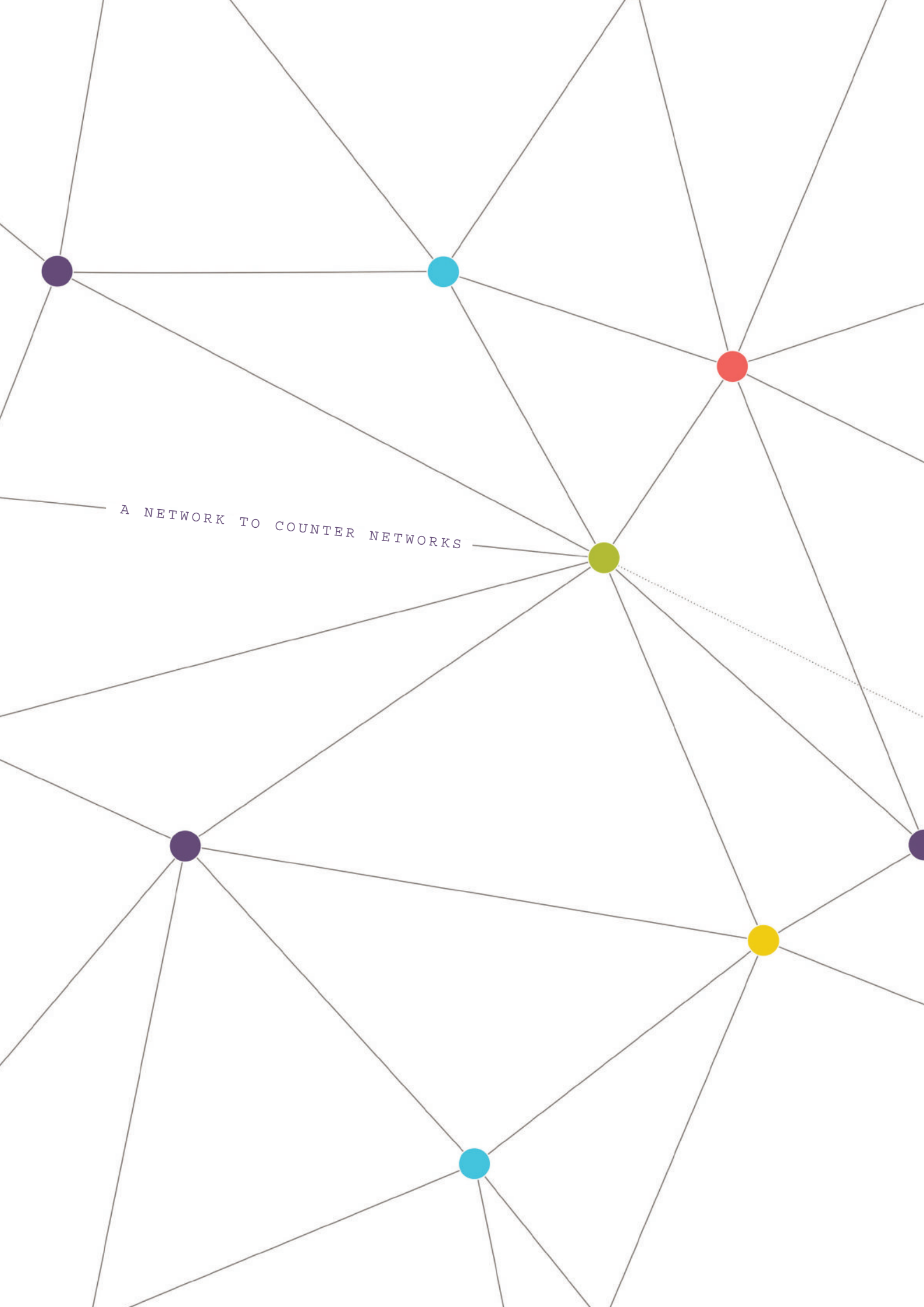


**THE GLOBAL INITIATIVE
AGAINST TRANSNATIONAL
ORGANIZED CRIME**

The Global Response to Transnational Organized Environmental Crime



**A Research Report
January 2014**



A NETWORK TO COUNTER NETWORKS



The Global Response to Transnational Organized Environmental Crime

Part of the Global Initiative against Transnational Organized Crime
series on Environmental Crime

Draft for review by the Global Initiative Expert Reference Group
on Environmental Crime

January 2014

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This report is currently in advanced draft. It will now be submitted to a multi-disciplinary expert review group for review and verification, before the recommendations are finalized.

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About the Global Initiative against Transnational Organized Crime

The Global Initiative against Transnational Organized Crime was conceived from a series of closed-forum dialogues with thirty senior law enforcement officials, representatives of multilateral organizations, development practitioners and policymakers, hosted by the International Peace Institute in New York in 2011-12.

At these meetings, the founding members of the Global Initiative, many of whom stand at the front line of the fight against organized crime, illicit trafficking and trade, described a situation where the challenge was unprecedented and poorly understood, and for which current tools seemed inadequate for the task. They concluded that the problem and its impacts are not well analyzed; they are not systematically integrated into national plans or strategies; existing multilateral tools have not been adapted and frequently fail to provide a sufficient return on the investment. While there have been some successes, these are not enough to claim that our responses are catching up with organized crime. In their view, existing forms of cooperation tend to be bilateral, slow, and restricted to a limited number of like-minded states.

What is required it was concluded is a more strategic and proactive global approach to counter transnational crime and trafficking. This is not only a law-enforcement responsibility. A “whole-of-government” and a more holistic approach is needed at a time when policymakers are increasingly seeking new ideas to inform their responses. Critically, there needs to be space created outside of the traditional multilateral systems to debate and develop new initiatives with a wide range of engaged stakeholders and experts.

The participants in these meetings called for a network of experts to be created which would allow for a much needed debate of the challenges and to serve as an incubator for new integrated strategies. Such networks should consist of experts from a range of thematic disciplines. They should not be constrained by institutional parameters, but should coalesce around common areas of experience such as law enforcement, development, media, the rule of law, research and policy development. It was with this vision that the Global Initiative against Transnational Organized Crime was born.

The Global Initiative is an independent international non-profit organization headquartered in Geneva, Switzerland.

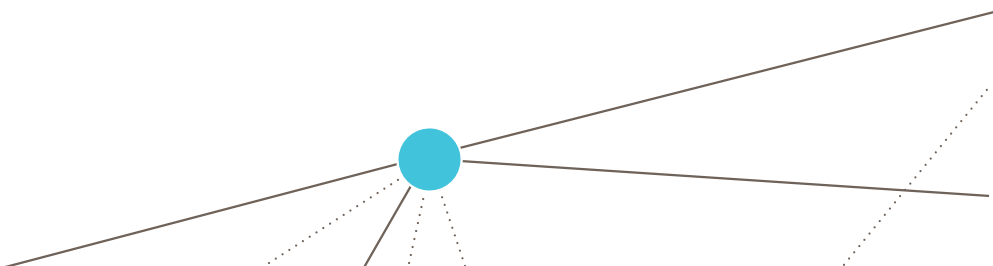
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Table of Acronyms

ARREST	Asia's Regional Response to Endangered Species Trafficking
ARPEC	Asia Regional Partners forum on Environmental Crime
ASEAN	Association of Southeast Asian Nations
BLO	Border Liaison Office
CFCs	chloro-flouro carbons
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DRC	Democratic Republic of Congo
ENV	Education for Nature Vietnam
EIA	Environmental Investigation Agency
FATF	Financial Action Task Force
HCFCs	hydrochlorofluorocarbons
ICCWC	International Consortium on Combating Wildlife Crime
INTERPOL	International Criminal Police Organization
KP	Kimberley Process
LAGA	Last Great Ape Organization
LRA	Lord's Resistance Army
MEAs	multi-lateral environmental agreements
NCB	National Central Bureau
ODS	ozone-depleting substances
PAC	Partnership-Africa Canada
RILO	Regional Intelligence Liaison Office
ROCB	Regional Office for Capacity Building
PATROL	Regional Organized Law-enforcement
FARC	Revolutionary Armed Forces of Columbia
SLCS	South Luangwa Conservation Society
UPDF	Uganda People's Defence Force
UVB	ultra-violet rays
UNREDD	UN Collaborative Programme on Reducing Emissions from Deforestation and Degradation
UNCAC	UN Convention against Corruption
UNTOC	UN Convention Against Transnational Organized Crime
UNEP	United Nations Environment Programme
DELC	Division on Environmental Law and Conventions
UNODC	United Nations Office on Drugs And Crime
WCO	World Customs Organization
WENs	wildlife enforcement networks
WPSI	Wildlife Protection Society of India

Introduction

Environmental crime is one of the most damaging, high profile and economically significant fields of global criminal activity. It is not a new phenomenon, nor is it an emerging issue. Yet within the last decade environmental crime has escalated significantly in terms of variety, volume, and value. Despite considerable international attention and action, environmental crimes are an increasingly rewarding activity for those who carry out the crimes, and a significant challenge for the wide range of actors who aim to defeat it.

Some commodities illicitly traded under the broad umbrella of 'environmental crime' are amongst the most valuable on earth. Environmental crimes have an impact broader than just natural resources and

that those involved in the problem of tackling environmental crime are driven by passion and a genuine concern for the consequences of criminal activity. National law enforcement agencies, non-governmental organizations and international bodies work apparently tirelessly to find solutions, but all indications are that the problems go beyond both conservation measures and criminal justice responses, and call for a broader and more cooperative stakeholder engagement.

Strategies may exist within organizations, but globally the presence of common direction and goals are lacking. There is no shortage of impressive activity, and some emotive and powerful rhetoric, but it is still often difficult to see tangible outcomes.

"Immensely powerful though we are today, it's equally clear that we're going to be even more powerful tomorrow. And what's more, there's compulsion upon us to use our power as the number of human beings on the Earth increases still further. Clearly we could devastate the world... as far as we know, the Earth is the only place in the universe where there is life. Its continued survival now rests in our hands."

Sir David Attenborough, The Living Planet (1984)

habitats: they affect human security in the form of conflict, rule of law and access to essentials such as safe drinking water, food sources and shelter. The loss of revenue and income through legitimate trade in natural resources restricts economic development and exacerbates income inequality. At a local level the involvement of elements of organized crime threatens communities and reduces opportunities to access sustainable and honest income as crime crowds out legitimate ways of making a living.

Considerable effort has been made to curb environmental crime, including the implementation of international treaties, establishment of national enforcement units, and millions of dollars invested by a wide range of stakeholders. There is little doubt

Even crimes where the identity of suspects is openly known remain unresolved and the most controlling criminals rarely face arrest let alone conviction.¹

We must ask, despite all the resources being ploughed into the fight against environmental crime, why are we still losing?

There is a need to take stock, and consider the efficacy of strategies relative to effort and investment. This is a luxury many organizations do not have, particularly those burdened by size and entrenched policy. If stocktaking were to take place, is there sufficient knowledge and expertise in this area of work to determine the right direction? Are appropriate and effective policies in place at a sufficiently high level to guide national governments, and those who fund



Photo provided by Environmental Investigation Agency (www.eia-international.org)

enforcement efforts? Are there overarching, powerful issues, institutional or procedural bulwarks, or even specific individuals getting in the way of real progress?

Environmental crime responses have been developing significantly over the last decade. But as more and more financial resources are invested in projects and programmes, now is the time to consider how we develop actions over the forthcoming decade and beyond.

This report aims to look beyond the value of and harm caused by environmental crime and examines our current responses; what works and what doesn't? What are the most significant obstacles to tackling transnational organized environmental

crime, and how does the international community overcome them? In conducting such analyses, we may understand how we can learn from successful initiatives and evolve even more effective solutions.

The Global Initiative is in a unique position to examine the situation critically but constructively in order to develop recommendations for such a strategy. Encouraging cross-sectoral debate involving a wealth of experience from a broad range of experts, the Initiative can help build relationships for improved international and local cooperation, and develop a policy framework towards a long-term, effective and sustainable strategy to combat environmental crime for good.

The Crime Scene

Environmental Crime is Serious, Organized and Transnational

Defining a crime-type as diverse as environmental crime is not straightforward, but there are established definitions that assist. The UN Convention Against Transnational Organized Crime (UNTOC) defines a transnational organized crime as “any serious transnational offence undertaken by three or more people with the aim of material gain”. This definition however presents difficulties, since ‘serious crime’ is defined as an offence punishable by a maximum prison sentence of at least four years or more. Legislation on environmental crimes in many countries is poorly developed and therefore sentencing guidelines may not be defined. As a result, some states may consider that environmental crimes are not, by the UN definition, serious. Steps are however being taken to address such anomalies including most recently the adoption in April 2013 of a resolution under the Commission on Crime Prevention and Criminal Justice which urges countries to treat wildlife crimes as ‘serious’.² The latest in a series of United Nations decisions and resolutions, the implementation by States will determine whether the words can be turned into action.³

Of course it is not necessary for states to be bound by the guidelines of the United Nations definitions. It is possible to apply a more common-sense approach to determine what constitutes serious organized crime. Financial or otherwise material loss to an aggrieved party (which may include a State or its people), or gain to a criminal is often a sound indicator of seriousness, for example. In 2004 the Chief of Enforcement at the CITES Secretariat defined a list of indicators of organized wildlife crime⁴ and provided them to the United Nations as an arguably more practical definition reflecting more accurately the reality of organized crime. The indicators include the presence of detailed planning, significant financial support, use or threat of violence, sophisticated forgeries and altering of documents,

armed participants with modern firearms and opportunity for significant profit.⁵⁶⁷

Regardless of which definition is followed, the vast majority of significant environmental crime is, at some point transnational in nature. Secondly, most environmental crime, if only for logistical reasons, will involve more than three individuals working in common purpose. And lastly, depending on which legislative acts are used, crimes attracting more than four years imprisonment are common. On this last point it is important to bear in mind that it is rarely necessary to focus only on environmental laws, but issues of revenue evasion, human trafficking and exploitation, and health violations are often treated as serious crimes and should be considered in the prosecution of environmental criminals.

The majority of environmental crimes are ‘series crimes’. That is, individual crimes are committed repeatedly following a similar pattern of offending, similar modus operandi and often using similar routes. Unlike ‘one-off’ crimes, while series crimes may cause more harm or impact, they also provide investigators with opportunities with each incident to gather evidence exponentially through reactive investigation, and to develop interventions including planning pro-active operations. Whilst not always the case, series crime may also involve the same offender or group of offenders particularly in long-established crimes.

It is useful to understand that transnational crimes also include a substantial (complete) offence within a national boundary. Even ‘international smuggling’ includes elements of attempt, preparation, and conspiracy – specific crimes usually defined in legislation. Therefore in the case of transnational crime, it is possible for national agencies to work independently as well as cooperatively. But the latter is proving far more challenging.

The majority of environmental criminals are motivated by financial gain and as there is considerable wealth to be obtained through environmental crime.

With this wealth comes the power to purchase equipment for processing, transport and storage, and for protection such as weapons including firearms. Indeed some organized criminal groups engaged in poaching wildlife are known to possess all-weather clothing, night-vision equipment, high-powered firearms, tranquilizer drugs and guns. Helicopters have been used by poaching gangs in the commission of crimes.⁸⁹ The acquisition of more sophisticated tools of the trade only serves to make criminals more capable to commit offences and garner more wealth, but also to evade detection both through more sophisticated methods, and through greater means to bribe officials, or to use power and influence over them.

It is widely accepted that criminals will diversify from one crime type to another as opportunity arises. Indeed it is their adaptability and resourcefulness that increases their chances of success, and ability to evade capture. Crossovers between environmental crimes have been detected but are poorly evidenced. Associated criminality includes money laundering in order to process the proceeds of crime from illicit to wealth that appears legitimate.

In some incidents environmental crime converges with other crimes often as a result of transportation routes and border crossings which have been used for centuries but which are attractive to criminals because of poor enforcement, making smuggling less of a risk or due to the presence of corrupt agencies which will ensure safe passage of contraband for a fee.

An Overview of Environmental Crime Types

The term “environmental crime” covers a broad range of specific offences where criminal acts or misdemeanors involve trade in environmental commodities or damage to the natural environment itself, such as pollution of air, water or earth. The actions conducted often cause harm that has an impact not only to wildlife and natural habitat but also pose a direct or indirect threat to human health, wellbeing, and security, or result in material loss to an individual or group.

More specifically, environmental crime involved the killing or illegal trade in or taking of flora and fauna (trees, birds, fish, plants, and animals); illegal extraction of natural resources such as minerals and precious stones; trade in chemicals which harm the ozone layer, and pollution of the environment through inappropriate use or disposal of harmful waste or other pollutants.

In addition to the tangible offences listed, practices that facilitate the offences are also examples of environmental crime. These may include the provision of premises and equipment, or preparation of logistics. Laundering of the proceeds of environmental crime is significant offence. The actions of corrupt private and public individuals are also a significant facilitator to the commission of substantive acts of environmental crime.

The words ‘illegal’, and ‘crime’ are used loosely since legislation and penalties vary considerably around the world. In one country an act may result in the offender being sentenced to a term of imprisonment, whilst in another, only a minor administrative penalty may be issued. The range between what may be considered acceptable and highly illegal is vast.

It should also be noted that there is significant inconsistency between the ways different types of environmental crime are treated under international (and therefore national) legal frameworks. For example, the trade in fauna and flora is regulated by comparatively robust international law, with penalties to non-compliant parties. Illegal logging and fishing however mainly rely on national laws and agreements. The trade in ozone-depleting substances, waste and pollutants may have international agreements, but they have little in the way of teeth and again rely on national enforcement. Such ambiguities currently present a challenge. Even the collective term ‘environmental crime’ may be too vague to be helpful and is often the source of debate. But the debate must move beyond semantics and on to how to overcome ambiguities and move on to actions.

Bearing in mind these inconsistencies, a brief description of the main types of environmental crime follows. The list is certainly not exhaustive, nor

is this the only way to define environmental crime, but time spent on discussing definitions is arguably distracting us from dealing with the problem, whatever we choose to call it. When looking forward at proactive strategies and effective responses, it is useful to understand the different crime types.

Trade in Fauna and Flora

Animals, both wild and captive bred, are legitimately traded around the world as food, clothing and décor, for the pet trade, science and entertainment. International and national laws and regulations control trade in many species, often in order to ensure that such trade does not affect populations of species, but also to avoid spread of disease that can be passed from animals to humans. Criminals, by contrast, trade animals around the world almost entirely for profit, with little regard for the dangerous externalities of their actions.

Often overlooked in favor of protecting animals, plants are also traded in vast quantities for medicinal and horticultural use, and may also be sourced from the wild or cultivated stocks. Collectors strive to find the most rare and therefore potentially endangered species and will go to considerable lengths¹⁰ to smuggle them across international borders.

Illegal Fishing

Generally referred to as 'illegal, unreported and unregulated fishing', the practice refers to fishing in waters where no fishing is permitted, or fishing quantities, species, age or size of fish which is prohibited by national and regional laws or regulations. The practice depletes fish stocks leading to species becoming seriously threatened, and reduces biodiversity causing imbalance of species and adversely affecting ecosystems.

By far one of the most neglected areas of environmental crime, illegal fishing is also probably one of the most extensive in geographical terms. Estimates put the value of the global illegal fishing industry at US\$23 billion – around 20% of the value of world fish exports. The depletion of certain species due to unregulated overfishing in turn affects the numbers of species they consume, unbalancing

oceanic ecosystems. Such imbalance and depletion may lead to a reduction of human food sources due to lack of abundance of fish, as 75% of all fish production is for direct human consumption.¹¹ Approximately 50% of fish exports are sourced from developing countries, which are most at risk from illegal fishing.^{12,13} The exploitation of such resources from developing countries has impact on those countries economic stability and development.

The modus operandi of transnational and organized offenders is many and varied. Use of multiple fishing vessels, altering the identification of ships and transfer of catches prior to an apparently legitimate landing are just a few methods used to frustrate monitoring and investigation of suspicious activity even if it is detected.

One of the most significant challenges to addressing illegal fishing is the issue of international waters. Responsibility is one factor, while jurisdiction and legislative difficulties make it difficult to prosecute vessels operating in international waters.

The fishing industry is also linked to other serious criminal activities. The United Nations Inter-Agency Project on Human Trafficking suggests that trafficking into long-haul fishing industry exemplify the worst cases of labor exploitation.¹⁴ Incidence of crews being comprised of victims of trafficking is well documented. There is evidence of widespread abuse of workers on fishing vessels, and cases of murder with the victims being disposed of by being thrown overboard.¹⁵ Human rights abuses and environmental crime often go hand in hand.

Forest Crimes and Illegal Logging

Forests are destroyed to supply a global furniture industry and to clear land for development or infrastructure and agricultural use such as the growing of rubber, soya or oil-palm, used in hundreds of everyday products. Alongside the legitimate trade in timber comes an insatiable illegal trade resulting in deforestation on a mass scale and timber traded in vast quantities, laundered through countries, re-labelled and sold into industry across the globe. Illegal logging is estimated to account for between

50-90% of all forest activities in key producer countries and 15-30% of all wood traded globally.¹⁶

Unlike many aspects of the wildlife trade, which are controlled by relatively small networks, the timber industry is closely linked to industrial-scale profits, national income and development. Unsurprisingly, incidents of illegal logging correlate geographically with the world's remaining tracts of forest: mainly the Amazon basin, Central Africa and Southeast Asia. Found in developing countries, often with poor governance and corrupt businessmen and politicians, the scene is set for unscrupulous companies to take advantage, often with the greatest loss to the poorest of society who lose land and livelihoods. Rates of deforestation are estimated at around 13 million hectares per year (about the size of Greece)¹⁷ while recent reports claim that in some regions, such as the Amazon, deforestation rates increased by 103% between 2012 to 2013¹⁸, figures supported by government data.¹⁹

Hazardous Waste

The disposal of electronic, hazardous and other polluting waste is a global issue and one that is increasing with the population and ever-increasing demand for consumable goods. Whilst many countries may have introduced effective and appropriate measures for disposal of waste, the export of waste and transportation over long distances raises challenges to monitor that disposal.

Criminals exploit these challenges by dumping waste in countries where monitoring and/or enforcement is ineffective. The consequences include pollution to land as chemicals leach into soil and waterways, harm to people who come into contact with waste either deliberately or inadvertently, and damage to the atmosphere as a result of release of chemicals as waste degrades or is burnt.

“We cannot live without forests. People will have to be in symbiotic relationship with the forests. When people preserve the forests, the forests will give back to people. The relationship between people and forests are interdependent.”

Her Majesty Queen Sirikit of Thailand, 2009

Forest crimes are also linked to destruction of habitats and killing of endangered species, and contribute to changes in climate, removing natural carbon dioxide sinks and warming the planet as a result of high levels of carbon dioxide released when trees are destroyed.

The world's remaining forests are also home to indigenous communities and people who rely on them for food and shelter. These include over 100 tribes who have no contact with outsiders, such as the Awa people of Brazil. Their future is directly affected by unsustainable and often illegal logging industries²⁰ with effectively no avenues of recourse.

This practice takes place from developed to developing countries since the former have the means and wealth to collect and export waste, while poorer countries may inadvertently allow dumping of waste and where poor legislation, investigatory powers and enforcement facilitate such exploitation.

It should be noted that practices such as the inappropriate disposal of hazardous waste are conducted primarily by unscrupulous companies rather than individuals or networks of criminals. It is important to recognize that difference is essential to ensuring relevant responses.

Ozone-depleting Substances

Ozone-depleting substances (ODS) are man-made chemicals used mainly as refrigerants but also for other purposes. They include chloro-flouro carbons, or CFCs, which gained notoriety in the 1970s when it was discovered that they contribute to the thinning of the ozone layer. Other ODS include halons, methyl bromide and hydrochlorofluorocarbons (HCFCs).

A layer of gasses surrounding the planet, the ozone layer protects life from the sun's harmful rays, which in humans can cause cancers and cataracts, and is detrimental to crop-growth. The release of ODS damages the ozone layer allowing harmful radiation through to the earth's surface.

International agreements have seen the phase-out of the production and use of CFCs and more recently their harmful replacement, HCFCs. But these chemicals are still produced and traded around the world. Sophisticated methods of mass smuggling have been adopted by industrial criminals, including counterfeiting of legitimate brands by rogue producers. The most direct effect of this illicit industry has been seen where legitimate chemicals are mixed with banned ones. In 2011 explosions took place following servicing of refrigerated containers in Viet Nam. As a result of deliberate contamination of refrigerant, three people died in the explosions that occurred in Viet Nam and Brazil.²¹

While the trade in ODS should be diminishing, it continues to be detected regularly on a significant scale, with little monitoring to determine how extensive it actually is. Trade takes place from producing countries, mainly China and India, to all consuming countries but particularly less wealthy countries where equipment is less frequently or affordably replaced, and where repair of equipment rather than disposal, is more likely.

The scale of illegal ODS production and distribution, along with the technology involved, are indicators of corporate criminality. There is a need for robust industry regulation and enforcement to introduce

greater oversight of practices, ensuring they are ethical and legal. If States are to sign up to international agreements, compliance measures should be present to ensure that signature and ratification ensures response.

Extractive Industries

The extractive industries sector involves raw commodities, which are taken from the earth such as oil and gas, minerals and precious metals, through processes including mining, dredging and quarrying. Carried out by private companies on an industrial scale, the practices require the concession of land by governments. Demand for commodities is soaring and invariably the richest sources of commodities are found in some of the world's poorest countries. If not managed carefully, extractive industries damage vital ecosystems, resulting in biodiversity loss, pollution of soil and water systems and damage to local livelihoods.

The issue of extractive industries being part of organized environmental crime is debatable. The illicit elements of extractive industry are often facilitated at the outset of land acquisition through collusion between government and private companies, resulting in the granting of concessions for activities, but perhaps not in the subsequent trade. There are also links between illicit mining and control over mineral resources by armed groups facilitating and protracting conflicts.

Revenue from extraction should result in development of better social services for the country's people and a bridging of the gap between rich and poor. But what little does reach governments is often misappropriated and fuels the development of corrupt regimes and conflict. The gap between the wealthy and poor in resource-rich countries is growing. Lack of transparency of earnings of extraction companies only serves to make enforcement more difficult if it is to take place at all in corrupt establishments.

Costing the Crime

As with many clandestine activities, estimating the value of environmental crime is challenging. Many estimates are based on seizure numbers, which are believed to be around 5-10% of actual trade. Pro-active intelligence gathering is also low, and prosecutions rare, thus reducing the opportunities to gather information on the extent of trade and cost or profit.

A recent UNODC report²² examined transnational organized crime and assessed the cost of illicit economies including drug-related crime, intellectual property crime, environmental crime, trafficking in persons and smuggling of migrants. Of the total cost of organized crime, environmental crimes make up approximately 25% of the total value.

In 2010, a global report on transnational crime examined some of the most prevalent illicit timber flows and estimated that “imports of illicitly sourced wood-based products to the EU from China and South-East Asia in 2009 are estimated at some \$2.6 Billion and from South-east Asia to China at about \$870 Million”.²³ Since timber is often laundered into licit markets without detection these estimates are likely to be conservative. UNEP estimated in 2012 that the global value of illegal logging at between \$30-\$100 billion – up to 30% of the global wood trade with the significant involvement of organized crime groups²⁴.

One of the most concerning aspects of environmental crime is the dramatic acceleration of criminality, perhaps as organized crime groups begin to realize the profit potential and low risk compared to other forms of crime.

One of the most tangible examples of this rise is the poaching of rhinoceros and illegal trade in their horns

from central southern Africa to Southeast and East Asia. In 2007, 13 rhinoceros were poached in South Africa. In 2012 that figure reached 668 and at June 2013 the figure for the year was already at 428 and rising.²⁵ Rhinoceros horn, largely used as traditional medicine, can fetch around \$40,000 per kilo or up to \$260,000 per horn²⁶. No wonder organized crime gangs are becoming involved in the trade, not by poaching wild animals, but stealing rhino horn from museums and similar collections – according to Europol 100 horn across 16 European countries were stolen between 2011-2012.²⁷

Many crimes are still beyond our capacity to assess. The illegal trade in pangolins was estimated at between 40,000-60,000 animals in 2011 alone possibly making it the most traded mammal. A single pangolin, their bodies used in soup and scales for traditional medicine, can fetch \$1000 sold whole. But the direct financial cost is not the only factor. Loss of biodiversity and species through illegal trade also impacts upon human livelihoods affecting hunting for food and opportunities to benefit from industries such as tourism. Pangolins play an important role in natural pest control consuming an estimated 70 million insects each year.²⁸ The consequence of their demise to agriculture is difficult to predict.

These figures demonstrate a massive illicit economy solely centering around environmental commodities and in many cases resulting in significant losses in national income and revenue. But dramatic as these figures are, the financial cost of environmental crime is merely the tip of the iceberg as far as its impact goes. Damage to human health, livelihoods and food sources impact development and exponentially increase the costs to society.

The Implications

Whilst environmental crime is a serious and burgeoning global problem, and considerable effort is made to tackle it, it is essential to examine not simply the value or extent of the problem but more significantly the cost, in terms of human security, development and wider impacts.

Organized crime of any type is both a security issue in itself, and may also further threaten regional and national security through the strengthening of criminal groups and networks, reducing the impact and effectiveness of law enforcement, and destabilizing the rule of law. Environmental crime is no different to any other in this respect.

There are crossover issues involved in illegal trade including trafficking of persons into exploitative industries such as waste processing or production of counterfeit goods; smuggling of migrants to support such industries; revenue evasion on potentially legitimate commodities; and laundering of profits. These issues will be explored later.

There are, however, particular features that are unique to environmental crime which make improving the quality of the response all the more pertinent and urgent.

Environmental Crime is Time Critical

It is essential to recognize that environmental crime, unlike many other forms of crime, is a time critical issue. As our natural resources are finite, lack of action may have permanent consequences. It is often said with regard to species and ecosystems "once it's gone it's gone" and "extinction is forever". There is also evidence that damage to our atmosphere may be irreversible once it reaches a certain tipping point.²⁹ At the very least, environmental damage, such as to life-supporting coral reefs, may take hundreds or thousands of years to recover, yet can be destroyed in an instant.

Therefore, while there may be other issues of development, security and economy, which right now may appear more urgent, we cannot afford to be complacent on issues relating to environment and in fact need to act with urgency. Invariably, we are applying annual strategies to a half-century crime-wave, which is rapidly devastating a process of evolution that has taken place over 4 billion years.

The Human Cost

For millions of people around the world local reliance on wildlife, plants, trees, rivers and oceans is as strong as it has ever been. Human vulnerability to environmental changes is considerable. Such change may be caused by a number of factors, some natural and many man-made. Trade in environmental commodities is often perfectly legal, but is negatively affected by poor governance. Of all the causes of environmental damage however, crime is arguably one of the most preventable.

Environmental crime reduces the availability of food for communities through excessive and unsustainable hunting. Diminished fish stocks mean smaller catches and less food, with a tendency to catch undersized fish, further depleting future stocks.

Many areas with rich biodiversity and aesthetically attractive environments also benefit from active tourist industries, often making up a significant part of economy of countries. Local communities benefit from tourism through direct employment in entertainment industries such as safaris and scuba diving, and by providing services such as accommodation, transportation and restaurants. If key species are lost, or areas are degraded by deforestation or pollution, tourists will be less likely to visit. Tourism is also affected by perceptions of safety, with many travelers avoiding areas of high crime.

In countries that rely more on agriculture, there is a risk of crop failures as a result of climate change and an increase of incidents of flooding and drought, and the detrimental effect of pesticides entering the environment through land and entering waterways and the oceans - poisoning species and entering food sources. The demise of certain species may have a significant impact on our production of food, such as the reduction in bee populations due to use of banned pesticides. While some of the most harmful pesticides are controlled under multi-lateral agreements, illegal production continues and counterfeit poor-quality and contaminated pesticides are widely sold.

Harm and Intervention

Environmental crimes are often unique from other forms of crime due to the point at which the offence causes the most significant degree of harm. With many forms of crime, the complete offence involves manufacture or production of commodities or preparations, which take place before the greatest harm occurs: the narcotics industry and human trafficking are examples of such crimes.

With environmental crimes, including the killing or taking of wildlife, felling of trees or pollution of environment, the greatest harm often take place at the very outset of the offence. What then follows to complete the offence is the preparation and trade of the commodity in question, which while may generate profit are invariably insignificant in terms of harm caused.

The point of a crime at which intervention takes place has a significant impact upon the harm subsequently

caused. This concept is widely appreciated by enforcement officers who frequently need to make tactical decisions on intervention timing. But the application of this concept to environmental crime is generally under appreciated by practitioners who may assume that the harm caused by any form of organized crime can be prevented or reduced through intervention at any stage in the commission of the offence.

Prevention of crime is an imperative goal for enforcement and criminal justice practitioners. It is essential to understand the point at which interdiction will be most effective. With environmental crime, intervention after the inception of the crime is often futile. Therefore, enforcement activity should focus upon disrupting crime series and identifying and stopping the key controllers of organized crime to ensure that future offences are not committed.

To facilitate deforestation for a variety of purposes, land is 'grabbed' from often poor communities by governments who lease it to wealthy private companies involved in the timber and agricultural industries, extraction of natural resources and development of infrastructure. Often with collusion between government and private sector, individual landowners may sell land for what may be an acceptable price to them, only for the companies to disregard boundaries and take more land than that which was sold. Land may also be leased without any knowledge of the landowners, until authorities forcibly evict them.³⁰

Environmental crime also affects the atmosphere. The continued illegal production and use of ozone-depleting substances poses a significant risk to human health from the breakdown of the ozone layer. Ozone protects humans from the harmful radiation of ultra-violet rays (UVB) of the sun. Without such protection human health is affected: incidents of skin cancers increase, particularly affecting children due to the sensitivity of their skin. Occurrences of cataracts also increase, and human immune systems

are adversely affected by unprotected exposure to UVB.

The trade in hazardous and electronic waste presents dangers in the locations where it is illegally dumped. Residents in impoverished communities rifle through waste extracting parts that can be reused or resold. The breaking of equipment for its component parts, sometimes through burning, releases toxic chemicals exposing workers to them. As components break down they also leach into waterways and land and potentially affect food sources and drinking water.

Environmental Crimes Fuel Conflict

The connection between environmental crime and conflict raises significant concerns, elevating the issue to a level which arguably calls for the engagement of a different set of actors. It is not unusual for fragile states and countries in conflict to hold vast and valuable natural resources, which while usually protected by national laws and enforcement, are afforded no such protection in times of conflict

when other concerns take priority and the rule of law breaks down. Natural resources become ripe for the taking, and as already acknowledged are often freely available sources of profit, which can help further supply insurgents and corrupt regimes.

Although environmental crimes have long been a concern for enforcement agencies, the relationship between such crimes and conflict, terrorism and insurgency has been underappreciated despite evidence of the connection, with little effective framework for response. These specific issues are now gathering some attention however, and we may be witnessing greater responsiveness to environmental crime because of the connection to wider security issues but perhaps not as a discrete crime-type.

The use of ivory as a resource for funding by militant groups goes back several decades, but increased evidence is now emerging indicating that groups that pose global threats are being supported by their involvement in environmental crimes.

The Lord's Resistance Army (LRA), a rebel group that originated in northern Uganda is now scattered across a number of central African countries some of which are rich in natural resources. Responsible for numerous attacks on villagers in the region, the LRA needs means of maintaining weapons and basic supplies. Allegations of the LRAs involvement in elephant poaching reached international concern in 2012. The UN Security Council called³¹ for an investigation into the involvement of the LRA³² in the ivory trade to fund their illicit activities in the Democratic Republic of Congo (DRC).³³ There is also evidence that the LRA have been engaged in firefights with park rangers. The UN Secretary General expressed concern over the involvement of rebel groups in the ivory trade, mentioning the possibility that poacher may be armed with weapons from Libya.

The LRA is not the only group to use ivory as a major source of funding. The Somalia-based Al Shabaab is thought to source around 40% of its funds from poaching elephants to fuel the illegal ivory trade, mainly from Kenya where anti-poaching rangers have been killed. The group is thought to raise between \$200,000-600,000 each month from poaching with the main markets being in Asia.³⁴

Announcing in July 2013 his Executive Order³⁵ to address wildlife crime, US President Barack Obama observed³⁶ that "Al Shabaab's recent merger with al Qaeda makes the link between wildlife poaching and extremist ideology and terrorism more clear", in reference to allegations of 'blood ivory' helping to finance the groups. In addition to ivory trade, Al Shabaab is thought to be involved in a number of other criminal activities. There is also evidence of Sudan's Janjaweed being similarly involved in the ivory trade.³⁷

In an incident in March 2012 in Garamba National Park, DRC, 22 elephants were killed of which 15 were killed by a single shot to the head. During the incident a Uganda People's Defence Force helicopter was observed flying low over the park around the time of the incident although the UPDF have denied any involvement.³⁸

While the involvement of apparently undefeatable and well-established groups may seem overwhelming for enforcement agencies, it is unlikely that these groups control the ivory markets. The buyers of African ivory, who sell to Asian markets, are more likely to be well-connected familial groups in Asia, who can ensure safe delivery, processing and sale within markets where the most profit is to be gained.

Africa is not the only region to be affected by groups that use environmental commodities to fuel conflict. In Columbia, the Revolutionary Armed Forces of Columbia (FARC) has waged a 50 year war funding itself with cocaine trafficking, extortion, kidnapping – and mining of natural resources. FARC owns the only known tungsten mine in Columbia, from where a number of multinational companies most-likely source tungsten.³⁹ The FARC are also believed to control the black market in coltan, mined in Venezuela on the border with Columbia.⁴⁰ The unregulated coltan reserve was estimated in 2009 to be worth \$100 billion with foreign investment helping to increase exports of and income from these illicit minerals.⁴¹

To restrict funding to militant groups around the world, enforcement agencies need to identify who is controlling the international trade, and target

resources towards them. But equally, a range of actors addressing environmental crimes effectively across all levels would impact upon such groups and their capacity to raise funds through trade in natural resources.

The Corruption Connection

Corruption facilitates environmental crime at almost every level. At the highest levels, state officials sell permits, land and extraction rights to individuals and companies based on the level of the kick back rather than the merit of the tender, or distribute them as gifts amongst favored cronies. Criminal justice and law enforcement officials are bribed to prevent convictions. Local and national officials permit illegal loggers and poachers to gain access to forests and protected species and in many cases provide false customs declarations to allow the commodities to exit the country or region undetected. Pastoral communities, whose poverty and lack of legitimate economic opportunity present them with few alternatives, are either convinced or coerced to become supporters and proponents of this illicit trade in order to secure a livelihood.

Where evidence of corruption exists, it is generally restricted to wildlife trafficking and illegal logging, while there is less evidence regarding trade in ozone-depleting substance or hazardous waste. Greater research is required to fully comprehend the extent the problem.⁴²

Corruption fundamentally undermines governance, statehood and the rule of law, and critically weakens institutions of the state and their capacity to deliver services to the people. This captures states in a vicious circle by which the increasingly inter-woven nature of politics, organized crime and corruption poses a significant threat to the long-term development of democracy across the developing world. The seeming impunity (with some exceptions) of elites from prosecution and their ongoing connections to organized crime undermines citizens' trust in democratic institutions, and illicit profits may have bolstered some authoritarian regimes. Such trends, and their ability to perpetuate themselves, have long-term implications for future political and

economic progress.

Within the context of developing successful responses, corruption undermines all other efforts to combat environmental crime. A great proportion of the millions of dollars being invested around the globe into combating environmental crime may be wasted because the efforts being funded have little chance of succeeding in the face of corruption. Law enforcement capacity is being built, but if a barrier of corruption protects the most-significant criminals, then only superficial enforcement can take place. Tackling corruption should become a priority activity for all projects which address environmental crime and more broadly, environmental protection.

The existence of national environmental enforcement agencies may be a welcome response, but there have also been cases where such agencies become magnets, or targets for corruption. In June 2013, news broke that over 30 officers from the Kenya Wildlife Service had been suspended for corrupt practices, including their alleged involvement in poaching of wildlife.⁴³

Corruption while identified as a significant impediment to addressing environmental crime is still significantly under-discussed in international fora. It is occasionally mentioned but generally in passing as though continued discussion may lead to accusation or offence. In order for corruption to be addressed effectively, greater openness needs to exist within national and international meetings, so that the subject is discussed. Unless meaningful discussion takes place, and solutions found, other efforts to prevent environmental crime may be futile.

The Criminal Chain

In order to better design a set of strategic responses, it is important to understand the different processes, types of crimes and criminal actors involved in the chain of environmental crimes. Whilst each

area of crime may involve different mechanisms or combinations of criminals, we can divide those involved into three groups:

Criminal Flow	Criminal Act	Criminal Actor
Source	Poaching and Live Capture Felling of Trees Illegal Fishing Extraction of Minerals/Resources Collection and Disposal of Waste	Poachers Loggers Fishermen Producers Collectors Disposers Local Corrupt Enforcement
Transit	Carving/Design Tanning Document Fraud Bribery Concealment Smuggling Money laundering	Manufacturers Designers Smugglers Brokers Shipping Companies Fraudsters Financiers Corrupt Border Agents
Destination Market	Consumption Purchase Use	Market Controllers Vendors Traditional Medicine Practitioners Wildlife Restaurant Owners Pushers Consumers Entertainers

The list of entities included in the table above is by no means exhaustive and serves only as illustration to categorize the various elements. It is important to recognize the diversity of criminality, convergence and crossover that occurs and that those involved in environmental crime cannot in reality always be so easily compartmentalized. However, identifying division in the chain serves to allow a better entry point for analysis of the various responses required along the chain.

Source

At the source end are the poachers, loggers, and fishermen, producers of chemicals and collectors and initial disposers of waste. The environment they work in could be described as local, and in many cases is the sharp end of the crime.

Understandably, where poverty and opportunity to profit from crime come together, the temptation to become engaged in criminal acts may outweigh the risk of capture or moral deterrents. A lack of

awareness of the impacts of crime both locally and globally may prevent offenders from understanding the full consequences of their actions. Furthermore, the presence of organized crime in a local setting may prevent people from engaging in legitimate sources of employment.

We should be cautious not to be misled that offenders at the source end are necessarily poor villagers with no other options. In the case of tiger traffickers in India, for example, the poachers are as complicit in the criminal networks as those making the greatest amount of profit, with tigers poached to order, and skins prepared by skilled individuals. Sustenance hunting may be connected to transnational organized crime where local villagers are aware of the existence of a larger market. There is a suggestion that while commodities are undoubtedly sourced to order, local hunters will also poach opportunistically and stockpile goods until a buyer comes forward.

Whilst profit may be a driver of crime, circumstance may make it more likely that individuals become or continue to become involved in the commission of crime. Sustenance through hunting or harvesting from the land is a natural occurrence for millions of people around the world. Timber is felled for construction and firewood, and wildlife is hunted for food. When regulations ban such harvest, individuals may take the decision to continue to hunt, but this level of crime is unlikely to constitute organized crime.

Transit

In order to ensure that goods travel from one end of the market to another, significant logistical challenges need to be overcome. Storage facilities need to be procured, documents forged, or obtained to legitimize goods. Transportation needs to be arranged and collusion with shipping agents and those working for airlines. Relationships may need to be cultivated between individuals who can ensure safe passage of goods. In addition, and critically, money needs to exchange hands for goods and services, and is then often laundered to conceal its origins.

The number of individuals involved in these logistics is almost impossible to determine. Each regional or even local location may involve a number of traffickers all performing similar roles at different levels. It is also likely that in some cases just a few individuals may perform a number of roles.

In many examples it is the individuals at 'the center' of the trade who are described as the traffickers, and are widely believed to be the key group of criminals who need to be targeted. This is likely to be far from the truth, and in fact these 'facilitators' while key to the industry, are low-level players, similar to the get-away driver in a bank robbery. They may however be common denominators with connections to bigger prizes.

The transit stage of organized environmental crime is a key step in the process but one that frequently falls between gaps in responsibility. Where transit takes place between source and destination countries, the transit country is neither offender nor victim, but in fact it is weaknesses in their enforcement that make certain countries more attractive than others to smugglers.

Destination Market

A number of actors are active in the destination facilitating the transaction to the final consumer of the illicit environmental good.

High Profits

Many of the drivers of environmental crime are similar to other forms of organized crime. Perhaps foremost is greed for financial gain.

Environmental commodities tend to be sourced for very low outlay but may garner very high prices at the consumption or market end. They therefore provide high profit margins for most individuals involved – potentially higher than any other form of organized crime. A factor to be considered is not just the profit of individual crimes but that many industries have been continuing with little disruption for around 25 years.





Photo provided by Environmental Investigation Agency (www.eia-international.org)

Vendors

A key step in the criminal chain is ensuring that the commodities reach the hands of the consumer. Those who sell or supply the end product are key links in the chain. It is possible that in some circumstances, vendors may be unwittingly supplying illegally sourced products, particularly where parallel legal markets exist. But in many cases, the vendors are simply part of a network of individuals with a specific role to play in securing perhaps the last level of profit. Illicit vendor activity can often be gauged by their behavior – clandestine and cautious of detection, regardless of the consequences. Craft market sellers, restaurateurs, traditional medicine practitioners and furniture manufacturers are examples of local vendors.

Consumers

The general public, at the level of the individuals who deliberately or ignorantly purchase, eat, or use the end products of environmental crime are also an important actor in the criminal economy chain. In many cases, the consumer may genuinely not understand the process that a product has gone through before it reaches them. Goods may be laundered into legal markets, appearing to the

consumer to be legitimate. The trade in timber products, such as redwood or mahogany, is an example of where products are illegally sourced mainly in Asia, and sold mainly to European consumers as legitimately sourced products. Timber products may be sourced through transit countries, and labelled to conceal the genuine origin. Legislation such as the US Lacey Act (amended in 2008 to include a broader range of plant products) aim to ensure importers are liable for verifying the provenance of their products.

Corporate consumers are a major link in the criminal economy chain due to the scale of their purchases. While the UN Conventions (described below) prohibit certain environmental crimes, additional legal controls have been placed on corporations to prevent and limit certain well-known environmental crimes and their impacts – for example, as part of the 2010 Dodd-Frank law, the U.S. Securities and Exchange Commission requires publicly traded companies to follow UN guidelines and disclose by May 31, 2014, whether they are buying gold, tin, tungsten or tantalum from mines that finance war in Central Africa. However, this is far from comprehensive, and there are well-documented major multinationals buying minerals from countries whose mines are operated by criminal groups.

Preventing consumption of environmental commodities is a challenge due to the size of the market and the number of individual consumers. Enforcement, in the sense of prosecuting offenders, while should not be ruled out as an option, is liable to exhaust resources. In many cases, the end consumer may have no way of knowing if the goods they purchase were illegally sourced. Many argue that if demand could be reduced or stopped, there would be no trade at all. A range of demand-reduction solutions need to be adopted that will affect the behavior of mass-markets, and stop potentially millions of consumers from making the preceding criminal acts economically worthwhile.

The Controllers of Organized Crime

The individuals most responsible for transnational crime are arguably those who profit most from it, or have the greatest influence over its execution – often one and the same.

This group of criminals exists at the heart of environmental crime and is the pivot within the networks of individuals around the globe who commit individual criminal acts at various nodes in the chain.

Networks of individuals frequently conduct transnational criminality that takes place from source to consumer with a number of facilitators. Whilst many within the network may be known to each other and may conduct criminal acts, the traditional, hierarchical organizations are less frequently encountered in environmental crime. Therefore, a 'head of organization' is less likely to be found than a number of key individuals within countries and continents.

Between source and destination, harvesters and consumers, these few individuals control the trade. They place orders, make bulk purchases, arrange transportation and processing, and ensure that the goods reach the hands of the end customer. They oversee business, as would any other executive. Identifying the key individuals within criminal networks, even at a local level, is an essential step to directing resources efficiently and ensuring that they are not exhausted on 'lesser' offenders.

In addition to the many controlling criminals within local or national networks, there are undoubtedly a small number who control global environmental crime markets. Some of these individuals have been publicly identified – Sansar Chand, Vixay Keosavang⁴⁴ and Labora Sitorus⁴⁵ to name just a few. Whilst it is undoubtedly these individuals to whom most attention should be directed, evidence of high-level connections often renders these people 'untouchable'. In some cases these people are senior officers in the police, government officials, ministers, or have connections to royalty. The concept of them being stopped through conventional enforcement is arguably unrealistic. But they have henchmen and underlings who can be targeted, and history tells us that even the most well-connected and apparently powerful criminals can be convicted. But the will at high-levels of state must be present, along with the desire to see justice done and be seen to be done.

The rise of the controller and their position above and across the breadth of international environmental crime is only set to increase along with globalization, but particularly crime conducted over the internet. Wildlife and timber trade is already conducted on the 'net and banned ozone depleting substances can also be found for sale and export. As internet crime appears overwhelming, the risk it poses to the environment should be of great concern.

There is also a group of significant players who whilst may not commit substantial criminal acts (or at least not ones they could be convicted of), do contribute significantly to ensuring a set of circumstances which facilitate crime to take place. Amongst these are private businesses, particularly the development and investment sectors.

The issue of where the illicit markets merges with the licit is a grey area as is the range of actors that sit largely in legitimate industries who facilitate the trade and its onward passage. These are the intermediaries within the illicit markets. One of the reasons that organized environmental crime has become so insidious is the way it sits increasingly connected with the licit economy, and thus part of the reason why now we need to be more proactive in a response.

The Response

“The despoliation of the environment is arguably the gravest of all the problems we are going to hand on to our children and grandchildren. They will not thank us – particularly those of us who work in the administration of justice – for having done too little about it at a time when action and prevention were feasible... Environmental crime, if established, strikes not only at a locality and its population but also in some measure to the planet and its future. Nobody should be allowed to doubt its seriousness or to forget that one side of the environmental story is always untold”.

*The Right Hon. Lord Justice Sedley, Lord Justice of Appeal,
Royal Courts of Justice (2009)*

Environmental crime is arguably the most challenging form of organized crime to tackle from an enforcement and criminal justice perspective. It is one of few crimes that is genuinely time-critical: every delayed response allows damage to occur on an irreparable scale, to our natural habitat and human health and wellbeing. Furthermore, environmental crime takes place in or affects every corner of the globe; and individual offences have far-reaching impact making it a truly international crime.

To address such a diverse and multi-faceted crime area requires a similarly multi-faceted response. While there has been much effort in various directions, the overall global response to environmental crimes – much like most transnational organized crimes – lack a strategic vision and an understanding of the broad spectrum of responses that are required to truly turn back the trends and prevent environmental crimes. A more strategic, holistic approach is needed, which balances awareness raising against other important interventions such as strengthening legal frameworks and law enforcement capacity, combatting corruption and catalyzing political will. It is also important for actors seeking to counter wildlife crime not simply to coordinate and mobilize with each other, but also with a broader range of stakeholders including law enforcement, the financial sector, and private companies. If we are to be more effective in combatting environmental crime in the future, then we will need to mobilize, implement and strengthen all of these responses.

The Responses



A holistic spectrum of responses employed to counter the criminal economy chain for environmental crime can be broadly broken into six categories, which are shown in the diagram above and briefly described below:

Harnessing Political Will

With the exponential growth of new media, civil society has a greater opportunity to increase political pressure on governments to act. Incidents of environmental crime are broadcast around the world within seconds as a result of viral sites such as Facebook and Twitter. A sense of concern is often expressed through re-posting of cries for action

that must be heard by most policy-makers and decision makers.

The use of e-petitions is increasing through governments and also civil-run sites such as change.org, which claims over 40 million users across 196 countries. The effectiveness of such petitions to achieving tangible change may not always be easy to assess, but the accessibility for anyone to start a petition for any purpose empowers civil society to speak as they have never spoken before. The success of such initiatives in raising awareness amongst the electorate cannot be denied - Change.org claims thousands of victories.⁴⁶

One activity apparently intended to harness and develop political will is to hold “high-level” meetings and “summits” to discuss environmental crime. Invariably, the organisers attempt to hold the participants to some level of commitment so that the meeting produces some form of sustainable action. In recent years, an array of resolutions, decisions, pledges, consensuses have been developed, but the point of them is questionable. The participants to such meetings are often not in a position to commit their country to tangible change or financial investment. The language of such documents is therefore often grand but vacuous and unspecific. Far better would be to put effort into strengthening legally binding mechanisms and for the international community to enforce them.

Implementing Policy Responses

States play arguably the most significant role in combating environmental crime, determining and implementing national policy must be a key step to effective actions that see such policy impact and consequently prevent environmental crime at all levels.

While international policy is also relevant, it is a challenge to see that agreements made at a national level are implemented locally. Knowledge within international organizations and national agencies is often limited to a few individuals, particularly where an agency or department responsible for environment is suddenly faced with having to address organized crime.

As with many of the responses to transnational organized crime, given the breadth of the impact on rule of law, governance and development, it is increasingly being recognized that a purely law enforcement approach is no longer sufficient. In order to avoid a situation where policy is too focused on law enforcement and seizures, or is overly determined by a small number of individuals, multi-disciplined teams must come together, with a range and depth of expertise commensurate with the problem. For example, since environmental protection often falls under a specific ministry, it is essential to secure the substantial input of departments responsible for tackling crime, developing legal frameworks and protocols for corporate or environmental protection, for advocacy, outreach and public awareness.

The same is true for international policy-setting conventions. It has been said regarding wild flora and fauna for example, that discussing organized crime in CITES meetings is like the pharmaceutical industry discussing the trade in illicit narcotics. Ensuring the right actors are addressing the most serious issues at hand is imperative to implementing policy effectively, and ensuring ownership and the availability of sufficient resources. Equally, it is important to ensure that international policy can be genuinely and effectively implemented at a national level, and that an agreement to do so, however apparently compelling, does not automatically translate to action.

The Impediment of Diplomacy

It is generally accepted which countries are the most responsible for environmental crimes. Developed countries create significant amounts of hazardous waste, which is then exported and illegally dumped in developing countries. The greatest consumers of wildlife from Africa and Asia can be pinpointed down to one or two countries. Rainforest destruction can easily be detected through satellite imagery, and therefore greatest-losing countries can be identified.

Civil society groups, with no obligation to be overly diplomatic and without conflicting interests, frequently expose and name offending nations usually backed up with evidence, research and analysis.

Yet within national and intergovernmental organizations, such naming and consequential shaming is perceived as undiplomatic and therefore unacceptable. When the UN develops reports on crime issues, it is vetted by countries involved, which can then request that text be edited. Even bilateral communications between agencies and individual member countries are heavily censored so as to avoid causing offence.

Attempts to address genuine issues by 'naming and shaming' countries are generally not acceptable. There are however mechanisms which could be adopted to highlight under-performing countries and ensure compliance. For example, members of the Financial Action Task Force are required to comply with recommendations to prevent money laundering, including the financing of terrorist groups. The FATF maintains a 'blacklist' of non-compliant countries. Such mechanisms could exist in relation to other forms of organized crime, but international political will needs to be strengthened if this is to happen.

Scrutiny and critical analysis of countries is also not unheard of. The USA annually produces its Trafficking in Persons Report which lists all countries in 'tiers' depending on the measures they take to meet minimum standards according to US legislation. Concerned countries could apply similar grading to its fellow nations depending on their measures to combat environmental crimes. Arguably, environmental crime affects the global population, and uniformed measures to combat it are essential. Perhaps the legitimate trade in environmental commodities is clouding the desire to address the illicit markets.

While states can arguably not be held responsible for the actions of individual criminals, they are responsible for enforcement responses including the development of effective legislation and allocation of sufficient resources to combat the problems. And while UN bodies and agencies such as INTERPOL, or the WCO are not above national agencies, nor can they dictate national policy, their role in assisting countries to address environmental crime should extend to informing them of gaps and weaknesses.

One consequence of over-diplomacy is that UN resolutions and decisions that are often intended to define international policy and national action to combat environmental crime are watered down to unspecific and vacuous language. While some progress is better than none, the effort that goes into such outputs should arguably result in tangible responses.

Improving Legal Frameworks

Whilst environmental crime is a global problem, some countries lack specific legislation tailor-made to tackle it, although many are evolving such legislation.⁴⁷ Penalties vary from country to country, for example smuggling of ozone-depleting substances in the USA can attract a prison sentence while in Afghanistan it is treated as an administrative issue. The lack of specific legislation and penalties however does not prevent agencies and prosecutors from utilizing alternative legislation, such as that which applies to money-laundering, revenue evasion, health or quarantine offences.

Lack of depth and breadth: The impact of activities to combat crime can either be broad and overarching (such as at an international policy level), or narrow and deep (such as national or local initiatives). Ideally a holistic and thorough response would be a combination of the two in order to target effectiveness and also since different actors are involved at different levels. Environmental crime is arguably still weak in both approaches with international policy and response not broad enough and national effort not focused enough. International policy, developed in line with national needs should be broad and strong leading to focused, direct response at international levels.

International Conventions: In order to address issues where production, trade in or use of environmentally sensitive commodities where may have an adverse effect on humans and/or the environment, a number of international agreements have been developed. Known as multi-lateral environmental agreements or MEAs, they serve to join parties together in common agreement over measures to control or prevent trade, ensure compliance and enforcement of the agreement. The

mandate, scope and strength of agreements vary significantly, as does their effectiveness.

Amongst the range of MEAs which may impact upon or prevent environmental crime are: the Convention on International Trade in Endangered Species of Wild Flora and Fauna, or 'CITES'; the Montreal Protocol on Substances which Deplete the Ozone Layer, and the Basel Convention. Other conventions and initiatives also include the UN Collaborative Programme on Reducing Emissions from Deforestation and Degradation (UNREDD). Aside from these environmentally-specific agreements, there are also less utilised but nevertheless relevant mechanisms such as the UN Convention Against Corruption and the UN Convention Against Transnational Organized Crime.

These international agreements are described in more detail in Appendix II. Their effectiveness varies significantly since each is subject to different requirements upon member states and varying levels of penalty or sanctions that can be applied in the case of non-compliance. In terms of combating respective crime, the treaties imply or require countries to conduct enforcement sufficient to ensure compliance with the convention. Many countries already have national legislation or would develop such legislation unilaterally. A few countries go beyond the requirements of the MEAs while others fall short.

CITES is essentially a trade agreement but which lists the level and circumstances under which certain plants and animals may be traded. In the case of non-compliance, trade sanctions may be applied against countries. Furthermore, the CITES Secretariat, and national authorities, work to prevent illegal trade in species, through enforcement officers. However most national CITES Management Authorities are not law enforcement agencies but fall under ministries of forest or environment. Their powers and knowledge of crime and enforcement is often limited.

The Montreal Protocol aimed to reduce the trade in chemical substances which harm the ozone-layer was described by former UN Secretary General Kofi Annan as "the single most successful international agreement to date" due to its widespread adoption and its effectiveness to date⁴⁸. The Protocol has

proved effective in reducing trade in ODS particularly in developed countries, however due to significant and on-going demand in developing countries, production and trade of CFCs and HCFCs continues. The Protocol fails to specifically address illegal trade with illicit goods not counting towards import and export quotas of countries. Countries are not obliged to report incidence of illegal trade. As with CITES, national responsibility for implementation of the Montreal Protocol falls to National Ozone Officers who mainly fall under divisions of the ministry for forests or environment and lack substantial knowledge of crime and enforcement.

The Basel Convention was adopted in 1989 in response to discovery that toxic waste was being exported from mainly developed countries and dumped in Africa and other developing parts of the world. It restricts movement of such waste and applies regulations where movement is permitted. Prevention of illegal trans-boundary movement of chemicals and waste was addressed in the 2008 'Bali Declaration'.

Strengthening Criminal Justice Responses

The national response to environmental crime varies from country to country. Some nations have advanced, dedicated environmental enforcement agencies with decades of experience and state of the art resources and equipment as advanced as any other national law enforcement agency. Such established agencies are, however rare, and many countries that do have them are constantly threatened by funding cuts due to other priorities. The reality is that many countries that need sophisticated enforcement have no dedicated enforcement agency to deal with the problem.

Where dedicated environmental enforcement agencies do exist, they are often quite separate from other law enforcement bodies and usually fall under ministries of environment or forestry instead of ministries of security or home affairs. This often results in officers having not only limited resources, but also a lack of investigative powers, including the power to conduct searches, make arrests or oversee prosecutions. While the option to engage with and seek assistance from 'mainstream' law enforcement exists, inter-agency friction and competition make such processes unproductive.

Inter-agency Cooperation and Prioritization:

Cooperation between enforcement agencies is a problem in many countries due to differing mandates, historical rivalry and competition and perceived effectiveness and issues of trust. In many jurisdictions to combat environmental crimes effectively, cooperation is essential since detections will often be made by Customs agencies at borders, or environmental or forest agencies within countries. Responsibility for, and power to conduct investigations falls more appropriately under a body with wider investigative powers such as the police. Cases are often not handed over from one agency to another, or where they are handed over they fall to the bottom of existing workloads of the receiving agency.

Similar situations may also occur within prosecutors' offices where high workloads for many different crime areas result in environmental crime falling as lower priorities. In addition, while awareness of environmental crime is increasing, many prosecutors may see them as trivial or at least not as important as other crimes types, including those where direct harm has occurred to a person or to their property.

In order to address these issues amongst the judiciary, some countries in Asia have developed 'Green Benches' – associations of judges who develop specific knowledge of environmental crimes, their impacts and prevalence in their region. This facilitates a better-informed and appropriate response to hearing such crimes, and delivering sentences commensurate to the severity of the crime. Dedicated environmental courts and judges also ensure that crimes are heard in a timely fashion rather than other crimes being prioritized.

In many criminal spheres, the threat of detection and penalties are intended to deter the commission of offences. If detection was inevitable and penalties extreme, most conscious offenders would be deterred. Where both the risk of detection and the penalties if caught are low, necessity or greed may prevail. Many countries cite severe penalties for environmental crimes, including the death penalty, but such penalties are irrelevant if detection and prosecution are unlikely.

In addition to penalties such as fines and imprisonment, there is a need to use of legislation to confiscate the proceeds of crime and seize assets that have been purchased through illegal means. Such legislation is used effectively in many countries for a number of serious offences, but is yet to be widely extended to environmental crimes. 'Proceeds of Crime' legislation helps to ensure that crime does not pay, and may also recoup lost revenue for governments.

Methods of Enforcement: Reactive and Proactive:

The style of enforcement activity used to combat crime has a significant effect on the outcome of such activity. In general terms, enforcement actions are either reactive or pro-active. "Intelligence-led enforcement" has become a popular buzz-phrase and recommendation for the response to environmental crime. It is an important and often effective response to serious crime but it also requires substantial effort and time. It may also be used to investigate crimes that have yet to be committed, requiring speculative investment of resources.

Frequently, seizures or interception of environmental commodities occur and are often described as a starting point for an investigation. Often considered successful interventions, seizures are too often seen as 'enforcement' per se whereas they are in fact part of a wider and often more comprehensive investigation. The emphasis on seizures as an end-point also detracts from the need for an investigation that might lead to preventing future commodities from being trafficked. The regularity of seizures of similar commodities over decades indicates that seizures not deterring smugglers.

The preventative potential of environmental enforcement often falls somewhere between reactive and pro-active enforcement. Reactive investigations by agencies following seizures are only occasionally carried out fully, perhaps due to the perceived preventative effect of a seizure, or because such investigation falls beyond the mandate or power of an agency. Pro-active investigations require developmental intelligence but more importantly they need financial and institutional support to conduct potentially long-

term surveillance, or undercover operations, or analysis. In addition, legislation to conduct intrusive investigation methods only occasionally extends to environmental crime.

In fact, effective enforcement requires a holistic, comprehensive application of all of the above methods, for a sustained, potentially indefinite period. Crimes are often detected after their commission, or in the case of series crimes, at some point in that series. Developing knowledge of trends and modus operandi, combined with intelligence gathered by trained informant handlers and evidence from crime scenes (including documentation, electronic devices, and packaging) can provide a package to initiate a pro-active investigation to gather intelligence and evidence against more serious offenders. Once enforcement action occurs, and an appropriate penalty is applied, ensuring that the public are aware of the case creates a deterrent.

Not only is such comprehensive action necessary however, but equally important is sustainability and momentum – developing one case upon the evidence and intelligence gathered on the previous one. Enforcement cannot rest.

There is an imperative obligation to assess the current success or otherwise in combating environmental crime. Momentum gathers to solve the problem, but we need to ask whether current strategies are effective. Many impediments exist to reducing environmental crime, yet deeper analysis shows that the most significant challenges come not from the criminals, but from within our own organizations and governments, and the policies and practices they choose to adopt.

Investigative Techniques: A vast range of investigation methods is available to enforcement agencies tackling environmental crime. But experiences of experts working with investigators have consistently found that methods used to tackle other forms of organized crime are infrequently used to address environmental crime.

CITES and INTERPOL have developed a guide to questioning wildlife traffickers, which literally lists questions that interviewers could use⁴⁹. Interviewing

is a basic technique taught to almost all enforcement officers, yet the need for such a guide indicates a lack of knowledge and skill in this area by the officers tasked to investigate it. Surveillance is another highly effective and arguably essential tool to gathering intelligence and evidence against criminals, yet very few environmental crime investigators in the world have been given even basic training in surveillance, a skill used daily to investigate serious crime.

Basic equipment and software for downloading information from mobile telephone SIM cards can be purchased for around \$20. In an age where almost every adult owns a mobile telephone, the ability to interrogate seized phones and SIM cards for contact information, call data and text messages is invaluable to investigators. Controlled deliveries are used in drugs investigations to follow smuggled goods and identify traffickers and recipients. It is a relatively straightforward process, yet rarely used to track environmental contraband despite efforts to enhance knowledge of this technique⁵⁰.

Clearly the arsenal of tools available to enforcement officers is extensive. But the examples described above are ‘bread and butter’ to most detectives and would be used frequently against more serious criminals. Amongst environmental investigators however, these techniques are not taught to them, used by them, and legislation and powers may not allow them to conduct such methods. It should be no surprise that enforcement against environmental crime is poor when investigators are hampered by the lack of options open to them to face sophisticated criminals.

International cooperation: The UNODC suggests that “only interventions that are made at a regional or global level – are likely to have a chance of succeeding” against TOC and recommends integrating “national responses into international strategies” and developing transnational justice.⁵¹ No doubt, greater cooperation, cross-border enforcement and intelligence sharing is thought by many to be the answer to combating transnational crime. But it is also proving extremely challenging.

Much effort has been put over the years into encouraging and increasing international

cooperation and action to combat environmental crime. Intergovernmental organizations like INTERPOL and the World Customs Organization manage information management platforms such as the I24/7 platform and the Customs Enforcement Network both of which can be used by national enforcement officers to exchange and access information stored on international databases. INTERPOL and the CITES Secretariat developed the Ecomessage⁵² in 1994.⁵³ It is a specific format to assist officers to share environmental information in a standardized format. In 2013 it was adopted by parties to CITES as *the* form to use for exchanging information.⁵⁴ But its usage and number of submissions has been below expectations. The CITES Enforcement Expert Group has noted a “very poor submission rate of Ecomessages”⁵⁵ and international meetings often result in pleas for countries to make greater use of the tools available to them.⁵⁶

There are certainly promising initiatives in the area of international cooperation. Over a number of years approximately ten wildlife enforcement networks, often known as WENs, have been formed around the world. WENs are designed to develop into both political alliances to combat wildlife crime, and also to develop the capacity of front line law enforcement agencies to tackle criminality.⁵⁷ Wildlife networks have been developed through a number of different initiatives and their effectiveness may vary. But recent efforts have been made to bring them closer together to enhance communication and cooperation.⁵⁸

Another developing success story is the Border Liaison Officer (BLO) network implemented by the UNODC.⁵⁹ BLOs were developed across the Greater Mekong Sub-region in 1999 to address cross-border drug trafficking. They feature cooperative offices on either side of a border that act as local clearing houses for information exchange and operational activities. They are usually multi-agency units including police, customs, immigration, and border army.

In 2009, the BLO mechanism was expanded to cover other forms of organized crime including human trafficking and migrant smuggling, wildlife and forest crimes and pollution crimes. A UNODC programme called Partnership Against Transnational-crime

through Regional Organized Law-enforcement (PATROL) aims to work with the BLOs to strengthen their ability to tackle such crimes.⁶⁰

PATROL is one of the more effective initiatives against trans-national crime in the Asia region. Some support is provided to develop infrastructure and equipment at often remote but strategically border crossings. But the key element is the delivery of anti-smuggling training delivered by international and national experts to officers from a range of enforcement agencies. Knowledge and skill-levels vary greatly between agencies and countries, but the courses raise awareness and undertaking of investigative techniques. Bringing agencies together enhances cooperation and decreases the likelihood of corrupt practices in front of partner agency peers. The challenge of initiatives like PATROL however is sustainability and maintaining momentum to ensure that training is developed into effective responses.

Despite the significant efforts described, there remain a multitude of obstacles to international cooperation, not least fundamental issues such as language, culture, and unequal resources. In addition, even countries in the same region may be at different nodes in a criminal chain, have different criminal groups, and different level of criminality. Governance, penalties, and justice systems vary greatly.

Whilst international response to combating international crime may seem logical, are we placing too much energy and money into trying to bring uniquely different countries together? Is it not more logical for countries to protect their own natural resources, people and livelihoods and enforce their borders and territory to prevent criminality from abroad? If each country made greater effort, would this not equal the combined effort of a number of countries? Donor countries and international agencies should therefore ensure that their resources and efforts are aimed at improving individual national responses.

Promoting Cultural Change

Many practitioners addressing environmental damage and conservation of habitats and species quite rightly place significant importance on curbing

consumption. The argument being that if there was no demand, there would be no need to source products, and consequently the trade would die.

Such an approach seems too simple. It also assumes that consumers are completely in control of their own choices whereas there is a strong indication that environmental commodities are not simply 'demanded' by consumers but are pushed upon them, perhaps exploiting traditional demand. In the narcotics market whom do we hold most responsible: the user or the pusher?

Nevertheless, reducing demand is a necessary part of combatting any commodity crime and should be considered in a holistic way along with other measures. It should not be considered as an activity separate to law enforcement or criminal justice measures, but as part of them.

That said, many issues relating to demand are cultural, traditional or based on strong national identity, including fads or trends, which may be challenging to combat and often require change over generations. Therefore, the role of local, national agencies and organizations that understand the issues of consumption may be best placed to consider demand-reduction strategies.

Developing Understanding

Developing understanding is the foundation to any and all the responses that are cited above. The need for accurate information that is well analyzed and interpreted and then distributed to the appropriate stakeholders in such a way that it can serve as a baseline and catalyst for response, is a fundamental requirement. And such information broadly does not exist.

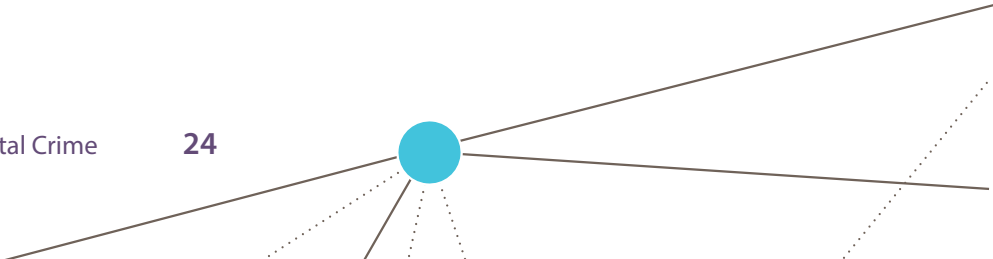
Lack of information, analytical capacity and understanding of the implications of environmental crime prevents the issue moving higher up the agenda in terms of political will, and similarly handicaps policymakers in the design of an effective response. The failure to provide nuanced information to consumers about their choices, the content and the implication of their purchases means that the demand side of the equation will be challenging to suppress.

As a crime area, environmental crime suffers both from not being addressed at a level commensurate with the impact of the crime, but also from being addressed in a similar way to other forms of transnational organized crime. There is a lack of intelligent appreciation of the key methods of committing environmental crime and analysis to determine the most common methods and threats. Such analysis would help direct enforcement to target resources at the areas most exploited by criminals. For example, is document fraud a common method of smuggling goods? Are forests poorly guarded and therefore a weak link in the criminal chain? Do criminals frequently exploit particular border crossings? Is bribery used to circumvent otherwise strong enforcement measures? Knowing the answers to such questions can help to direct law enforcement efforts around the world to address such areas of exploitation. Conversely, and more importantly, without such knowledge, resources and effort is not directed but spread arbitrarily across a breadth of enforcement responses. Since resources are already lacking in this area, misdirection of them is a critical issue.

The lack of specific knowledge also stifles innovation to combat organized crime. Criminals are constantly learning to adapt, improvise and overcome in order to stay ahead of law enforcement agencies. Technological advances and access to otherwise confidential information gives national enforcement agencies potential to accelerate their response in order to counter the efforts of criminals. But this requires knowledgeable and innovative individuals to come up with less conventional responses to combatting crime.

The Responders

It is important to ensure that enforcement against environmental crime is effective as a preventative tool. Does a deterrent exist through a reasonable likelihood of detection? Are penalties and related consequences sufficient enough to deter offenders? Is there sufficient awareness of the consequences of environmental crimes, and social stigma against offenders?



In order to answer these questions we need to explore a number of elements of the enforcement and criminal justice processes, and examine their effectiveness: We need to look at the range of actors engaged in the fight against environmental crime including the role of civil society which has been present for several decades. But what role does civil society, including non-government organizations, play, and how do they integrate with other actors?

It is necessary to examine international mechanisms including international agreements and the role of inter-governmental agencies. How effective are initiatives to assist countries and regional to tackle crime and is the capacity of agencies to tackle environmental crime sufficient? Often conspicuously absent in discussion and analysis under environmental crime is the area of corruption as a driver and facilitator, despite significant evidence of its dominance as an issue.

The figure below illustrates the relationship between the wide range of actors who respond to environmental crime (the 'Responders') and in which typology of the spectrum of holistic responses that they would expect to engage. It highlights some of the key responses required.

While it is clear that there is significant overlap, with many actors having a key role, or roles, to play in different areas of the problem, what is interesting is in fact how limited the role of law enforcement is in ensuring a sustainable solution to the challenges of environmental crime. While they are often perceived as the lead actor in fact, the role of states, international multi-lateral actors and donors are as, if not more, significant.

It is clear, therefore, that there needs to be a greater number of players at the table, engaged in crafting a response. To ensure that responders are aware of where they can be most effective, and that they take action, we need to develop comprehensive,

RESPONDERS	RESPONSES						
	Political Will	Policy Responses	Legal Framework	Criminal Justice and Enforcement	Cultural Change	Understanding and Analysis	
States	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	
Inter-Governmental Organisations	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div></div>		<div><div></div><div></div><div></div><div></div><div></div></div>	
Non-Governmental Organisations	<div><div></div><div></div><div></div><div></div><div></div></div>				<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	
Law-Enforcement Agencies (National)	<div><div></div><div></div><div></div><div></div><div></div></div>		<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>			
Media		<div><div></div><div></div><div></div><div></div><div></div></div>			<div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	
Donors	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>				<div><div></div><div></div><div></div><div></div><div></div></div>	

AREAS OF CRIMINALITY:

- SOURCE: (Poachers, Extractors, Producers)
- TRANSIT: (Transporters, Document Fraudsters, Storage Providers, Craftsmen)
- DESTINATION: (Consumers)
- CONTROL: (International Bosses, Key Traffickers, Financiers, Senior Corrupt Figures, National Coordinators)

holistic strategies that draw upon the value added of each actor in the correct context, and eliminate duplication, fragmentation and incoherence of approaches.

The section below explores in greater detail the roles that need to be played by each of the actors:

States

As the table above suggests, by far the greatest responsibility lies with national governments and agencies. Whilst there is recognition that environmental crime is often transnational in nature, crimes in fact take place within national boundaries. There is a need to foster an increased national concern, pride in both the environment and the response to those who damage it and develop national responsibility for the problem. The effort involved in international cooperation, particularly exchanging information and conducting joint investigations, may be better spent on national efforts, creating national fortresses where natural resources and environmentally sensitive commodities cannot be taken from nor enter the country through illicit means.

International cooperation including intelligence sharing and joint operations seem to be the answer to transnational crime, and such activities are invariably called for by many agencies involved. But while such cooperation is successful where it takes place, it is also still rare and challenging.

A regional or international response is only as strong as the combined response of single nations. Far more achievable and effective is for States to develop effective national legislation commensurate with the national problems they face, including loss of natural resources, consumption within their country and, perhaps most neglected, their role as transit countries for illicit commodities passing through.

Intergovernmental Organizations

In order to assist countries with issues affecting regional or global human safety and security, development and economies, inter-governmental organizations have developed a range of projects, programmes and initiatives. Recognizing the importance of the

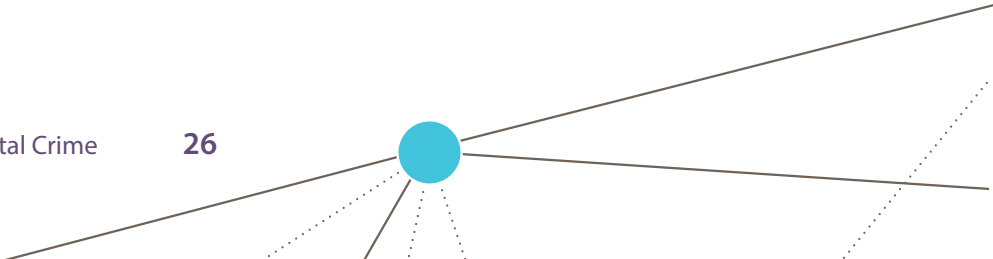
environment on human and national development a number of activities related to the environment exist today. These extend across issues such as biodiversity protection, controlling trade in environmentally sensitive commodities, addressing climate change, and reducing deforestation.

In addressing global responses to issues of environmental crime, inter-governmental bodies have the potential to make a significant difference both at a policy level and on the ground. In the last five years or so, several intergovernmental organizations have developed responses to environmental crime, ranging from individual projects to fully-fledged programmes.

Environmental crime falls clearly under the definition of the UNTOC, and several resolutions under United Nations and INTERPOL call for greater investment by countries to the area of environmental crime. Yet investment by inter-governmental organizations to date however is generally restricted to discrete projects on specific areas of environmental crime. To date the number of dedicated officers addressing solely the issue of environmental crime is too few.

INTERPOL: The International Criminal Police Organization, better known as INTERPOL and representing 190 member countries, has addressed environmental crime since 1992. It divides offences broadly into pollution and wildlife crimes and developed Working Groups, consisting mainly of enforcement agencies, to come together once a year to discuss issues. In 2009, INTERPOL developed an Environmental Crime Programme. Initially consisting of a few staff, the programme has grown in 2013 to over 20 staff of varying levels of experience.

INTERPOL has specific programmes on tigers and Asian big cats, forest crime, fisheries crime, pollution crimes and also encourages countries to develop operations to target environmental crimes. It has produced a number of capacity building products for use by enforcement agencies. One of the Programme's core functions is providing a mechanism to countries for the exchange in information and intelligence, maintaining databases and issuing 'Notices' on criminal issues.⁶¹ An overarching initiative of the Programme is to develop National Environmental Security Task Forces, which



are intended to link national agencies with their respective INTERPOL National Central Bureau (NCB) and thereby to the international network of NCBs.

Environmental crime is not recognized as a core activity under the mandate of the INTERPOL General Secretariat and as a result does not receive core funding. The programme activities are mainly funded by national donor agencies such as the US Agency for International Development, and also through considerable from non-government organizations. The Programme has also been supported through seconded officers supported by their home agencies. The environmental crime activities of INTERPOL however received overwhelming support by member nations in 2010 when a resolution on sustainability of the Programme was unanimously adopted.⁶² Tangible support by most of those countries however, particularly in financial terms, has been less forthcoming.

World Customs Organization: Representing the world's Customs agencies, the World Customs Organization (WCO) assists countries to develop the effectiveness of their responses to protect borders. The WCO includes Regional Offices for Capacity Building (ROCB) and Regional Intelligence Liaison Offices (RILO), which manage information exchange tools and databases including Environet, specifically addressing environmental crimes.

The WCO has coordinated a number of international activities to curb environmental crime.⁶³ Capacity building of enforcement officers is a core activity, with training taking place on toxic and hazardous waste smuggling, and on tactics such as controlled deliveries. Partnering with the UNEP, WCO developed the Green Customs Initiative⁶⁴, which provides environmental law enforcement training.

WCO has also coordinated global operations including Operation GAPIN and Operation Demeter addressing wildlife crime and illegal trade in waste respectively. The operations have proved highly successful and have subsequently developed their activities in recent phases.

United Nations Office on Drugs and Crime: The United Nations Office on Drugs and Crime addresses

environmental crime mainly through its custody of the Convention Against Transnational Organized Crime (UNTOC). The Convention includes Protocols to address specific crime areas (trafficking in persons, smuggling of migrants, and trafficking in firearms). The former Executive Director of the UNODC suggested that a fourth protocol on environmental crime might be necessary⁶⁵. Several decisions and resolutions under UNTOC have addressed environmental crimes.

Discrete projects have also been developed by UNODC including production of a Wildlife and Forest Crime Assessment Toolkit, which provides a mechanism to review countries' capacity and effectiveness to combat wildlife and forest crime. UNODC has also commissioned the production of two Transnational Crime Threat Assessments (one global and one covering the East Asia and Pacific Region), both of which have included sections on environmental crimes. The UNODC also addresses wildlife and pollution crimes through its trans-boundary crime initiative PATROL.

United Nations Environment Programme: The United Nations Environment Programme aims to be "the leading global environmental authority that sets the global environmental agenda".⁶⁶ Whilst addressing a broad range of environmental issues across the globe since 1972, its engagement in issues of criminality have been limited to date. In the outcome document from the RIO+20 meeting in June 2012, which recommended the upgrading of UNEP tackling organized crime it is not mentioned as a function.⁶⁷

The UNEP Division on Environmental Law and Conventions (DELIC) describes its function as "the development and facilitation of international environmental law, governance and policy".⁶⁸ DELIC takes a high-level approach to tackling environmental crime, assisting countries to develop overarching policies, and developing relevant legislation. DELICs engagement on the issue of transnational, organized crime and enforcement responses is so far minimal and has largely been restricted to the implementation of MEAs and criminal justice matters.



Photo provided by Environmental Investigation Agency (www.eia-international.org)

Other divisions of UNEP have developed environmental crime activities over a number of years. The Compliance Assistance Programme of the Ozone Action team has assisted in activities such as the Green Customs Initiative and developed the Asia Regional Partners forum on Environmental Crime (ARPEC) which brings together a range of actors on the subject to meet and discuss issues in a semi-formal environment. The biannual meetings were established in 2005 and a number of partnerships and projects have developed as a result of the meetings.

International Consortium on Combating Wildlife Crime: One of the most significant developments taken by intergovernmental organizations in this area was the formation of the International Consortium on Combating Wildlife Crime (ICCCWC). The consortium brings together five agencies: the CITES Secretariat, INTERPOL, UNODC, World Bank and the WCO and has assigned focal points from each organization to form an 'experts group'.

The Consortium was initially conceived to develop high-level government advocacy and policy to address wildlife crime, using the clout of the organizations and their membership. With the receipt of funding from various sources however, the

members of the Consortium have begun to develop more conventional project-related activities either together or individually. Whilst these activities are valuable, they are perhaps not the best use of five such organizations. ICCWC can add extraordinary value to the fight against environmental crime through greater global analysis, research and the development of strategy. There may also be a need to expand the role of ICCWC to address other forms of environmental crime.

Donors

Since the majority of the responses described require financial support, responders should assess not only the means to deliver or acquire necessary funding, but ensure that funding is intelligent and supports well defined strategies rather than leading them.

It is clear that there are significant efforts being developed to address environmental crime at a number of levels. But it may be useful for us to consider what determines those responses and who or which entities are determining priorities and policy.

Whilst some activities are led through passion and concern for the issue at hand, without sufficient

resources and funds, the impact of such actions is likely to be insignificant unless addressed by a better-funded body. Whilst money is not an essential factor in all cases (there are some excellent initiatives working through volunteers or on small budgets), it does enable far greater reach, support for activities, equipment and salaries.

Projects to address environmental crime tend to be led by donors: either trusts and foundations, or national (government) donor agencies. Invitations for letters of interest or proposals are regularly advertised and the best bid wins, subject to criteria and suitability. Occasionally an organization will develop a project and then seek funding for it, but even so it will usually only be funded if it sits within the donor's existing framework of activities. So invariably, it is donors who decide which projects go ahead.

Therefore it would appear that donors are leading policy on environmental crime through the funds they grant, based on the proposals they are presented with. This would seem reasonable since donors are responsible for their own funds, but to what extent do they have sufficient knowledge and expertise on matters of transnational environmental crime to determine accurately which projects to fund? Are we in a situation where for decades, the effectiveness to

is a need for intelligence-led funding, directing resources to where they will be most effective at combating organized environmental crime.

Environmental crime is not only a billion-dollar enterprise for criminals, but the amount of funding going towards enforcement projects around the world is equally significant. Whilst there is no suggestion that recipient organizations have anything but worthy intentions when it comes to securing funding for projects, there exists a significant level of competitiveness between them. Competitive bids are designed to ensure that the best proposal wins, but is it the desire to carry out the work required, or the security of reputation and staff salaries that is also in mind when writing a killer proposal for funding?

Non-Governmental Organizations

Civil Society: The extent of civil society engagement in environmental issues, particularly that of non-governmental organizations, is somewhat overwhelming. There are hundreds of NGOs working on dozens of different areas of the problem, from conservation, to pollution, animal welfare and corruption. A number of organizations address the issue of environmental crime, although

“Don’t be against foreign NGOs. Make them your partners, your collaborators and friends... Work with them, not against them. That way we can ensure a better environment and a better country in the future.”

***President Suilo Bambang Yudhoyono of Indonesia
World Environment Day, June 2013***

combat serious, organized crime has been based on the decisions of administrators of funds, rather than experts on the issue to be addressed? Does this pose a risk that funds are mis-directed to apparently sound but in fact less-effective projects?

Funded activities should be need-driven based on a comprehensive assessment of the problem, and mindful of policy developed by a comprehensive and wide range of experienced practitioners. There

only a few could be considered to specialize in that field. Nevertheless, almost all environmental organizations recognize that crime is a significant obstruction to sustainable use of the Earth's natural resources.

Those organizations that tackle environmental crime cover activities including capacity building and training of enforcement officers, investigations, information and intelligence gathering and analysis,

awareness raising and campaigning and lobbying.

NGOs are not uniformly visible throughout all issues of environmental crime however. By far the largest number of NGOs is in the area of wildlife with several thousand working across the globe, locally and internationally. Issues of forest protection, fishing and climate change have a far lesser number of civil society actors. Even less work in the area of illegal trade in ozone-depleting substances and hazardous waste where they reach single figures. The reasons for this disparity do not necessarily correlate with the seriousness of the issue, but is more likely to be driven by emotion and the need to attract funds. Certainly fundraising on the issue of pollution would appear to be more challenging than on issues relating to emotionally charged charismatic species.

It is often said that NGOs fill a gap that should be filled by national governmental responses. As a

result, NGOs are often critical of government effort or lack of, and campaign and lobby for development. In addition, NGOs have also successfully sought funding from donors including national public agencies, to conduct research and investigations and conduct capacity-building programmes. A number of NGOs have also worked directly with governments to develop policy and inform them on technical aspects of environmental crime and governance issues.

The relationship between NGOs and government and inter-governmental organizations is not always amicable however. NGOs, often excluded from government and intergovernmental meetings are often themselves criticized for overstepping their role as civilians, or engaging in activities that are seen as governmental or national roles. This is particularly the case with enforcement that is traditionally seen as a national function.

NGOs and their role in Enforcement

While non-governmental organizations are perhaps not accepted as the first choice when it comes to addressing enforcement, many have done so with considerable success and provide a valuable complementary service to states.

In the Cameroon, the Last Great Ape Organization (LAGA) describes itself as the 'first law enforcement NGO in Africa'. It claims a successful arrest of a wildlife trader every week since 2006 with significant penalties and confiscation of assets. LAGA works closely with local law enforcement agencies and international bodies. Cameroon has invited a LAGA representative to represent the country in international meetings.

In India, the Wildlife Protection Society of India (WPSI) supports national law enforcement officers through training. In addition it holds the most comprehensive wildlife crime database in India, which includes nominal information on wildlife criminals. WPSI has provided information to enforcement agencies, which in 2011 alone resulted in the arrest of 97 wildlife criminals.

In Zambia, the South Luangwa Conservation Society (SLCS) conducts anti-poaching patrols and operations with teams consisting of their own rangers and those of the Zambian Wildlife Authority (ZAWA), developing a relationship whereby SLCS can seek funding from a range of sources perhaps inaccessible to a national agency.

Enforcement activity often extends beyond on-the-ground activity. The UK based NGO the Environmental Investigation Agency has on occasion provided nominal information to INTERPOL and the CITES Secretariat, along with national enforcement agencies. In Viet Nam, Education for Nature Vietnam maintains a highly effective hotline, which provides the public a means of reporting incidents they witness. ENV then passes the information to relevant agencies and monitors cases to ensure action. Working across Asia, Freeland Foundation has for a number of years supported national agencies through developing sources of information, conducting crime analysis and assisting in interdiction activities.



Photo provided by Environmental Investigation Agency (www.eia-international.org)

It seems clear that for many years NGOs have been leading the debate on environmental crime matters, yet are still sometimes only tolerated by governments and international organizations. We need to better understand why, and ensure that all those with constructive contributions to make are permitted to do so. While international NGOs are occasionally seen as external critics of national effort, many have developed cooperative relationships with governments. Local environmental NGOs are also growing in number and influence.

Without the institutional backing of an enforcement agency, NGOs conduct investigations into environmental crime, providing intelligence and information to enforcement agencies and inter-governmental. Yet despite the established practice of grading of sources, their often high quality and substantiated information is excluded from databases.

For over three decades, NGOs have been largely responsible for lobbying and driving a response to environmental crime. Changes in international legislation have been brought about largely through the efforts of NGOs. Entire regional responses such as the ARREST programme in the ASEAN region have been driven by the efforts of NGOs, yet in frequently held closed sessions of meetings, governments complain about their interventions and perceived leadership.

There are clearly boundaries that exist between sworn law enforcement officers, with a duty and operational interest in managing intelligence securely and protecting sources. Investigations and operations need to remain secretive to maximize opportunities to secure and preserve evidence and prevent suspects from avoiding prosecution. But most civil servants, including politicians and members of inter-governmental organizations do not fall into this enforcement category but into that of 'civil society'. The need for all to work together in the development of effective policy is imperative.

Private sector: Private businesses and public corporations have extraordinary influence over the management of environmental resources, not simply because of their financial might, but because of the difference between over-exploitation of resources, and more ethical, conservative practices.

Many in the private sector demonstrate ethical behavior and vigilance to all stages of the economic chain, ensuring that illegal commodities cannot enter. But private companies also need to ensure responsible dealings with mineral rich countries, ensuring that they know from where their products come and who their suppliers are. Companies involved in the transit industry need to employ the proper diligence to cargoes. Suppliers at the consumer market end of the chain must ensure that customers cannot unwittingly purchase or otherwise use illicit products.

The Kimberley Process

The Kimberley Process (KP) was borne out of a series of reports around the Millennium which drew attention to the close relationship between the illicit diamond trade and conflicts in third-world conflicts, namely in Africa. The most well-known of these, the UN Fowler Report “named and shamed” countries and actors involved in the trade.⁶⁹ In response, in May 2000, diamond-producing states convened in Kimberley, South Africa to discuss ways to stop the illicit trade and ensure diamond purchases were not financing violent rebel movements.⁷⁰ Regular meetings and negotiations between governments, the international diamond industry and civil society ensued and in 2003 the Kimberley Process Certification Scheme entered into force.

The KP imposes extensive requirements on its members, requiring shipments, both exported and imported, of rough diamonds to be certified ‘conflict-free’.⁷¹ Each participating government must “be able to track the diamonds being offered for export back to the place where they were mined, or to the point of import, and it must meet a set of standards for these internal controls.”⁷² Also, participants can only legally trade with other KP members who have met the minimum requirements of the scheme.⁷³ The KP “is open to all countries that are willing and able to implement its requirements” and has 54 participants, representing 81 countries, with the EU and its

Member States counting as a single participant.⁷⁴ In addition, the World Diamond Council and civil society organizations, such as Partnership-Africa Canada (PAC), participate, playing a major role since its outset.⁷⁵

While the KP had early achievements, in recent years it has received a great deal of criticism. Narrow definitions; major flaws and loopholes; failing to address major issues – for example, violence in Zimbabwe and in compliance by Venezuela; and little interest by member states to undertake reform have undermined the credibility and effectiveness of the KP.⁷⁶ In December 2011 the Global Witness withdrew from the KP, stating, “this scheme, begun with so many good intentions, has done much that is useful but ultimately has failed to deliver. ...The Kimberley Process’s refusal to evolve and address the clear links between diamonds, violence and tyranny has rendered it increasingly outdated.”⁷⁷ The PAC, while also critical of the KP, has elected to remain arguing “the KP is too important to fail, and the prospect of a return to a world in which such a potentially dangerous commodity is unregulated is not an option...”⁷⁸ For the KP to deliver, reforms raising standards and increasing accountability as well as making the KP more adaptive and responsive to evolving challenges are necessary.

Media: In addition to civil society organizations in developing response to environmental crime, the media is also playing an increasingly important role in highlighting and exposing the issue. From bloggers to investigative journalists and international news agencies, the combination of visual environmental images with the exciting world of organized crime and important issues of government response to issues relevant to development and economy make for intriguing and newsworthy stories.

But far more than information and entertainment, the media also acts as a watchdog over inadequate responses, and corruption issues. By increasing transparency and accountability, civil servants are more obliged to act, and wrongdoings are harder to hide. A ‘free press’ is essential to maintain to ensure that public concerns over environmental crime are not just heard, but are cast widely, catalyzing a chain of action from civil society and governments.



Photo provided by Environmental Investigation Agency (www.eia-international.org)

The Risk of Protecting the Environment

The hazards involved in investigating and curbing environmental crime are high for all involved. The big financial incentives mean offenders are willing to risk their lives, or kill to protect their profits.

Several examples highlight the risk to those from civil society who attempt to scupper the business of environmental criminals.

Whilst investigating the illegal logging industry in Indonesia in 2000, two campaigners from the UK based Environmental Investigation Agency were kidnapped, beaten and held at gunpoint by illegal loggers. Faith Doherty, leader of EIA's timber campaign had her fingers broken. The campaigners were then arrested by local police and held for three days.⁷⁹

In 2012, Cambodian activist Chut Wutty was shot and killed while escorting journalists to an area of protected forest. He had attempted to expose forest crime networks linked to the military.⁸⁰

In December 2012 Sombath Somphone was stopped by police near Vientiane, in his home country of Laos.

Somphone, an environmental campaigner who had tackled land use and abuse of local farmers, was driven away and has not been seen since.

The list goes on: 2012, 44 year old Hang Serei Oudom, reporter with a Cambodian newspaper was found dead in the boot of a car apparently killed by with an axe. He had been investigating illegal logging and the role of powerful officials.⁸¹

In July 2010, Indian forest campaigner Amit Jethva was shot dead by two assailants on motorbikes in Gujrat. Earlier the same year Satish Shetty had campaigned against land deals in Maharashtra and was murdered.⁸²

This list is by no means exhaustive, and the examples are included to illustrate the threat that environmentalists pose to criminals – surely an indication of the role of organized crime and collusion by those who should protect civilians from such threats.

Conclusion

It was acknowledged at the outset of this report that environmental crime is not new, but that despite considerable effort and expense, our approaches are doing little to stem the scope, scale and spread of the phenomenon. Environmental crimes are affecting all countries, developed, middle income and developing, as well as states beset by instability. Having reviewed the criminal chain of environmental crime – from the myriad of forms in which the crime can be manifested, its unique features and the increasingly widespread and detrimental ways in which they are impacting human security and development, it is clear that the time to take action is now. The impact may be different in different places – but the common feature is that it negatively affects the life chances of ordinary people, it undercuts key institutions required for service delivery, it distorts or impedes economic growth, and it fuels conflict and instability.

The analysis of the responses and responders demonstrate a clear lack of synergy between environment, security, and development, and the debate has for too long been dominated by a law enforcement perspective, without the understanding and political will required to make it effective. Beset by corruption, and working off incomplete and poorly understood analytical frameworks, national law enforcement and multilateral organizations are left fighting an increasingly innovative criminal industry with yesterday's news. Furthermore, the focus on law enforcement and criminal justice responses to environmental crime is too slow and fails to recognize either the time-critical element, or the fact that the harm comes at the point of source, and that later interventions to seize commodities will reduce profits but not the global damage.

There is a lack of appreciation of the end to end process of the criminal economy chain and the key methods of committing environmental crime from source through transit to destination market. Even a basic analysis would help to target financial and human resources at the areas most exploited by criminals. For example, is document fraud a common method of smuggling

goods? Are forests poorly guarded and therefore a weak link in the criminal chain? Is bribery used to circumvent otherwise strong enforcement measures? Is there a criminal group perpetuating misinformation that would change local values towards the crime? Is one corporation motivating a criminal practice with widespread environmental impacts? Are donors failing to understand the impact of the crime? Without such knowledge, resources and effort are not directed but spread arbitrarily across a breadth of responses, leaving many loopholes to be exploited.

There are states that are addressing environmental crime effectively, and there are many successful individual initiatives, which if adopted globally may help to address some of the key impediments that currently exist. But there is no consistent and effective means by which these good practices can be shared, debated and disseminated more broadly and to the diverse, cross-sectoral group that will be required to engage.

While many stakeholders are active in the sphere of combatting transnational organized environmental crimes, there is a general lack of understanding and appreciation of the comparative values that each brings to the table. The trend appears to be to look towards the multi-lateral institutions and international conventions to set policy, regulate the domain and catalyze the response, yet here again lack of political will, inconsistent and fragmented application of resources, and a grey areas in mandates seems to hamper the kind of leadership that is required. The most appropriate agency to take primary responsibility for combating environmental crime is not always afforded that responsibility, and dedicated expertise is often lacking within some of the organizations that determine and support policy. Furthermore, the enormous investment required to create momentum and coordinate regional and international responses may detract from national efforts, and hamper a truly successful and tangible response to environmental crime within the rhetoric of the diplomacy trap.



Photo provided by Environmental Investigation Agency (www.eia-international.org)

Towards a better response

The changes in approach that are required cannot be achieved overnight, but an incremental approach to increasing information, understanding and providing opportunities to break down some of the misinformation and miscommunication would could serve to build the coalitions that will be required for a better response. A forum for debate across multiple sectors would facilitate making available information as to the nature and impact of environmental crime; and provide a

platform through which to design cross-sectoral responses to the challenge. The goal must be to move towards a cooperative framework between national agencies, public and private stakeholders to ensure cross-fertilization of knowledge and ideas for initiatives. Actors working on these areas should be encouraged to develop cross-cutting, tangible activities which complement each other, and which aim to ensure, paramount to all other considerations, that environmental harm is prevented.

Recommendations

This report, which endeavored to undertake a baseline examination of the range of responses currently in play along the chain highlights the complexity of the landscape and the urgent need for a rationalized and reinvigorated approach, which takes the challenge of environmental crime more comprehensively. A strategic and holistic approach is required to tackle environmental crime if we are not to lose the battle and suffer the extermination of species and irreversible damage to the planet.

A new global strategy is required that should aim to create synergies and bridge the gap between development, law enforcement and justice, the environment and anti-corruption.

While the practical application of a strategic approach may differ from sector to sector, place to place and crime to crime, there are enough commonalities for some important conclusions to be drawn. Having in place such a global strategy would in turn assist in the allocation of resources to priority activities, and assist in enhancing synergies and coordination.

It is clear that a stock-taking exercise is urgently required. All entities working on issues of organized crime, should conduct an assessment of environmental crime within their sphere of responsibility. Such an assessment should consider the material gain or loss as a result of environmental crimes; the human impact of such crime; and the connection of environmental criminality to other aspects of crime such as corruption, terrorism, and other crimes. The results of such an assessment should determine the future response to environmental crime in order to ensure that it is commensurate and proportionate to the impact of the crimes.

The recommendations outlined below have been developed with the input of recognized experts from across the spectrum of organizations and institutions engaged in the fight against environmental crime. They will further be verified by broad dissemination through a wider expert reference group process.

The goal with both this report and these recommendations is to catalyze debate and discussion around the creation of a global strategy towards countering serious organized environmental crime.

Assessing current efforts:

- Organizations funding and developing projects related to environmental crime are encouraged to conduct a thorough needs assessment to ensure that the most significant threats posed by environmental crime are addressed. Organizations should consider the personnel available and ensure that relevant experience is deployed.
- A comprehensive assessment of enforcement practices should be conducted. This would focus upon reviewing actions that take place in other areas of organized crime, and holding them up against environmental crime, in order to assess the most effective enforcement and criminal justice responses to tackle environmental crimes. The study could inform donors and practitioners on the most effective responses.
- An academic review of international treaties, conventions and regulations should be conducted against all environmental crime types. The objective would be to assess the ambiguities between such mechanisms and the impact of those ambiguities. The study could be used to inform parties of MEAs and similar agreements, with a view to encouraging uniformity.
- The array of resolutions, decisions, pledges, and consensus introduced to address environmental crime should be reviewed and considered for their effectiveness as tools to drive action. The result of such an assessment should determine the extent to which such outputs are considered as meaningful contributions to combating environmental crime.
- An independent assessment of products and tools, including training materials, for enforcement officers, should be conducted globally. This would aim to assess for the first time, what materials currently exist, assessing quality, identifying



duplication, and gaps. In addition, an assessment of utilization of products should be conducted, in order to see whether their production was worthwhile and relevant to the audience for which they were intended.

Prevention First

- Recognizing that environmental crime is unique in that the greatest harm is done at the source once the offence is first committed, efforts must be focused on prevention. Thus, perhaps the most over-riding policy that needs to be developed is to move towards a universal “Prevention First Response”, which ensures that all activities, regardless of where in the chain they are targeted, they aim to ensure that environmental harm is prevented.
- In key source countries, there is a need to foster an increased national concern, pride in both the environment and the response to those who damage it, and to develop a shared national responsibility for the protection and prevention of harm. This involves extensive awareness raising and sensitization. There are more researchers than law enforcement officers on the ground to combat organized environmental crime, and these researchers and investigative journalists have an important role to play both in drawing attention to the crimes and mobilizing political will.
- Given the proximity to the tipping point of irreversible damage, there is a need for acceleration of our responses and an increase in outputs. Projects should be focused on achieving a significant number of tangible outputs that build upon previous work. Conferences, awareness raising, partnerships and to a lesser extent training – particularly those that are not well focused, practical and output orientated – should be viewed as collateral activities to more tangible goals of harm and crime reduction.

Intelligence-led approaches

- New communications technology are being harnessed to tackle other transnational crimes, such as human trafficking, by harvesting data and monitoring social media trends. A shift towards a prevention-based intelligence approach in the

environmental crime sector could also be effective. By combining online activity analysis with travel and financial data, intelligence agencies can compare data for a more proactive approach to criminal analysis. The use of technology to identify and track key criminals, and to build evidence for prosecution, is currently limited, and databases to pool this data are under-utilized.

- The use of technology to combat environmental crime is advancing considerably – anti-poaching units are using equipment such as night-vision and unmanned aircraft to monitor vast tracts of land. With donor support, these can be distributed more widely in key countries where source offenses take place to prevent and deter criminal acts.

Criminal economy chains

- There is a general lack of appreciation of the key methods of committing environmental crimes and analysis to determine the most common methods along the supply chain after the products have been sourced. Analysis would help to direct enforcement to target resources at those nodes along the criminal economy chain that are most vulnerable.
- While recognizing the current extent of environmental crime, an assessment should be made of emerging threats such as the diversion of criminal activity from one species to another as a result of depletion of stocks, increased enforcement activity, or changes to legislation. The threat of cyber-crime should be explored. The attractiveness of environmental crime to crime groups should be examined and addressed.

Combat corruption:

- Addressing corruption is a fundamental requirement for an effective response to environmental organized crime, and without which other efforts will be nullified. An anti-corruption response will need to be mainstreamed throughout other prevention and response efforts.
- Corruption in the field of environmental crime should be addressed through engagement with the UN Convention against Corruption (UNCAC)



Photo provided by Environmental Investigation Agency (www.eia-international.org)

and other agencies working on corruption issues. In addition, donors and project developers should include anti-corruption measures in all projects relating to environmental crime, recognizing it as a significant risk of eventual failure to achieve project outcomes.

- Develop multi-agency units and cross-disciplinary training to encourage transparency between agencies. Support whistleblowing within agencies and protection for whistle-blowers. Encourage national and international agencies to openly discuss issues of corruption and reject suggestions that discussion is critical of nations.

Finally, while it is certainly necessary to continue to develop mechanisms and opportunities for international and regional cooperation, not all approaches are required to be transnational. Avoiding the greatest harm to the environment may require a combination of exclusively national resources that protect those resources and environmentally sensitive commodities. Local actors are essential in sourcing, moving and vending illicit environmental products. Given the effort of engaging in international cooperation with limited results, perhaps efforts might better be spent at the national level, building up bulwarks to protect natural resources, preventing crimes and creating bulwarks to cross-border illicit trade.

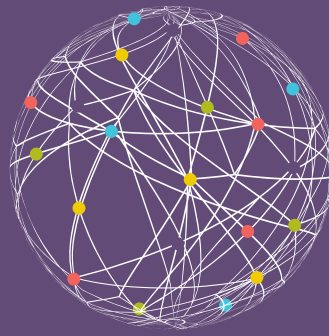
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