 2010, “China persists in fight against software piracy”, *China Daily*, 14 December 2010.

⁷ See the following Reuters story based on information from the Ministry of Public Security. Accessed at: <http://www.reuters.com/article/2012/08/05/us-china-drugs-idUSBRE87401D20120805>

Thailand has also had some success in suppressing counterfeit consumer goods. For example, in 2011, the Royal Thai Police and Department of Special Investigation conducted 9,872 raids and seized 4,561,272 items. In the same year, the Customs Department conducted 581 raids and seized 308,458 items. Also in 2011, the government organized two ceremonies during which 2.1 million counterfeit items - worth approximately US\$ 40 million - were destroyed.⁸

2. *How is the trafficking conducted?*

Because those involved in counterfeiting may also be involved in producing the genuine product, the production processes are similar. Although dedicated counterfeit factories have been detected in large numbers, production is often decentralised, making use of networks of specialists. Sometimes production processes cross borders. Counterfeit logos may be attached to generic garments and items produced elsewhere. The misbranding of merchandise can even occur in transit countries. As a result, many of those involved in manufacturing counterfeits may have no notion that they are doing anything illegal.

At the level of marketing, of course, there is active collusion, or at least willing blindness. As with any market, there are both push and pull factors at work. Those who organize the production of counterfeits may actively seek distributors, making contacts through the Internet or social networks. At the same time, regional distributors may travel to China or contact Chinese firms with specific production requests. A flurry of activity on both sides may accompany major market events, such as sports competitions and the release of new product lines.

The complexity of the networks involved in satisfying global demand for counterfeits has made enforcement difficult, but the threat of detection is sufficient that counterfeiters are taking measures to avoid it. To reduce the risk of having their products seized, counterfeiters may conduct “just in time” production, minimizing inventories. To evade detection, goods may also be stored in warehouses, located at a distance from production facilities and registered to front companies.⁹

As in many contraband markets, corruption is key. Corrupt officials may sell manufacturing licenses or falsify inspections of goods.¹⁰ At production sites, officials may receive bribes to allow the use of irregular labour or the dumping of hazardous waste. Security officials may be paid to tip off counterfeiters about upcoming police raids. In more extreme cases, corrupt public officials may themselves be members of counterfeiting networks. In the Pacific islands, authorities report several recent cases of corrupt law enforcement officers in the Republic of the Marshall Islands and Tonga facilitating the flow of counterfeit goods in the region.¹¹

After production, the next phase is concealment and shipping. Counterfeiters can falsely declare goods in order to avoid inspection at border points, or combine fake products with legitimate shipments, particularly for products sourced from ‘back-door production’.¹² Alternatively, brand-name counterfeit goods can be disguised with lesser-known logos in order to avoid suspicion by authorities. For example, in one shipment of illegally manufactured boots seized by US authorities, counterfeiters had covered the fake branded boot soles with non-descript and removable soles.¹³ Similarly, in 2010, Czech Republic Customs seized sports shoes from China that had nameless labels sewn over the fake brand-name labels.¹⁴

Circuitous routes used by East Asian counterfeiters to evade detection often involve free-trade zones, such as the Jebel Ali Free Zone in Dubai, United Arab Emirates. The UAE is commonly the provenance of counterfeit goods shipments, despite the fact that very little manufacturing goes on there. Free-trade zones also provide opportunities for counterfeiters to “sanitise” shipping documents in ways that disguise their original point of manufacture. A lack of enforcement in free-trade zones also allows for unbranded goods to be repackaged with counterfeit trademarks prior to being exported to destination markets.¹⁵

There appear to be two primary channels for transporting counterfeit goods. One is by post

⁸ Official Communication with Government of Thailand, October 2012.
⁹ American Chamber of Commerce in Shanghai 2010.

¹⁰ Chow 2011; UNICRI 2012

¹¹ PCTN 2011: p.19.

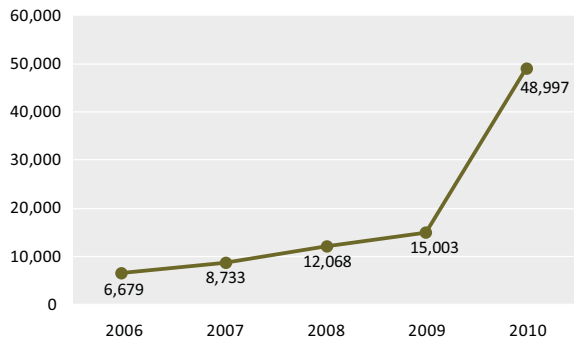
¹² WCO 2011: p.11.

¹³ CNBC 2011

¹⁴ WCO 2011: p.25.

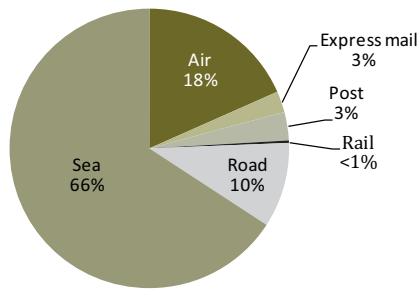
¹⁵ NZCS 2008: p.5; Filipino Post 2011, “Nation cited as major source of fake goods”, *The Filipino Post*, 22 February 2011.

Figure 5: Number of cases of counterfeits detected in postal shipments in the EU



Source: European Commission

Figure 6: Value of European Union seizures by shipment mode, 2010



Source: EC 2011

directly to the consumer, mainly involving Internet purchases. The number of postal detections of counterfeits has increased dramatically in the European Union (see Figure 5), although the value of these small shipments constituted only 3% of the total in 2010. This has been ascribed to the increase in Internet commerce.¹⁶ The number has also increased in the US, though much less dramatically.¹⁷ US Customs officials have noted that with Internet-based sales, officers have to look harder to find less.¹⁸

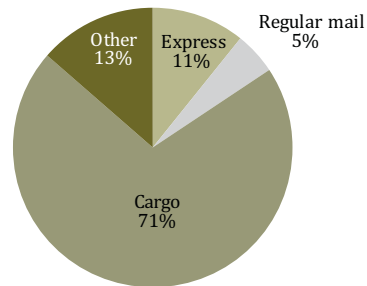
The second channel generally involves containerized shipment of large volumes of merchandise to be distributed on arrival. In both the US and the EU, maritime shipments comprise the bulk of the value of counterfeits seized. The WCO does not consistently report on shipment methods in its IPR and Customs Reports, but at least some 2010 WCO data affirms the pattern seen in the US and EU. For

¹⁶ Lomas 2011

¹⁷ USCBP 2011: p. 12; EC 2010: p. 30.

¹⁸ Palmer and Lee 2010

Figure 7: Value of US seizures by shipment mode, 2007-2010



Source: USCBP 2008-2011

example, 59% of the value of total seizures from East Asia in 2010 came from seaborne container shipments, even though there were 654 mail seizures compared to only 433 seaborne seizures.¹⁹ Other sources also demonstrate that most counterfeit seizures are made on bulk cargo and seaborne cargo (see Figures 6 and 7).

3. Who are the traffickers?

Since so much of counterfeiting involves the same production mechanisms and the same transportation modes as legitimate manufacturing, a large, dedicated organization is not required. Anyone can contract a Chinese textile mill to produce 10,000 shirts and another to produce 10,000 brand-name patches. The shirts can be shipped by container to a free-trade zone and the patches dispatched by post to the same location. Irregular labourers can be contracted to affix the patches to the shirts, and the product can be shipped to Europe through any of the major ports, where, despite remarkable enforcement efforts, only a small share of counterfeits will be seized.

It helps, of course, to have experience in manufacturing the goods to be counterfeited and the technicalities of international shipping, but more important are connections to producers and distributors. The key players in counterfeit markets are essentially brokers and logisticians, connecting supply and demand. They invest the money, coordinate production and transport, unload the merchandise, and reap the rewards.

¹⁹ WCO 2011: p. 42.

On arrival at destination, nationality-based or ethnic networks are often important for receipt and distribution. Expatriates from South Asia, East Asia, and West Africa appear to be particularly important. Wholesale distributors may offer both licit and illicit merchandise. At the distribution end, some of these goods may be sold through mainstream retail outlets, often variety stores in depressed areas, while others are sold through street vendors and at flea markets.

Street distribution often requires the consent of territorial organized crime groups in destination countries. Rather than organizing the trafficking, most often these groups license distribution, levying a “tax” on vendors. In some cases, these groups may buy bulk merchandise at a discount and arrange distribution through their own networks.

For example, in June 2010, Italian police arrested 17 Chinese nationals and seven Italian nationals in an investigation into various criminal activities, including prostitution, money laundering, tax evasion, human trafficking, and the distribution of counterfeit goods. The counterfeit goods were primarily designer clothes produced by Chinese crime groups in Tuscany. That investigation led to the seizure of 780,000 counterfeit items. Chinese criminal gangs also reportedly partnered with suspected Italian mafia associates to exploit niche markets for luxury goods in several major Italian cities. Chinese gangs reportedly forced smuggled migrants into prostitution and low-wage labour and used mafia intimidation tactics in some Chinese diaspora communities in Italian cities.²⁰

In another example of Italian mafia links to counterfeiting criminal networks in East Asia, Spanish authorities arrested 64 individuals in July 2011.²¹ Italian mafia associates linked to the Neapolitan Camorra group reportedly purchased thousands of counterfeit brand-name products, including tools, machinery and textiles that had been produced by 25 companies in China. The counterfeit goods were imported to Spain and Italy with plans for further distribution in Europe, North America, Latin America and South Africa.

²⁰ Hooper 2010; Financial Times 2010, “Chinese gangs exploit niche left by mafia,” *Financial Times*, 28 June 2010; The Telegraph 2010. “Chinese Gangs Step into Gap Left by Mafia”, *The Telegraph*, 10 June 2010.

²¹ EuroWeekly 2011

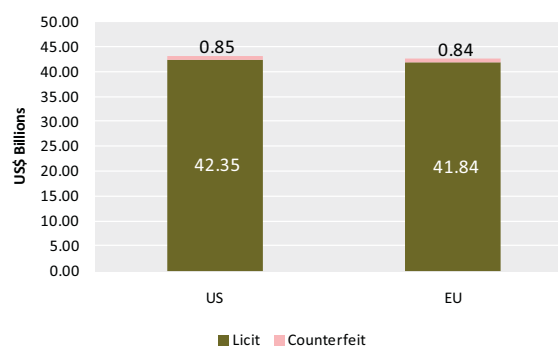
4. How big is the flow?

The poor and heterogeneous quality of data related to seizures does not allow accurate calculations of the actual size of the market for counterfeit goods. Therefore, it is important to refer to statistics related to the legitimate trade worldwide and to combine this information with other studies on crime patterns. If we limit the scope of this analysis to the flow of counterfeit goods from East Asia to EU and the US it is possible to depict a credible picture.

In 1997, the Counterfeiting Intelligence Bureau of the International Chamber of Commerce estimated global counterfeiting at approximately 5-7% of world trade.²² This proportion is widely used in anti-counterfeiting analyses but has been criticized as an overestimate based on limited empirical data.²³ Comprehensive research by the Organization for Economic Co-operation and Development (OECD) in 2008 and 2009 concluded that counterfeiting accounts for around 2% of world trade.²⁴

In 2010, the US imported about US\$587 billion-worth of products from East Asia.²⁵ Using the OECD’s 2% estimate, this amounts to roughly US\$11.7 billion of counterfeit goods. In that same year, the EU imported roughly US\$678 billion of products from East Asia,²⁶ which would yield – using the OECD’s 2% estimate – approximately US\$13.5

Figure 8: Value of licit imports and estimated counterfeits (2%) in 2010



Source: UNCTAD 2012

²² ICC-CCS 2012

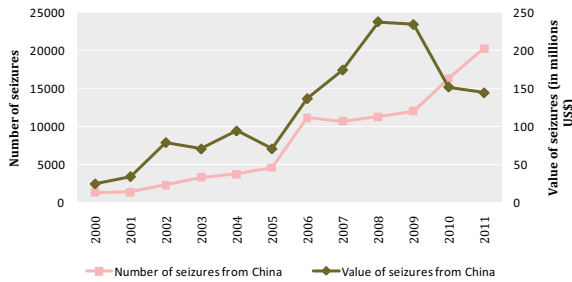
²³ OECD 2008; p. 71; UNODC 2010; p. 173.

²⁴ OECD 2008; OECD 2009. Within the region of East Asia and the Pacific, the OECD notes potential counterfeit-to-trade percentages of up to 5% for a number of countries, including China, Hong Kong, China, Malaysia and the Philippines.

²⁵ UNCTAD 2012

²⁶ UNCTAD 2012

Figure 9: Value and number of seizures of counterfeits shipped from China to the US



Source: USCBP 2008-2011

billion worth of counterfeit goods. According to this trade-based estimate then, the US and EU markets combined are estimated to have imported US\$25.2 billion of counterfeit goods from East Asia in 2010. In order to avoid double counting with the following chapter which is devoted exclusively to fraudulent medicines, it is necessary to subtract the estimated value of this flow from East Asia to the U.S. and EU. Using official U.S. and EU seizure statistics for 2010, fraudulent medicines constituted only around 3% of all counterfeit products from East Asia to these jurisdictions. This would amount to approximately US\$ 0.8 billion. Subtracting this figure from the total for counterfeits yields a net value of **US\$24.4 billion**.

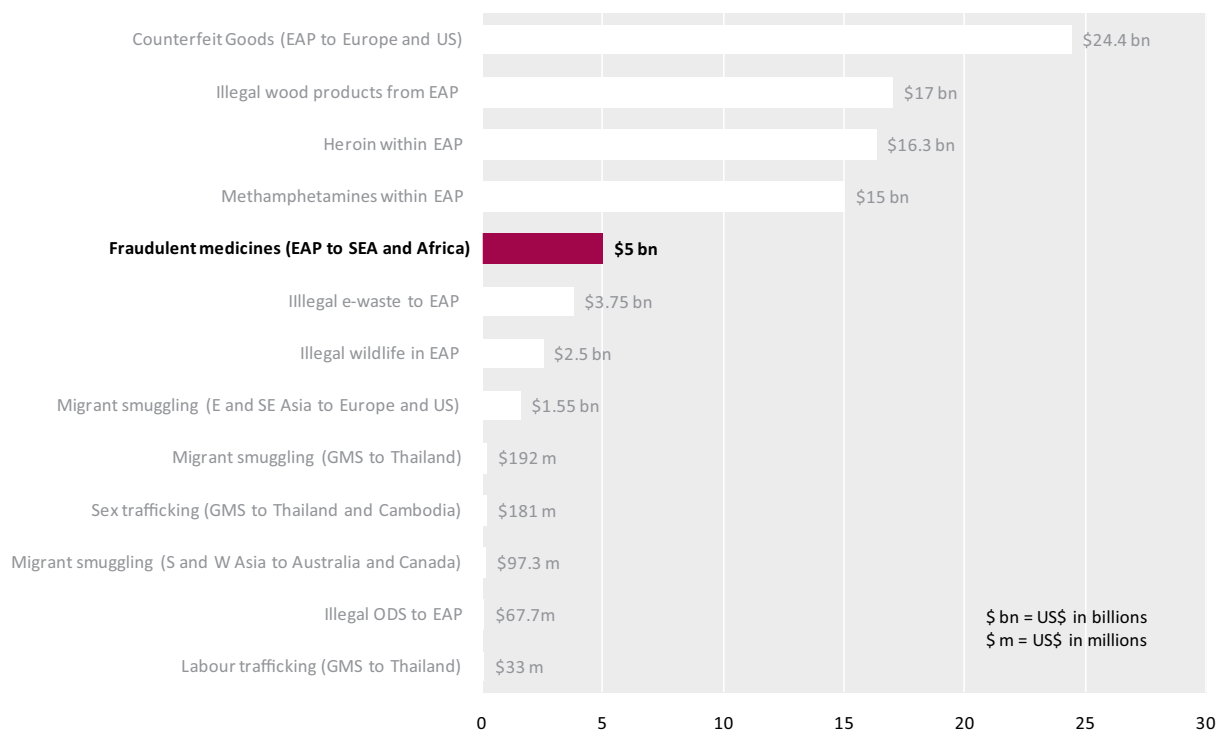
By way of triangulation, in 2010, the US seized roughly US\$155 million in counterfeit goods from East Asia, while the EU seized roughly \$161 million.²⁷ The sum of these two figures represents 1.25% of the estimated illegal trade from East Asia to EU and US. This rate of interception seems realistic and in line with previous studies by the OECD, which presented a rate of seizures equal to 0.5% of the global illegal trade.²⁸

²⁷ USCBP 2010; EC 2010. The EU values its counterfeit seizures at the retail level. In order to make this figure comparable to US wholesale-level data, the 2010 EU retail-level seizure value was divided by a factor of 7.5. The factor of 7.5 was derived by comparing US retail and wholesale valuations of counterfeit seizures (see USCBP 2010, p. 18).

²⁸ OECD 2008: p. 113.

Chapter 12

Fraudulent essential medicines from East Asia to Southeast Asia and Africa



NATURE OF THE THREAT

1. Severe health risks including death: presence of toxins; lack of active ingredient.	2. Drug resistant strains: microbial resistance: under-medicated patients become vectors for drug-resistant strains; “superbugs”.
3. Revenue loss: financial losses to private industry and government revenues.	

1. What is the nature of this market?

This chapter refers to fraudulent medicines, not counterfeit medicines, and this choice of terminology is important. “Counterfeit” is often used to refer to falsely-branded or unlicensed products, where the crime involved is intellectual property theft. In contrast, the act of deceiving buyers as to the content of what they are buying is fraud. This includes misbranding, but is broader, and – crucially – encompasses products that do not contain what they purport to contain.

In the context of pharmaceuticals, fraud is a very serious matter indeed. When sick people are not properly medicated, two things can happen. One, they don't get better, and the inappropriate medicine may even make them worse. The best doctors in the world cannot provide healing when they don't know what is in the drugs they are administering. Two, when antimicrobial drugs are given in insufficient doses to kill the pathogen, drug resistant strains can develop, posing a global health threat.

The exact percentage remains unclear, but a number of surveys have determined that a large share of the essential medicines sold in Southeast Asia and Africa are bogus. Forensic testing of samples from these regions has produced alarming results – in most, one-third to two-thirds of the samples tested were found

to be deficient or falsified (see Figures 1 and 2). In some cases, there is deliberate brand counterfeiting, but in many others, the drugs are generic. For the consumer, the results are the same.

There are many possible reasons why the contents of the medication may not be what the packaging promises. Some of this may be a simple lack of production standards, insufficient mixing, or contamination and degradation. The fact that some tested samples actually included more than the specified dose is evidence that sloppiness occurs. But the market incentives for under-dosing are surely a factor as well. In order to under-price their competitors, producers of fraudulent medicines may include less of the expensive active ingredients and more filler.

In general, organized crime flourishes in times of rapid transition, when the old norms no longer apply and the new have yet to take hold. Thus, we should expect abuses to emerge in countries with rapidly growing pharmaceutical industries. The countries with the most rapidly-expanding pharmaceutical industries in the world today are India and China (see Figure 3).

If those involved in this industry were aiming at getting the highest price for their wares, almost all fraudulent medicines would be shipped to the G8 countries. Looking exclusively at the seizure figures, one might conclude that this is, in fact, the case. But the high rate of seizures in the richer nations is a direct result of their ability to detect the fraud. Forensic testing has shown that the prevalence of fraudulent medicines is much higher in poor countries than in rich ones, with some of the highest rates being detected in Africa and Southeast Asia. The low value of these markets suggests this is a crime of opportunism. Fraud is mainly perpetrated where there is lowest risk of detection, not highest rate of return.

The nature of the medicines involved also varies depending on the destination. Seizures made in the wealthier countries are mostly of mail-order lifestyle medicines, such as the erectile

Figure 1: Share of anti-malarial medications found to be falsified in Southeast Asia

Location	Date of Sample Collection	Falsified
Cambodia, Laos, Myanmar, Thailand, Viet Nam	1999–2000	39 out of 104 (38%)
Cambodia, Laos, Myanmar, Thailand-Myanmar border, Viet Nam	1999-2005	195 out of 391 (50%)
Cambodia, Laos, Myanmar, Thailand, Viet Nam	2002–2003	99 out of 303 (33%)
Cambodia	2003	88 out of 111 (79%)
Laos	2003	27 out of 30 (90%)

Source: Keledsis and others 2007

Figure 2: Share of anti-malarial medication that failed chemical assay analysis in Africa

Location	Date of sample collection or study publication	Failed chemical analysis
Uganda	2001	57 out of 92 (62%)
Cameroon	2001	112 out of 284 (39%)
Kenya	2002	47 out of 116 (41%)
Kenya	2001–2005	11 out of 41 (27%)
Laos	2003	27 out of 30 (90%)
Kenya and Democratic Republic of Congo	2004	9 out of 24 (38%)
Burkina Faso	2006	32 out of 77 (42%)
Madagascar, Senegal, Uganda	2008	64 out of 197 (32%)
Ghana, Kenya, Nigeria, Tanzania, Ethiopia, Cameroon	2008	72 out of 267 (27%)
Kenya	2000	23 out of 33 (69%)
Tanzania	2000	5 out of 9 (55%)
Nigeria	2001	119 out of 284 (42%)
Senegal	2002	15 out of 27 (56%)
Tanzania	2003	10 out of 33 (30%)
Congo, Burundi, Angola	2007	16 out of 28 (57%)
Nigeria	2007	19 out of 32 (59%)
Tanzania	2008	38 out of 301 (12%)
Ghana, Kenya, Nigeria, Rwanda, Tanzania, Uganda	2008	73 out of 210 (35%)
Ghana	2009	14 out of 17 (82%)
Nigeria	2009	60 out of 225 (27%)
Burkina Faso, Chad, Cameroon, DR Congo, Ghana, Kenya, Nigeria, Rwanda, Senegal	2002-2010	35 out of 59 (59%)

Source: Gaurvika and others 2012

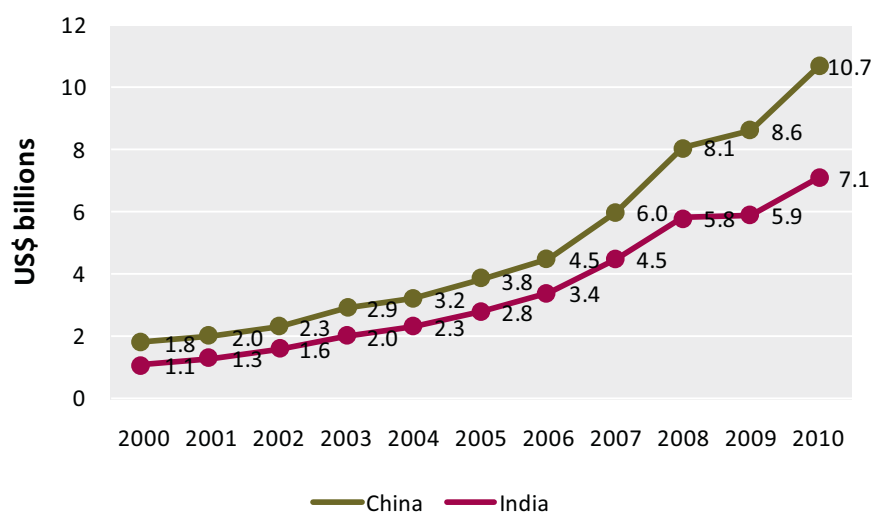
dysfunction drug, Viagra. Internet pharmaceutical fraud can have serious health consequences for individual users, but users in the wealthier countries can largely avoid this hazard by buying from reliable domestic sources. Those in developing countries do not have this choice, and the damage is far more widespread.

Both seizure data and forensic testing have – again – confirmed that the largest sources of both fraudulent lifestyle medicines and fraudulent essential medicines are India and China. The Pharmaceutical Security Institute, a trade association that monitors counterfeit seizures globally, found that China and India were the top origins of detected counterfeits in 2010 (see Figure 4). They also found that China detected more counterfeit manufacturing operations than any other country that year.¹

Statistics from the World Customs Organization (WCO) indicate that China was the departure point of nearly 60% of the counterfeit medical products (medicines and condoms) seized worldwide between 2008 and 2010.² These statistics reflect the departure points (provenance) of seized shipments, not their origin. The provenance of these shipments is often from countries that have no known pharmaceutical production, licit or otherwise, and so the share of shipments originating in India and China could actually be higher.

Unlike in Europe or the U.S., there is no consolidated database of African or Southeast Asian pharmaceutical seizures. Lifestyle drugs are also seized in Southeast Asia, but most of the fraudulent medicines encountered in East Asia and the Pacific are antibiotics, anti-microbials, anti-hypertensives, cardiovascular

¹ PSI 2010² WCO 2008; WCO 2009; WCO 2010

Figure 3: Pharmaceutical exports

Source: World Trade Organization 2012

medicines and anti-diabetics.³ Large quantities of fraudulent essential medicines have been seized in Interpol-led law enforcement sweeps aimed at detecting fraudulent products and their purveyors:

- The 2008 Operation Storm detected counterfeit anti-malarials in Myanmar (produced in Thailand) and Kenya (produced in China).
- The 2010 Operation Storm II in Southeast Asia led to the seizure of millions of dollars worth of fraudulent antibiotics, anti-malarials, birth control medicines, anti-tetanus serums, and pain-relief medications.⁴
- The 2008 Operation Mamba in East Africa led to the seizure of more than 100 different products (including anti-malarials, cardiac medicines, and others).
- The 2009 and 2010 Operations Mamba II and III in East Africa led to the seizure of essential medicines such as vaccines, anti-malarials and antibiotics.
- The 2009 Operation Zambezi in Southern Africa led to seizure of counterfeit and illicit anti-malarials, antibiotics, and steroids.
- The 2011 Operations Cobra and Harmattan in West Africa led to the seizure of counterfeit anti-malarials and antibiotics.
- The 2006 Operation Jupiter in Southeast Asia found that of the 321 samples manufactured by

³ UNODC Communication with Dr. Budiono Santoso, Regional Advisor, Western Pacific Regional Office of the World Health Organization, Manila, Philippines), 21 December 2011.

⁴ Interpol 2010a

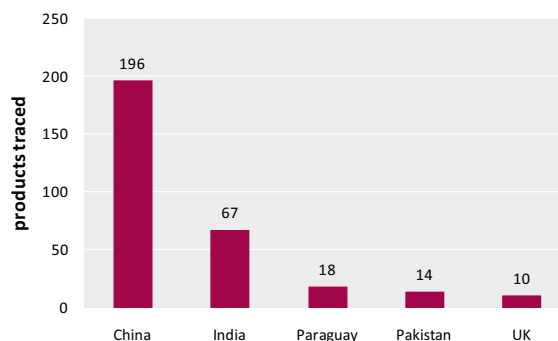
one major Asian producer (Guilin Pharmaceutical from China's Guangxi region), 61% were found to be counterfeit.

Forensic testing has also demonstrated the extent of the problem. A recent review of the literature found that between one-third and nine-tenths of the anti-malarial medicines tested in Southeast Asia in recent years were found to be false. Similarly, between 12% and 82% of anti-malarial drugs tested in Africa have failed chemical

assay analysis. Chemical analysis of samples of other essential drugs has produced similar results.⁵

It is possible to determine the origin of fraudulent medicines forensically, although this has rarely been done. Testing in connection with Operation Jupiter traced the origin of certain counterfeits to a particular region of China, and arrests were then made on this basis.⁶ A recent forensic study of fraudulent medicines detected in Africa confirmed an Asian origin for these drugs.⁷

The Chinese government is aware of risks involved in a rapidly growing pharmaceutical industry, and has launched a number of campaigns to address abuses.

Figure 4: Top five origins of counterfeit medicines detected

Source: Pharmaceutical Security Institute 2010

⁵ Kelesidis and others 2007

⁶ Newton and others 2008

⁷ Newton and others 2011

The former head of the Chinese Food and Drug regulatory agency was executed in 2007 for receiving close to one million dollars in bribes for approving hundreds of medicines. In 2008, the melamine scandal – in which babies died from drinking tainted formula – showed that the problem ran deeper than one official. More recently, sweeps in 2011 found widespread counterfeiting in Henan province, with hundreds of operations detected.⁸ That same year, a network in Guangxi Zhuang Autonomous Region was found producing 710 different products, from lifestyle drugs to antibiotics.⁹

2. How is the trafficking conducted?

Fraudulent pharmaceutical production is not a homogeneous industry. There are firms of all sizes in the region, some specialized in a particular type of product and others offering a wide range. Some operations are exclusively focused on producing counterfeits, while others produce licit products (pharmaceuticals, traditional medicines, industrial chemicals) as well. A single firm can produce licit pharmaceuticals for one market and fraudulent ones for another. The share of fraudulent medicine produced by a firm may also vary over time.

The World Health Organization reports that the manufacture of fraudulent medicines is often a small-scale cottage industry, conducted in informal settings such as garages or small warehouses.¹⁰ Many detected operations fit this description, with chemicals stored in piles on the floor and distributed with shovels. But mainstream pharmaceutical firms can also produce fraudulent medicines. For example, in March 2012 Furentang Pharmaceutical, a company based in Jiangxi, China, had its license revoked for producing counterfeits. The company had been using forged documents to justify manufacturing products they had no license to produce.¹¹

Mainstream companies under financial pressure can stray into fraud. Wary of protecting their reputations, they may substitute cheaper chemicals that mimic the effects of the medicines they are purporting

to sell. For example, fraudulent heparin, a well-established drug with many clinical applications, was exported to the US from China in 2008. The heparin was diluted with a cheaper chemical that mimicked the effect of the original drug.¹² Similarly, products sold as the anti-malarial artesunate in Southeast Asia have been found to contain cheaper substances, including out-of-use anti-malarials and drugs with possible dangerous side effects.¹³ Companies under pressure can also cut corners by skipping steps in manufacturing process, including quality control checks.¹⁴ They can alter the expiration date of standing stocks, fail to maintain appropriate storage conditions, or add cheap ingredients not intended for human consumption.

In East Asia, traditional and herbal medicines are a multibillion-dollar business. Equipment to manufacture and package these products can be very similar to that used for pharmaceuticals, so transitioning to counterfeiting is easy. Pharmaceutical drugs may be secretly added to herbal products to increase the appearance of efficacy. A 2010 study of 20 herbal products and “natural” dietary supplements (over half of which came from China) found that only four had a composition corresponding to declared ingredients on the packaging or associated leaflet; the remainder were adulterated with unadvertised active pharmaceutical ingredients, some of which are believed to be dangerous to human health and are banned in various countries.¹⁵

Another example was an incident in 2009, when 150 Singaporeans were admitted to hospital after taking fraudulent herbal supplements marketed as erectile dysfunction remedies. The herbal supplements contained glyburide, a powerful pharmaceutical used for the treatment of diabetes that can be dangerous for non-diabetics. Seven patients were comatose as a result of severe brain damage and four patients subsequently died.¹⁶ In May 2010, Taiwanese authorities seized 650,000 diet capsules from a

⁸ Xinhua News Agency 2011a, “Chinese police busts multi-million-dollar fake drug cases”, *Xinhua News Agency*, 29 November 2011.

⁹ Xinhua News Agency 2011b, “Police detain 39 for fake drugs in SW China”, *Xinhua News Agency*, 31 December 2011.

¹⁰ WHO 2012. Also UNODC communication with East Asia-based fraudulent medicine expert, 12 January 2012.

¹¹ Xinhua News Agency 2012, “Drug maker punished for counterfeiting: SFDA”, *Xinhua News Agency*, 1 April 2012.

¹² Traynor 2010; Bogdanich 2008

¹³ Hall and others 2000. Such active ingredients no longer used in anti-malarials include chloramphenicol (an inexpensive antibiotic), pyrimethamine-sulfadoxine (an out-of-use antimalarial) and metamizole (an analgesic that has fallen into disuse due to possible dangerous side-effects).

¹⁴ UNODC Communication with Mr. Thomas Kubic, Pharmaceutical Security Institute, USA, 20 December 2011.

¹⁵ Vaysse and others 2010; BBC News 2011, “Fake medicine trade: UK crackdown on drug importers”, *BBC News*, 29 September 2011

¹⁶ WHPA 2011: p.8. See also Poon and others 2008.

licensed manufacturer that were found to contain phenolphthalein, a possible carcinogenic organic acid that has been banned in several countries.¹⁷

Of course, the crime of pharmaceutical fraud does not require a coherent organization at all, and can be the product of a chain of actors with no institutional identity. The fraud can be introduced at any point in the supply chain, with or without the knowledge of the other participants. For example, producers of chemical ingredients may export these to buyers in other countries, who combine them to produce bulk powders or solutions that are then again exported to be broken into dose units and packaged. Because the point at which an adulterant has been introduced may not be clear, the level of intent of any of these actors may be difficult to discern, but the end product can be as deadly as any produced in its entirety on one site.

Fraudulent Herbal Medicines in New Zealand

The New Zealand Medicines & Medical Devices Safety Authority (Medsafe), which inspects all medical consignments sent through the country's International Mail Centre, reports that falsely labelled herbal medicines have been problematic since the agency began functioning in mid-2007. These fraudulent medicines typically purport to be purely herbal treatments for erectile dysfunction or weight loss, but in fact are often found to contain hidden or undeclared prescription medicines, including those typically found in commonly used treatments for erectile dysfunction. From July 2007 through 2010, Medsafe found 1,721 consignments of such fraudulent herbal medicines, although annual incidents declined by 23% between 2008 and 2010. More than 60% of the consignments of fraudulent herbal medicines shipped by international mail to New Zealand from mid-2007 to 2010 came from China.

For example, in 2007, a small factory in China produced a syrup containing diethylene glycol – commonly used as antifreeze – and sold it as pharmaceutical grade glycerin. The fraudulent glycerin was sold to a Beijing brokerage company, which shipped it from Shanghai to another broker in

Barcelona, who forged some paperwork and sold it on to yet another broker in Panama. The syrup was used to manufacture medicines in Panama, resulting in at least 100 deaths.

It is not uncommon for counterfeit ingredients to be sent from China to Southeast Asia for production and packaging. These extended transnational networks are inherently flexible: if any supplier or assembler is removed, other partners can be found. As law enforcement and regulatory pressure has increased within China, key aspects of production are moved to other countries, such as the Democratic People's Republic of Korea, Myanmar and Viet Nam.¹⁸

Cases have also been reported where unfinished products have been shipped from China to richer countries for finishing. In 2011, a British national received an eight-year prison sentence for importing more than two million doses of fraudulent cancer, heart disease and schizophrenia medicines from China. To pass off the drugs as a French product, special French-style bar-code labels were produced and imported separately from the fraudulent medicines, and the final product was assembled in the UK prior to distribution.¹⁹

Once the product is finished, it may still be moved internationally many times before being consumed. Fraudulent medicines can change hands more than 30 times before reaching buyers.²⁰ One recent investigation found that fraudulent medicines produced in China were transported by road to Hong Kong (China), sent by air to Dubai, and then through London's Heathrow Airport to the Bahamas. The trafficking organization kept a warehouse center for its fraudulent medicines in the Bahamas from which the drugs were sent back to associates in the UK, who eventually sent the packages to the United States.²¹

As with counterfeit goods, the free-trade zones of the Middle East have emerged as key trans-shipment points for fraudulent medicines.²² In many cases, fraudulent medicines are smuggled by truck over the

¹⁷ Chao-Fu and Kuo 2010; WHPA 2011: p. 8.

¹⁸ UNODC communication with Mr. Thomas Kubic, Pharmaceutical Security Institute, USA, 20 December 2011.

¹⁹ London Evening Standard 2011; Sears and Greenwood 2011.

²⁰ Lewis 2009

²¹ Toscano 2011

²² OECD 2008

border from Guangdong Province into Hong Kong (China). From Hong Kong (China), the fraudulent medicines will transit free-trade zones, such as those in the United Arab Emirates and Syria.²³ Relaxed regulations in free-trade zones give fraudulent medicine traffickers the ability to repackage their goods and conceal their point of origin.²⁴

As with any other business, pharmaceutical fraudsters adapt their production to meet changes in demand. Fraudulent injectable cancer medications have been discovered at an increasing rate over the past three years.²⁵ Incidents involving fraudulent medicines in the “metabolism” category, which includes diabetic medicines, have increased recently.²⁶ The WCO reports that fraudulent forms of the H1N1 vaccine became widely available after the outbreak of this flu strain in 2009.²⁷ And in March 2006, fraudulent forms of rimonabant – an anti-obesity drug – was advertised for sale over the Internet. This was done three months prior to the drug’s approval by European Union authorities.²⁸

3. Who are the traffickers?

Just as there are many forms of pharmaceutical fraud, so too there are many types of traffickers. Those who merely repackage expired medications need little more than printing skills and the connections to acquire and move their product. At the other end of the spectrum are pharmaceutical executives who use their sophisticated understanding of the market to make large criminal profits. Most common are those with some involvement or experience of the industry, who learn that it is possible to make more money selling fraudulent medicines than licit ones.

For example, in 2008, forensic investigations of fraudulent artesunate in mainland Southeast Asia traced ingredients and components to a location in southern China, close to the border with Viet Nam, Lao PDR and Myanmar. An individual arrested

in this case claimed that he had previously sold legitimate pharmaceuticals until he was approached by Myanmar medicine distributors who wanted him to produce fraudulent varieties of medicines in order to increase their profits.²⁹

Producers of drugs which are abused may also be involved in producing counterfeit medications. For example, the veterinary drug ketamine, which is not under international control, is produced in large quantities in China. It is heavily abused in Hong Kong (China) in particular. Investigations in Cambodia have in the past revealed traces of Ecstasy (MDMA) in fraudulent medicines, indicating that the very same pill presses used to manufacture the Ecstasy were used to manufacture fraudulent medicines.³⁰ Similarly, investigations have shown that criminal manufacturers of amphetamine-type substances have been involved in the production and distribution of counterfeit medicines in Southeast Asia.³¹

4. How big is the flow?

There are several ways to get a sense of how much fraudulent medicine is being trafficked. One is to look at the legitimate pharmaceutical trade and estimate the comparable size of the illicit trade. One frequently cited estimate, commonly attributed to the World Health Organization, is that the illicit market represents 10% of the global trade.³² The basis for this estimate is unclear. The value of the global trade is heavily concentrated in the richer countries, where incidence of fraudulent medicines appears to be less than 1%. East Asia (except Japan), Africa, and Australia combined account for only 15% of the value of global pharmaceutical sales.³³

As discussed above, those who sell fraudulent essential medicines seem to target the low-value markets of Southeast Asia and Africa, where consumers spend less than US\$100 per year on pharmaceuticals. For example, looking at selected Southeast Asian countries, per capita pharmaceutical

²³ UNODC communication with Sebastian J. Mollo, Intelligence Director, Americas, Pharmaceutical Security Institute, USA, 30 January 2012.

²⁴ UNODC communication with Mr. Thomas Kubic, Pharmaceutical Security Institute, USA, 20 December 2011.

²⁵ UNODC communication with Sebastian J. Mollo, Intelligence Director, Americas, Pharmaceutical Security Institute, USA, 30 January 2012.

²⁶ PSI 2012; Toscano 2011

²⁷ WCO 2009: p. 14. See also Lewis 2009.

²⁸ OECD 2008: p. 348.

²⁹ Bogdanich and Hooker 2008

³⁰ Burki 2010: p. 585.

³¹ UNODC communication with East Asia-based counterfeiting medicine expert, 12 January 2012.

³² The World Health Organization has previously estimated that fraudulent medicines account for less than 1% of pharmaceutical markets in developed countries and between 10-30% of developing countries’ markets. See WHO 2006.

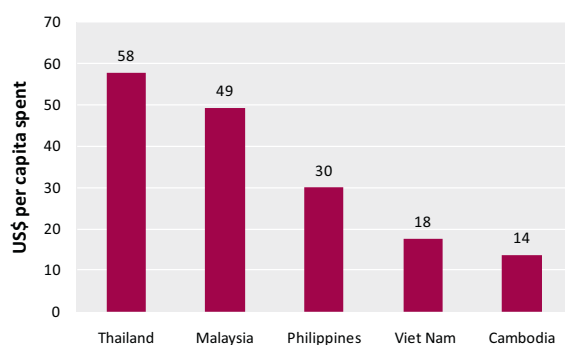
³³ IMS 2011

expenditures vary widely, between US\$14 and US\$58 in 2010 (see Figure 5).³⁴ Per capita expenditures in African countries are generally much less, in the neighbourhood of US\$8 per capita.³⁵

The anti-malarial studies cited above (see Figures 1 and 2)³⁶ indicate that between one-third and 90% of the drugs tested in Southeast Asia were fraudulent, and that between 12% and 82% of drugs tested in Africa failed chemical assay analysis. Studies of other anti-microbial drugs³⁷ indicate similar rates of failure. Given the wide range of values and the many products on offer, it is difficult to come up with a single figure, but an average of the anti-malarial studies cited above gives a figure of 47%.

If consumers in Southeast Asia bought around US\$8 billion in pharmaceutical products³⁸ in 2010 and 47% of them were fraudulent, this represents around US\$4 billion in fraudulent expenditures that year. Similarly, if each of the billion people of Africa spent US\$8 on pharmaceuticals in 2010 and half of these were fake, this represents a market of about US\$4 billion. If, in keeping with WCO seizures in 2010, 60% of these drugs originated in China, then the total flowing from this region to Southeast Asia and Africa would be just under **US\$5 billion**.

Figure 5: Per capita expenditure on pharmaceuticals in 2010, selected Southeast Asian countries



Source: BMI 2011

³⁴ BMI 2011. Viet Nam value is for the year 2009.

³⁵ Bennett and others 1997: p. 9.

³⁶ Gaurvika and others 2012; Kelesidis and others 2007

³⁷ Kelesidis and others 2007

³⁸ An extrapolation based on the per capita expenditures times the national populations.

Key issues and implications for response

1. ACROSS ALL CRIME TYPES, “FOLLOW THE MONEY”

As noted in the Introduction, connected to all crime is the threat and existence of money laundering which amounts to billions of US dollars worldwide. While money laundering is not the main focus of this report, it nevertheless has a major impact on the region. In all countries, efforts are being taken to address money laundering. Past experience points to one main conclusion: money laundering is a crime that has a unique impact on those countries where it is left unchecked. It damages reputations and frightens away honest investment. It also opens up financial institutions to criminality. By tackling

money laundering – by “following the money” – law enforcement efforts disrupt organized crime by tackling its lifeblood. Disruption also undermines the role-model status of organized crime bosses in the eyes of small-scale offenders and may prevent them from becoming major criminals themselves. By addressing the issue of money laundering governments also promote a fair and just society where crime is seen not to pay and, which prevents criminals from enjoying the fruits of their crimes.

PEOPLE

Responses common to both smuggling of migrants and trafficking in persons

2. DEVELOP AFFORDABLE, ACCESSIBLE, SAFE AND LEGAL MIGRATION CHANNELS

Despite the restrictions imposed by highly-regulated migration systems, people move continuously for a range of reasons – to seek employment, to escape poverty, to reunite with their families. They also move to flee internal conflict or persecution. However, the difficulty in accessing legal channels for migration often forces individuals to rely on the services of smugglers to reach their destination. Whether they are smuggled or not, migrants who move without the protection of the law – or full access to the labour market and social services in destination countries – can suffer from considerable disadvantages. In turn, these disadvantages make them vulnerable to exploitation or trafficking by brokers, agents, and employers. Several countries in Southeast Asia have established formal labour migration channels, and some have long-standing

refugee resettlement programmes. However, many of these systems are complicated, time-consuming, and expensive. Such shortcomings contribute to fuelling irregular migration and migrant smuggling.

Implications for a response:

a. Expand legal migration opportunities: Instead of resisting economic demands for low-skilled labour, countries which are growing economically and require such labour should expand legal migration opportunities for both men and women through regularization processes and temporary migration programmes. |

b. Review processes for bringing migrants within the law: Existing processes should be reviewed and made more accessible, efficient and flexible for migrants. Such efforts are an important step towards harmonizing a regional migration system. Anticipating the move towards an ASEAN Economic Community in 2015, such a system can bring more migrants within the law and address the needs of

vulnerable migrants, including those in need of protection.

c. Introduce or expand refugee quota systems:

In addition, there is scope to introduce or expand refugee quota systems to promote legal migration. Several destination countries have family reunification policies that provide legal channels for the migration of relatives. Such channels also need to be expanded.

3. IMPROVE MONITORING OF LABOUR STANDARDS – especially inspections in the workplace

Irregular migrants are extremely vulnerable to exploitation, including human trafficking, as they are generally not protected under any relevant labour standards. Law enforcement responses to this problem can further persecute victims if officers do not understand the linkages, as well as differences, between migrant smuggling and human trafficking.

Implications for a response:

Labour standards need to be extended to all migrants, including irregular migrants. Labour departments should monitor and enforce these standards and conduct inspections. This can be done: (a) proactively, through scheduled visits; (b) reactively, in response to complaints; and (c) at random. Inspection teams should be constituted through a coordinated inter-agency approach. Usually this will involve law enforcement and judicial authorities as well as social services. The purpose would be to properly identify victims of trafficking as well as employers suspected of trafficking or engaging the services of migrant smugglers. An effective understanding of the linkages between migrant smuggling and trafficking in persons is critical to ensure appropriate and proper responses to the broad range of situations encountered in the workplace.

Employers of illegal workers should face greater risks of detection and punishment. Such employers recruit illegal workers in order to reduce wage costs and taxes paid to the state. In doing so, they simultaneously contribute to the vulnerability of migrant workers to exploitation and deprive the state of tax revenue. Punitive measures taken against employers of illegal labour should complement the measures outlined above to increase the supply of legal labour to the market.

4. ON THE LAW ENFORCEMENT SIDE, COMPLEMENT IMPROVED BORDER CONTROLS WITH BETTER INVESTIGATION AND PROSECUTION OF TRAFFICKING AND SMUGGLING NETWORKS

Migrant smuggling and trafficking in persons both generate large profits for the criminals involved – whether they are migrant smugglers or traffickers in the form of agents or employers. Both are low-risk and high-profit crimes. Both are often deadly crimes. Both are increasingly attractive to organized criminal networks.

Implications for a response:

There is a need to complement border control efforts with improved collaborative investigation and prosecution responses. The aim should be to dismantle migrant smuggling and trafficking in persons networks. Responses to both crimes require a transnational approach by law enforcement, judicial authorities, and policy-makers. Specialist operational units with high-level investigative and prosecutorial skills are required to achieve an effective outcome. A greater focus on the development and use of intelligence in tackling criminal networks will lead to more effective and efficient use of police resources.

SMUGGLING OF MIGRANTS

5. GENERATE POLITICAL WILL TO COMBAT MIGRANT SMUGGLING

For the most part, there is a strong global commitment among origin, transit, and destination countries to combat human trafficking. Unfortunately, the criminal aspects of migrant smuggling are often ignored. This situation is worsened by the fact that migrant smugglers expose people to tremendous risk, including, an increased vulnerability to human trafficking.

Implications for a response:

a. Mobilize key constituents: In order to combat migrant smuggling, more effort is required to mobilize and enhance political will, particularly in origin and transit states. Efforts to galvanize political will should involve not only government agencies, but also businesses, labour unions, diaspora groups, and civil society organizations. This will help ensure

the development of a coherent policy agenda that sees migration as an integral element of globalization. Such an approach will assist in demonstrating how safe and legal migration can be of benefit to all countries and individuals.

b. Strengthen regional and international institutions dealing with migrant smuggling:

Strong national frameworks are only part of the solution. On their own, national or even bilateral responses to migrant smuggling can result in the displacement of smuggling routes to other countries. There is thus a critical need for strengthened regional and inter-regional cooperation among origin, transit, and destination countries if states are to effectively combat migrant smuggling.

6. STRENGTHEN NATIONAL LAWS AND POLICIES with due diligence given to human rights and to protecting the rights of smuggled migrants

Many countries do not have specific legislation on migrant smuggling. Where such legislation does exist, enforcement and implementation often remain weak. Migrant smuggling is typically included under more general laws and policies geared to reducing irregular migration. Often the natural impulse – reflected in laws and policies – is to simply strengthen border controls. Yet, there is substantial research evidence which suggests that restrictive border policies – by themselves alone – do not solve the problem of migrant smuggling. Moreover, states are bound by international refugee and human rights commitments. If efforts to address migrant smuggling are not embedded within a broader, more comprehensive approach, tight border controls can push irregular migrants into the hands of smugglers.

Implications for a response:

Comprehensive and practical approaches are required that identify and provide protection and assistance to smuggled migrants according to international law, in consort with the apprehension and prosecution of smugglers. Policies must therefore strike a balance between these two principles, punishing migrant smugglers while upholding the rights of the weak and vulnerable who are smuggled.

7. IMPROVE KNOWLEDGE OF THE PROBLEM – including through the use of the VRS-MSRC system

There is currently a lack of reliable and consistent data on migrant smuggling being collected and shared in the region. This greatly constrains the ability of the responsible authorities to develop evidence-based policies and implement strategies to combat migrant smuggling.

Implications for a response:

The ongoing development of the Voluntary Reporting System on Migrant Smuggling and Related Conduct (VRS-MSRC) in support of the Bali Process represents an important step in building evidence-based knowledge on migrant smuggling and irregular migration. The VRS-MSRC is a web-based data collection system that will make it easier for countries to collect, share, use, and analyze data on these issues. All countries of East and Southeast Asia are encouraged to use the VRS-MSRC to improve evidence-based knowledge on migrant smuggling and irregular migration.

TRAFFICKING IN PERSONS

8. IMPROVE VICTIM IDENTIFICATION SYSTEMS

The prompt and accurate identification of victims lies at the heart of successful responses to human trafficking. Once identified, victims can be provided with protection and support. Vital information can also be gathered for the identification of traffickers and trafficking networks for effective prosecution. By failing to identify trafficking victims, states deny victims the ability to realize their rights and the protections to which they are legally entitled and simultaneously allow traffickers to act with impunity.

Implications for a response:

a. Standardize national mechanisms: To identify victims of trafficking, standardized national mechanisms set within a holistic policy framework, are required.

b. Inter-agency coordination: Such coordination is necessary between law enforcement and social services.

c. Properly trained specialists: Specialists are also critical to ensuring the correct identification of victims, and in particular, to avoid mistaken assessments of trafficked victims as illegal migrants.

9. INVEST IN VICTIM-CENTRED APPROACHES TO LAW ENFORCEMENT

Simply put, traffickers are rarely identified, prosecuted, and convicted. This is the case worldwide – and also in East Asia and the Pacific. National law enforcement agencies and justice systems often lack the capacity to effectively investigate trafficking in persons cases. Nonetheless, an adequate law enforcement response to trafficking in persons is dependent on the cooperation of trafficked victims and other witnesses. Despite all this, many victims and other witnesses are reluctant to become involved in criminal investigations for several reasons. This is often because they lack confidence in the criminal justice system. This problem becomes compounded when law enforcement officials are complicit in or directly involved with trafficking practices.

Implications for a response:

- a. Training:** Law enforcement personnel must be provided with appropriate training and other capacity development resources to investigate the crime of trafficking in a victim centered manner.
- b. Rights at the core:** Law enforcement officials have an obligation to ensure that the rights of victims are protected at all stages of the investigation process, even if victims do not become witnesses in criminal proceedings. Protecting the rights of trafficking victims should thus be at the core of all anti-trafficking efforts and responses. This should become an essential element in all law enforcement training related to human trafficking.

10. ENCOURAGE INTELLIGENCE-LED APPROACHES TO THE INVESTIGATION OF TRAFFICKING

The capacity of law enforcement agencies to collect, develop, analyze and disseminate intelligence is under-developed in the region. Consequently trafficking investigations can be prone to achieving only a superficial penetration of the criminal networks responsible, and police officers rely too heavily on “fishing trips” to identify offenders –

where the officer adopts a speculative approach to identification of offenders.

Greater emphasis should be placed on the development of criminal intelligence structures and systems around the investigation of trafficking. This will allow more effective and efficient use of resources, greater penetration of criminal networks, and greater protection of the rights of innocent parties. It will also facilitate improved local, national, and international police cooperation. Furthermore such an approach will allow for a reduced reliance on the testimony of victims in trafficking cases.

Implications for a response:

- a. Equipment and training:** Law enforcement agencies require investment in terms of both equipment and training to develop an effective intelligence-led approach to counter trafficking work.
- b. Understand the structures behind human trafficking operations:** Collection and analysis of available intelligence will promote deeper understanding of the criminal structures, allowing for identification of offenders one or more steps removed from the immediate crime scene.
- c. Enhanced police cooperation at local, national and international levels:** As the bigger picture comes into focus, the potential for exchange of intelligence and wider cooperation is realized.

11. BETTER REGIONAL CRIMINAL JUSTICE COORDINATION

Trafficking in persons may take place within a country, but often it involves the movement of victims across national borders. In order to tackle the criminal groups involved, national law enforcement agencies must therefore cooperate effectively with the law enforcement agencies of other countries. Existing regional coordination mechanisms on TIP are in place. These include the COMMIT mechanism in the Greater Mekong Sub-region and ASEAN’s Senior Officials Meeting on Transnational Crime (SOMTC), the latter of which has a specific TIP working group. However, both these existing mechanisms are largely policy-focused. They are not directly operational. In addition, they cover only specific parts of the broader East Asia and Pacific region (i.e., the ten ASEAN countries) within which human trafficking networks operate.

Implications for a response:

The establishment of a specific mechanism that links or builds upon the work of COMMIT or ASEAN SOMTC, has potential to facilitate cooperation between regional law enforcement. This is particularly the case in respect of intelligence-sharing and investigative responses. Such an approach would enable a transnational coordinated law enforcement response to human traffickers.

12. EXPAND THE COUNTERMEASURES TO INCLUDE LEGISLATION AND OPERATIONS AGAINST CHILD SEX TOURISM (including suspicious internet activities)

There is significant concern that child-sex tourism is on the rise in Southeast Asia, and that the internet is being increasingly used to facilitate the activities of travelling child-sex offenders.

Implications for a response:

- a. Extra-territorial legislation:** Such legislation should be enacted, which prescribes criminal jurisdiction over sexual offences committed against children in foreign jurisdictions.
- b. Outlaw simple possession of indecent images of children:** Many of those with a sexual interest of children retain such images for their personal use, and as bartering chips to gain access to other collections. This behaviour perpetuates offending against children. A strong law on possession of such images gives greater scope to law enforcement officers when responding to such offenders.
- c. Intelligence-sharing strategies:** Policy-makers and law enforcement agencies should also develop national, regional, and international strategies to share intelligence on victims, facilitators, and offenders in cases of child sex tourism.
- d. ISP-related legislation:** In order to support investigations and transnational law enforcement cooperation, additional legislation should be enacted to ensure that Internet Service Providers (ISPs) maintain transactional records of suspicious criminal activity related to child sex tourism. ISPs should also block sites or remove websites with child sex images as a temporary disruptive tool.

13. MORE AND BETTER RESEARCH

As demonstrated in this TOCTA, the matter of estimating the volumes and annual gains from labour and sex trafficking is extremely difficult. At present, the lack of systematic and broad research limits the ability of policymakers to make informed decisions to improve law enforcement efforts.

Implications for a response:

Independent research should be conducted, with the endorsement and full support of national authorities. This will support more informed policy making and priority setting for law enforcement agencies. This in turn will increase the likelihood of improving responses to human trafficking in its various forms throughout the region.

DRUGS

14. PRIORITIZE MYANMAR – support the reduction of poppy cultivation and drug production in Myanmar

Opium poppy cultivation and heroin production in Myanmar has risen steadily since 2006. Myanmar is also a major source of ATS. Nevertheless, recent positive political developments in Myanmar, including in conflict affected areas such as Shan state (the key source of drug production) – and increasingly Kachin and Chin states – provide a window of opportunity to effectively address opium, heroin and ATS production in the country. Poppy-growing areas are becoming more accessible to law enforcement intervention, and there is high-level pressure from the President to eliminate poppy cultivation in advance of Myanmar's self-imposed deadline of 2014. These recent developments have produced a new political and operational momentum on drug control. However, international experience clearly indicates that crop elimination efforts must be accompanied by effective alternative development strategies if the livelihoods (and human rights) of poor farmers are to be protected, and the benefits are to be sustained.

Implications for a response:

a. Alternative development and food assistance:

The international community now needs to become more actively engaged in supporting Myanmar's drug control efforts. The international community must show that it can become a reciprocal partner in these drug control efforts by financially supporting immediate food assistance needs for poppy farmers, as well as investing in long-term alternative development programmes in poppy-growing areas.

b. Law enforcement and precursor chemical control:

At the same time, parallel law enforcement and prosecutorial efforts need to target the organizers of criminal syndicates that control drug trafficking from Myanmar into neighbouring countries, particularly China, including the movement of precursor chemicals for manufacturing ATS. It needs to be remembered that Myanmar, the largest single producer of heroin and methamphetamines in the region, does not produce the precursors for those

illicit drugs. Unless resolute efforts are undertaken in countries where most of these precursors are sourced, an important element of the solution will be missing. The solution will thus require transnational cooperation with neighbouring and regional law enforcement agencies, especially China, India, Lao PDR and Thailand.

c. Greater cross-border cooperation: UNODC and other relevant international agencies can assist in providing the forum, as well as relevant technical assistance, for such cross-border dialogue and cooperation.

15. KINGPIN STRATEGIES – increase the operational focus of law enforcement agencies towards investigating and prosecuting the kingpins of organized criminal groups

In tackling the drug problem, it is important to devote increased attention, in general, to identifying, arresting and prosecuting the kingpins of the drug trade, including those state officials with whom they collaborate.

Implications for a response:

a. Focus on kingpins and their accomplices:

Law enforcement agencies should be directed and supported to allocate more resources to investigating and prosecuting the kingpins of organized criminal groups (including state officials) who are involved in the illicit drug trade, as well as their white collar accomplices (lawyers, IT specialists, trade experts, accountants).

b. Focus on “following the money”, the proceeds of crime and money laundering:

Through the use of appropriate anti-money laundering legislation, support should include an increased allocation of resources and a narrowed focus on tracking and confiscating the proceeds of crime. Particularly where state officials are involved, opportunities to prosecute them through the use of anti-corruption legislation and tools should also be more actively pursued.

c. Empower frontline law enforcement agencies with proper knowledge, skills and equipment:

In addition, frontline law enforcement officers and prosecutors need access to the latest knowledge on effective countermeasures. With respect to forensic analysis, officers require better technical expertise and equipment. Specific training is also required on human rights principles and appropriate ways in which to manage contact with people who are drug users. Such training for frontline officers can be effectively delivered through e-Learning techniques.

16. PROMOTE EVIDENCE-BASED DRUG CONTROL AND LAW ENFORCEMENT RESPONSES

Regional and national responses to illicit drugs must be guided by empirical evidence.

Implications for a response:

a. Better data collected, shared and used:

Continued efforts are required by all concerned parties to promote evidence-based responses and strategy selection on how to best control the supply of and demand for illicit drugs. This requires that adequate resources are devoted to collecting and sharing robust empirical data, that such information is then actively shared and debated in public forums, and that the data is appropriately used to inform responses.

b. Prioritize both countering TOC/OC and promoting public health: Governments need to take a lead in developing innovative policies and strategies that work in tackling the dual objectives of countering organized crime and protecting public health.

17. USE EVIDENCE-BASED PREVENTION AND TREATMENT METHODS TO REDUCE DEMAND

Comprehensive prevention programmes – which deliver credible, evidence-based messages to at-risk youth on the dangers of drug use – are not easy to find in most countries. East Asia and the Pacific is no exception. Where programmes are in effect it is often difficult to establish a clear causal relationship between the programmes and a reduction in initiation of drug use and consumption patterns or levels. At the same time, there is solid evidence that

appropriate drug dependence treatment can reduce the demand for illicit drugs. This is particularly the case for opioids both by individuals and within communities. Low cost, community-based treatment – where cases are managed properly and treatment is tailored to the severity of addiction – are the most cost-effective. However, drug use prevention and treatment approaches in the region are poorly funded. Drug dependence treatment services are often compulsory, under resourced and not accessible to those who need immediate help. There is no evidence that incarceration of drug users (either through a judicial process or through compulsory detention) is an effective measure in reducing drug demand.

Implications for a response:

a. Adopt evidence-based communication and prevention strategies: Drug use prevention strategies should increasingly focus on the risk and protective factors, which powerfully influence an individual to take – or stay away from – illicit drugs. In broader society, effective demand reduction initiatives must also be supported by community education and evidence-informed drug prevention initiatives for all sections of the public.

b. Focus on community-based treatment: National authorities should adopt policies to recognize people dependent on heroin, ATS and other addictive substances as people suffering from a chronic relapsing health disorder. National authorities and international organizations should promote approaches that prioritize community-based treatment instead of compulsory detention. Treatment should be accessible to all who are drug-dependent.

c. Adopt diversion schemes: For those who are dependent on drugs within national criminal justice systems, national authorities should consider treatment options that include diversion into treatment schemes and treatment options for incarcerated drug dependent individuals.

18. REDUCE THE NEGATIVE HEALTH AND SOCIAL CONSEQUENCES OF INJECTING DRUG USE

Heroin users, but also increasingly users of ATS, are at risk of contracting HIV and Hepatitis C infections. The risks associated with HIV and H Hepatitis C transmission are particularly high in closed settings, such as in prisons and compulsory drug detention centres. There is substantial evidence that specific interventions aimed at reducing the adverse consequences of drug abuse for people who are unwilling or unable to stop using drugs are cost-effective in lowering the transmission of HIV and other blood-borne viruses among people who inject drugs (and subsequently among their sexual and injecting partners). Needle-syringe programmes, opioid substitution treatment and anti-retroviral treatment for those who are living with HIV are particularly effective.

Implications for a response:

- a. Improve quality and coverage of specific interventions aiming at reducing the adverse consequences of drug abuse:** National strategies and policies should aim to expand access for people who inject drugs to quality HIV prevention, treatment and care services, such as needle and syringe programmes and opioid substitution treatment. Where such services remain at the pilot stage, relevant national authorities should review laws and policies that continue to hamper scaling-up in order to overcome the current low service coverage and to reach a critical proportion of people who inject drugs, as recommended by WHO/UNODC/UNAIDS.
- b. Sensitize law enforcement officers to the nature of drug dependence:** Sensitization of law enforcement officials, judges and public security to drugs, HIV, harm reduction and human rights is a critical cornerstone of the national HIV response.
- c. Increase nationally-financed efforts for HIV prevention:** Commitment is also required in terms of increasing national ownership of the HIV response, including commitment to ensuring that financial resources for HIV prevention are channeled to high-impact interventions for key affected populations, such as HIV prevention for people who inject drugs and their sexual partners.

19. PROMOTING TRANS-NATIONAL COOPERATION including an increased focus on border control

Inter-agency coordination and regional cooperation in relation to border control is essential. This is due to growing sophistication of organized drug syndicates in the region, especially those which traffick heroin, ATS (and its precursors), and cocaine. In addition, the operational capacity of law enforcement officers working along the borders remains constrained, in terms of both knowledge/skills, effective communication systems and operational resources.

Implications for a response:

Cooperation in the profiling and sharing of intelligence in relation to known intra-regional and inter-regional drug syndicates and their couriers requires ongoing improvement. In this regard, enhanced information collection, storage, analysis and exchange systems would help control cross border movement of precursor chemicals. Transnational crime of this nature requires a sophisticated and coordinated transnational response. Increased support for joint operations (as well as capacity development support for border management systems and staff skills) involves the participation of counterparts in national agencies and regional partners.

ENVIRONMENT

WILDLIFE

20. RECOGNIZE THE ILLICIT WILDLIFE TRADE AS A TOC PROBLEM

The illegal wildlife trade is a high-profit, low-risk transnational organized crime. There is a high level of sophistication and profit, but there is a low risk of arrest and prosecution for perpetrators. National law enforcement has been inadequate to match the scale of the problem.

Implications for a response:

In East Asia and the Pacific, policy makers need to be more informed about the mechanics, transnational nature and diversity of wildlife crimes in the region, delivering regional responses where necessary.

21. REDUCE THE DEMAND

There is a need to reduce the demand for wildlife products, with special urgency for tiger and rhino parts: Despite law enforcement efforts and seizures, the demand for wildlife in East Asia continues to grow.

Implications for a response:

Targeted interventions that raise consumer awareness about the environmental impact of wildlife consumption or the related criminal penalties are needed in the main consumer countries of wildlife products. Misconceptions about the curative qualities of rhino and tiger parts should be urgently and seriously addressed through partnership with the media and private sector. Notorious wildlife markets should be closely monitored. When there is evidence of wildlife offences being perpetrated, adequate penalties should be applied.

22. KNOW THE PROBLEM BETTER

There is insufficient knowledge and information sharing on the range of regional wildlife crimes which are occurring. In comparison with other transnational organized crimes, the illegal trade in wildlife is a misunderstood and under-researched phenomenon. In particular, the broad range of different markets, trafficking routes and criminal operations in relation to different types of wildlife in the region are largely unknown, often due to insufficient data.

Implications for a response:

National authorities and other appropriate organizations should enhance their research and information collection capacities in addition to instituting more systematic coordination mechanisms for information sharing and analysis on the different forms of wildlife crime.

23. ESTABLISH (BETTER) NATIONAL STRATEGIES

There are few national wildlife strategies in existence to promote intelligence-led law enforcement and coordinated investigation strategies. Many countries in the region do not have a clear national strategy for combating the trade in illegal wildlife, frequently resulting in fragmented and under-resourced law enforcement responses.

Implications for a response:

The development of national strategies is essential to scale-up the quality of the criminal justice response to wildlife crimes. The diverse range of illegal wildlife trafficking requires effective intelligence-led strategies. Border control at land, sea, and airports should be strengthened through multi-agency responses and/or specialized task forces. Access to forensic and other innovative techniques is critical to effectively investigate wildlife crimes, in addition to inter-agency cooperation in areas such as anti-money laundering measures and 'controlled deliveries'.

24. ENACT TOUGHER LAWS

There is a need to strengthen legal frameworks to ensure prosecutions for wildlife crimes. National legislation on wildlife crime, including the prescribed criminal penalties, is often inadequate to support effective prosecutions or effective deterrence to the criminals involved.

Implications for a response:

It is important for Governments to enhance specific legislation to effectively prosecute wildlife crimes with consistent penalties across source, transit and consumer countries. As an example, national legal frameworks could criminalize the poaching of, and trade in highly endangered wildlife species. Judicial actors should be closely involved in the development of such legislation to ensure full implementation of relevant laws in national justice systems. In particular, this should involve prioritizing prosecutions which target high-level criminal actors controlling illicit international operations. The prosecution of wildlife crimes should also pay special attention to investigating state officials who are allegedly involved in the illegal trade in wildlife in source, transit and destination countries.

25. BUILD NATIONAL LAW ENFORCEMENT CAPACITY

There is a need to build the capacity of the criminal justice system to prevent, prosecute and punish wildlife offences. While the role of non-governmental organizations has been crucial in this area in recent decades, the primary sphere of responsibility to scale-up the response to wildlife crime needs to remain with national enforcement institutions. These include police forces, customs authorities and forest administrations, which can mount credible and effective national and regional strategies.

26. STRENGTHEN REGIONAL LAW ENFORCEMENT COOPERATION

Enhanced transnational and inter-regional cooperation among law enforcement agencies is critical. Trafficking in wildlife is a transnational organized crime. It requires an effective transnational law enforcement response.

Implications for a response:

a. Better funding: National authorities and appropriate groups should further improve intra-regional coordination throughout East Asia and the Pacific. In Southeast Asia, mechanisms such as the ASEAN Wildlife Enforcement Network (WEN) need to be strengthened and made financially sustainable through the support of its member states.

b. Better use of information-sharing potential: Such mechanisms should become a tool to exchange information and promote enforcement operations at a multilateral level. Similar efforts should also be undertaken to enhance legal cooperation with regions beyond the ASEAN Countries, such as South Asia, the Pacific, the Middle-East, Southern and Western Africa.

27. THE PACIFIC – A THREAT IN THE FUTURE

The illegal exploitation of maritime resources in the Pacific is likely to increase. The prospect of the serious depletion or even the extinction of various species of terrestrial and marine wildlife in Southeast Asia may portend a shift in the sourcing of various types of illegal wildlife trade towards the Pacific Island States and their maritime territories.

Implications for a response:

Given the anticipated threats to wildlife and ecosystems in the Pacific, inter-governmental coordination to promote adequate legislation and effective law enforcement in this region – and on this subject – should become a priority in preventing the proliferation of illegal wildlife crimes in the Pacific region.

TIMBER

28. RECOGNISE THE ILLEGAL TIMBER TRADE AS A TOC PROBLEM

The illegal timber trade exhibits all of the main characteristics of a sophisticated and well organized transnational crime. Given (a) the scale of the problem, (b) the level of corruption, (c) the violence associated with it, (d) the crossover between legality and illegality, (e) the profit margins and (f) the social, economic and the environmental impact of

the illegal trade itself, the problem requires an urgent response at national and regional levels.

Implications for a response:

In East Asia and the Pacific, policy makers should become fully informed about the mechanics, transnational nature and diversity of wildlife crimes in the region. In particular, there is a need to provide a broader range of resources and appropriate skill sets to relevant law enforcement and environmental agencies. Similarly, international organizations and development partners in the region should reassess their policies on combating timber crimes, with a view to increasing the level of support to law enforcement agencies in order to respond more effectively.

29. REVIEW NATIONAL LAWS – to empower countries to tackle illicit timber trade as an organized crime

National legislation in some countries is inadequate to support the effective prosecution of timber-related crimes. Source countries in the region need to introduce legislation to prohibit the export of all illegal timber and wood products.

Implications for a response:

a. Legal framework: Obsolete legal frameworks should be revised with a view to (1) criminalize the illegal timber trade, (2) simplify the adoption of the laws and (3) provide adequate penalties. There is a need to clarify legal frameworks so that prosecutors can apply the correct law. Intelligence-led operations should be conducted on the basis of effective information sharing among all relevant enforcement agencies of the criminal justice system.

b. Enforcement: In addition, any such new legislation should empower enforcement agencies to adopt modern investigative techniques (e.g., including wire tapping, anti-money laundering measures, and controlled deliveries). This will permit law enforcement to address the broader networks behind the illegal trade of timber rather than simply focusing – as is currently the case – on seizures and arrests.

c. Reciprocal legislation: Regional bodies should encourage cooperation with importing countries to

respond by enacting reciprocal legislation, which prohibits the import of illegal wood products from regional source countries.

30. IMPROVE BORDER CONTROLS – strengthen surveillance and control measures at border points and along transport routes

Illegal timber, in the form of either logs or sawn timber, is a bulky product and is difficult to conceal. Nevertheless, without the adequate skills and resources, frontline law enforcement officers may have significant difficulty in identifying illegal timber.

Implications for a response:

Governments should support border authorities, including customs, army and police, to strengthen their capacities to interdict the transboundary (and in-country) movements of illegal timber. Such efforts should include the following:

- a. Training:** training activities (for instance on the identification of fraudulent documentation and suspicious shipments, as well as the collection of evidence);
- b. Intelligence:** the sharing of intelligence related to seizures and arrests; and
- c. Inspection technology:** improved technology to inspect trucks/containers or to identify timber species at port and land crossings.

31. BUILD NATIONAL LAW ENFORCEMENT CAPACITY – specifically establish specialized and independent Task Forces on the illegal timber trade comprising representatives from Police, Customs, Forestry Administration and Attorney-General

Implications for a response:

The criminal justice response to the illegal timber trade is often fragmented and there are few (effective) high-level prosecutions. Countries in the region should take concrete steps to develop National Strategies to improve the capacity of their criminal justice systems to investigate, detect and prosecute all cases related to the illegal timber trade. The creation of specialized Task Forces would improve coordination in the investigations phase as well as effectiveness in conducting high-level prosecutions of illegal timber cases.

32. ENFORCE EXISTING SOURCE COUNTRY LAWS BETTER- including anti-corruption laws

Recent attention given to the illegal trade in wood products has resulted in significant policy changes in some source countries in the region. For example, Indonesia has actively undertaken efforts to curb illegal production and trade in logs and sawn logs. Nevertheless, there is significant scope in many countries to better enforce existing legislation, as well as enact new legislation that effectively prohibits the export of illegal timber and wood products.

Implications for a response:

All source and processing countries should properly enforce existing logging and timber export bans through effective law enforcement, anti-corruption initiatives and independent judicial action.

33. WITHIN LAW ENFORCEMENT, FOCUS ON TRAINING FORESTRY OFFICIALS

Identifying illegal logging activities on the ground, and then collecting appropriate evidence to feed into often complex criminal investigations and prosecutions requires appropriately trained and supported frontline forestry enforcement officials.

Implications for a response:

Selected forestry officials should be taught specialist skills so that the necessary evidence required to support complex criminal investigations and prosecutions is provided. The evidence that can be provided by these frontline officials is often critical to the work of the aforementioned specialized Task Forces.

34. PROMOTE SUSTAINABLE FOREST MANAGEMENT – as a crime prevention tool

To date, corrupt forestry officials have prevented the development of sustainable forest management for their own benefit. Evidence from elsewhere demonstrates that well-regulated forests are harder to plunder.

Implications for a response:

The quality of forest management in the region can be improved to prevent theft and illegalities in the trade of wood and forest products.

35. MONITOR THE EFFECTIVENESS OF THE CRIMINAL JUSTICE RESPONSE TO FOREST CRIME

When monitoring the effectiveness of the criminal justice response to illegal logging, it should be noted that seizures of timber and number of arrests do not necessarily provide an accurate measure of success in protecting forests.

Implications for a response:

Indication of success should include the number of complex investigations and prosecutions that target sophisticated networks involved in the timber trade. Nevertheless, at the same time, all institutions of the criminal justice system should strengthen their capacity to collect, manage and analyze basic data in relations to seizures, arrests, perpetrators, prosecutions and convictions for timber cases.

E-WASTE AND ODS

36. INCREASE AND COORDINATE LAW ENFORCEMENT EFFORTS ON POLLUTANT TRAFFICKING

East Asia is a hub for pollutant crimes related to e-waste and ozone depleting substances (ODS). The illegal trade in e-waste and ODS is closely associated with, or operates within, the international legal trade in these products.

Implications for a response:

Law enforcement efforts should effectively target the illegal trade while minimizing any disruption of the legal trade. This will require increased specialized training and improved inter-agency cooperation - including between jurisdictions – in order to properly identify and respond to specific forms of pollutant trafficking.

37. INCREASE EFFECTIVE INVESTIGATION AND PROSECUTION

Efforts have been undertaken to strengthen and coordinate customs agencies in the region in relation to pollutant crimes. However, investigation agencies and national justice systems have not yet implemented an effective prosecutorial response to the transnational crime. In East Asia, there is

no public record of any prosecutions of traffickers or companies engaged in the illegal trade of such pollutants.

Implications for a response:

The judicial deterrence delivered by successful convictions would contribute to reducing the likelihood of criminal network engagement with the illegal trade in e-waste and ODS. At the very least, judicial deterrence will disrupt the illegal trade. Specialist investigation agencies and prosecutors should be properly trained in relation to the nature of this trade, particularly with regard to the relevant criminal legislation and the skill sets needed to properly investigate and prosecute pollutant crimes within national jurisdictions. Transnational justice responses to the crime will also be required in some cases.

38. INCREASE JOINT TRANSNATIONAL LAW ENFORCEMENT OPERATIONS

Until now, customs agencies in the region have been the frontline response to trafficking in pollutants and countering trafficking networks. Coordination mechanisms and partnerships such as the Green Customs Initiative, capacity building and intelligence-sharing through the Multilateral Environmental Agreements Regional Enforcement Network have proved important in strengthening the transnational response of customs agencies to pollutant crimes. In addition, the Sky-Hole Patching joint operation represents a good example of joint law enforcement operations to combat trafficking in pollutants by disrupting trafficking syndicates. As a result of lessons learned, improved approaches to setting up and undertaking joint operations are also being established.

Implications for a response:

Policy makers in the region should undertake efforts to raise awareness of the Sky-Hole Patching joint operation experience across government agencies. National governments, regional organizations and international partners, including civil society, should also develop strategies and practical approaches to ensure that more national governments and law enforcement agencies in the region actively participate in joint operations. Operation Sky-Hole Patching should be not only provided with extended support but also broader participation by governments.

39. IMPROVE RECYCLING INFRASTRUCTURE AND TECHNOLOGY TRANSFER

With continuing economic growth, particularly in East Asia, the trade in e-waste and ODS is expected to increase commensurately over the foreseeable future. In particular, the volume of e-waste is anticipated to increase in parallel with growth and rapid innovation of consumer goods production in the region.

Implications for a response:

Governments, agencies and international partners need to ensure that safe and high standard recycling infrastructure is available and accessible in production countries, in order to reduce current reliance on the un-regulated informal sector. Furthermore, the more aggressive promotion of new technology – which is not reliant on HCFCs – would contribute to preventing the proliferation of the illegal trade in ODS following phase-out that is officially scheduled to commence in 2013.

40. DEVELOP OR STRENGTHEN POLICIES AND REGULATIONS TO CONTROL TRADE IN E-WASTE

In most countries in the region, regulations do not exist or are not adequate to tackle the increasing environmental and social challenges that are associated with trade in e-waste. In addition, e-waste is dealt with under hazardous waste regulations in most countries. This limitation in policy response can make recycling through the informal recycling sector more attractive, and also fuel the transboundary trade in e-waste – both among neighboring countries and across the planet.

Implications for a response:

Policy makers should prepare and implement regulations targeting e-waste management within each country. They should also monitor and control trade in e-waste. Such regulations should include approaches to the definition of e-waste, as well as its recovery, recycling and proper disposal.

GOODS

COUNTERFEIT GOODS

41. CREATE CONSUMER AWARENESS – reduce consumer demand

Addressing the level of consumer demand for counterfeit goods is critical, particularly in developed economies as this is where most of the TOC profits from criminal counterfeiting are generated.

Implications for a response:

Consumers need to be better informed about the social impact of counterfeiting – particularly health and safety concerns - and better understand the linkages between counterfeiting and organized crime. In addition, consumers should be better informed about what constitutes a counterfeit product. Given that Internet traffic from consumers seeking counterfeit goods is increasingly prevalent, initiatives to reduce online demand for counterfeit products must be innovative and multi-faceted with the involvement of various levels of government, private industry and civil society.

42. INTRODUCE TECHNOLOGICAL INNOVATION TO DISTINGUISH GENUINE PRODUCTS

Many counterfeit products are difficult to identify as counterfeit.

Implications for a response:

Technological innovations such as enhanced security features and packaging features that allow consumers to distinguish genuine articles from counterfeits would contribute to efforts to contain counterfeiting. Some electronic products now contain holographic images and identification codes to guard against counterfeits. Brand name prescription medication manufacturers have started using radio frequency identification (RFID) tags to track shipments. Given the expected increase in online sales, these innovations would be especially effective if designed to target the online market of counterfeit goods. Attention should also be given to the sophistication of technological innovation exhibited

by counterfeiters and criminal networks in East Asia in deciphering, reverse engineering and adaptation to such innovative security features. Coordinated efforts by governments, law enforcement and private industry to devise and broadly introduce technological solutions would contribute to reducing consumer demand for some counterfeit goods (and fraudulent medicines) and improve law enforcement interception methods.

43. IMPROVE LAW ENFORCEMENT RESPONSES TO ONLINE COUNTERFEIT MARKETS

Authorities have been shutting down websites that were selling counterfeit goods in recent years. However, these counterfeit websites can easily be rebranded or restarted in another jurisdiction.

Implications for a response:

Intensive monitoring and tracking websites will require enhanced technical innovation as well as cooperation between law enforcement and judicial authorities across jurisdictions. Law enforcement strategies need to be continually adapted to effectively combat this rapidly changing and innovative criminal enterprise.

44. STRENGTHEN IPR REGIMES AT THE REGIONAL LEVEL and enforce anti-corruption measures through law enforcement and prosecution

Intellectual Property Rights (IPR) regimes are an effective weapon to combat counterfeiting. However, in much of East Asia and the Pacific, these regimes are often weak, weakly enforced or both. Protection to criminal counterfeiting networks and the facilitation of product counterfeiting by corrupt officials in East Asia undermines policy initiatives and law enforcement efforts.

Implications for a response:

East Asian countries should consider strengthening their IPR regimes as well as implementing broader anti-counterfeiting measures through anti-corruption and anti-organized crime initiatives. Regulations

should be vigorously enforced by public officials and police. The linkages between corruption and organized crime in counterfeiting operations in East Asia should be formally assessed by governments and other regional bodies. Strong efforts should be made to bolster criminal investigations and the prosecution of counterfeit production and related corruption cases. This will represent an important criminal justice deterrent to the current high levels of counterfeiting in East and Southeast Asia.

45. ENHANCE PRODUCER-CONSUMER COOPERATION ON A TRANS-REGIONAL BASIS TO COMBAT COUNTERFEITING

Product counterfeiting is a transnational problem on a massive scale.

Implications for a response:

All consumer and producing countries of counterfeit products should sign the Anti-Counterfeiting Trade Agreement (ACTA) to establish international standards on intellectual property rights enforcement. The ACTA covers various aspects of enforcement. These include criminal procedures, judicial obligations and the authorization of actions which border officials can take to prevent counterfeiting and piracy. A number of countries have signed, but other key countries, particularly in East and Southeast Asia, should consider joining this initiative. Broad support from countries for the ACTA would establish a new international legal framework that countries can join on a voluntary basis, and would create its own governing body outside existing international institutions such as the World Trade Organization and the World Intellectual Property Organization.

FRAUDULENT MEDICINES

46. IMPROVE CONTROLS THROUGH LICENCING AND LAWS

Many patients in East Asia obtain their medication from unlicensed vendors. The impact can be deadly.

Implications for a response:

a. Licensing: Countries should work towards robust and coordinated licensing system for importers, wholesalers and retailers of

pharmaceuticals. A proper licensing system with tracking and inspections (both random and targeted) can help prevent fraudulent medicines from entering various points of the distribution chain. This will make it easier to detect – and then sanction – unlicensed dealers which import or distribute fraudulent medicines. By means of technical and financial assistance, support for developing East Asian countries could be facilitated through “twinning” drug regulatory authorities in developed countries with those in need.

b. Legislation: Laws are needed to govern safety and quality standards for medicines. This will help prevent the production and distribution of substandard medicines. Laws can also be used to identify a preapproved list of medicine importers, wholesalers and retailers.

47. DEVELOP A COMMON UNDERSTANDING AROUND THE DEFINITION OF FRAUDULENT AND COUNTERFEIT MEDICINE

There remains a lack of common agreement on the definition of fraudulent and counterfeit medicines. This impedes the international community from developing common policies and procedures to combat fraudulent medicine traffickers, and also prevents authorities from collecting data and assessing trends. Ultimately, the lack of a common definition is affecting developing countries worldwide, where access to a safe and affordable drug supply is critical.

Implications for a response:

The international community and the World Health Organization should continue work to resolve the long-standing issue of definitions in relation to what WHO currently refers to as “spurious/false-labelled/falsified/counterfeit” medicines.

48. PROMOTE INITIATIVES TO COUNTER ONLINE SALES OF FRAUDULENT MEDICINE

Online sales of fraudulent medicines appear to be growing.

Implications for a response:

Fraudulent Internet pharmacies can be partially combated through regulatory initiatives. Government approved online logos can be issued to websites that comply with safety and quality standards and online drug sellers of controlled drugs can be forced to link to a central government website. Ultimately, public initiatives to regulate Internet pharmacies will only work through enhanced cooperation with private sector actors such as Internet Service Providers. Voluntary programs can also be used to accredit online pharmacies, such as through the Verified Internet Pharmacy Practice Sites (VIPPS) accreditation program in the US, run through the National Association of Boards of Pharmacy.

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