THE ENVIRONMENTAL CRIME CRISIS

THREATS TO SUSTAINABLE DEVELOPMENT FROM ILLEGAL EXPLOITATION AND TRADE IN WILDLIFE AND FOREST RESOURCES
Given the alarming pace, level of sophistication, and globalized nature that illegal trade in wildlife has now notoriously achieved, UNEP initiated a Rapid Response Assessment to provide some of the latest data, analysis, and broadest insights into the phenomenon. Tackling illegal wildlife trade demands this examination of the relationship between the environmental resources at stake, their legal and illegal exploitation, the loopholes that exacerbate the situation, the scale and types of crimes committed, and the dynamics of the demand driving the trade.

In the international community, there is now growing recognition that the issue of the illegal wildlife trade has reached significant global proportions. Illegal wildlife trade and environmental crime involve a wide range of flora and fauna across all continents, estimated to be worth USD 70–213 billion annually. This compares to a global official development assistance envelope of about 135 billion USD per annum. The illegal trade in natural resources is depriving developing economies of billions of dollars in lost revenues and lost development opportunities, while benefiting a relatively small criminal fraternity.

This report focuses on the far-reaching consequences of the environmental crime phenomenon we face today. The situation has worsened to the extent that illegal trade in wildlife’s impacts are now acknowledged to go well beyond strictly environmental impacts – by seriously undermining economies and livelihoods, good governance, and the rule of law. Even the security and safety of countries and communities is affected: the report highlights how wildlife and forest crime, including charcoal, provides potentially significant threat finance to militias and terrorist groups. Already recognized as a grave issue in DRC and Somalia by the UN Security Council, the assessment reveals that the scale and role of wildlife and forest crime in threat finance calls for much wider policy attention, well beyond those regions.

The consequences are increasingly evident: illegal wildlife trafficking constitutes a barrier to the achievement of both sustainable development and environmental sustainability. As reflected in a range of decisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the UN Office for Drugs and Crime, the UN Commission on Crime Prevention and Criminal Justice, INTERPOL, the UN Security Council, and others, the illegal trade in wildlife and environmental crime are now widely recognized as significant threats on a global scale, to be tackled with urgency. However the responses to date, in terms of impact on the ground, have been too modest, and inadequate to the scale and growth of the threat to wildlife and the environment.

A fuller understanding of the phenomenon of illegal wildlife trade is necessary to design and further strengthen – and accelerate – an effective strategy to successfully tackle the issue at all levels and with all means possible. A global and holistic response needs to be implemented to support national, regional and international efforts by strengthening and synchronizing actions targeting coherent environmental legislation, poverty alleviation and demand reduction.

Achim Steiner
UN Under-Secretary General and UNEP Executive Director
Executive summary

Ecosystems play a crucial role and especially for developing economies by supporting revenues, future development opportunities, livelihoods and sustainable harvest sectors relying heavily on natural resources, such as in agriculture, forestry and fisheries. Healthy ecosystems provide the platform upon which future food production and economies are ultimately based.

The opportunities ecosystems provide for future development, however, are threatened by serious and increasingly sophisticated transnational organized environmental crime, undermining development goals and good governance. Transnational organized environmental crime may include illegal logging, poaching and trafficking of a wide range of animals, illegal fisheries, illegal mining and dumping of toxic waste. It is a rapidly rising threat to the environment, to revenues from natural resources, to state security, and to sustainable development. Combined estimates from the OECD, UNODC, UNEP and INTERPOL place the monetary value of all transnational organized environmental crime between 70–213 billion USD annually. This compares to a global ODA of ca. 135 billion USD. Whilst therefore benefiting a relatively small criminal fraternity, the illegal trade in natural resources is otherwise depriving developing economies of billions of dollars in lost revenues and development opportunities.

The illegal trade in wildlife is no longer an emerging issue. The scale and nature of the challenge has been recognized in decisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the UN Commission on Crime Prevention and Criminal Justice, the Economic and Social Council (ECOSOC), the UN Security Council, UN General Assembly, INTERPOL, the World Customs Organisation (WCO) and others, including at national levels. High-level political conferences have also addressed the issue, most notably recently convened in Botswana and Paris (December 2013), London (February 2014), and Dar es Salaam (May 2014). However, the responses in terms of impact on the ground are still behind the scale and development of the threat to wildlife, including forests, as well as increasingly also development goals.

The illegal trade in fauna and flora has been estimated by different sources to be worth 7–23 billion dollars annually. The trade involves a wide range of species including insects, reptiles, amphibians, fish and mammals. It concerns both live and dead specimens or products thereof, used for pharmaceutical, food, pets, ornamental or traditional medicinal purposes. Illegal harvest and trade includes a range of taxa such as gorillas, chimpanzees, elephants, tigers, rhinos, Tibetan antelopes, bears, corals, birds, pangolins, reptiles, sturgeon for black caviar, and a wide range of other commercial fisheries species from the high seas and territorial waters. All of these have a significant value not only on the black market, but even more to national economies if managed sustainably. The illegal trade in wildlife operates per definition outside government official regulation and management, and thus represents a significant economic, environmental and security threat that has received relatively little attention in the past.

The possible number of elephants killed in Africa is in the range of 20–25,000 elephants per year out of a population of 420,000–650,000. For the forest elephant, population size has been estimated to decline by ca. 62% between 2002 and 2011. Poached African ivory may represent an end-user street value in Asia of an estimated USD 165–188 million of
raw ivory, in addition to ivory from Asian sources. For rhinos, some 94% of the poaching takes place in Zimbabwe and South Africa, which have the largest remaining populations. Here poaching has increased dramatically from possibly less than 50 in 2007 to over 1,000 in 2013 involving organized syndicates. Rhinos have disappeared entirely from several Asian and African countries in recent years. Rhino horn poached last year is valued around USD 63.8 – 192 million USD, much less at the frontline.

The scale of revenue from wildlife crime is dwarfed by the income from illegal logging and forest crime. Forest crime, such as illegal logging, has previously been estimated to represent a value of 30–100 billion USD annually or 10–30% of the total global timber trade. An estimated 50–90% of the wood in some individual tropical countries is suspected to come from illegal sources or has been logged illegally. Forest crime appears to take place in four forms: 1) The illegal exploitation of high-value endangered (CITES listed) wood species, including rosewood and mahogany; 2) Illegal logging of timber for sawn wood, building material and furniture; 3) Illegal logging and laundering of wood through plantation and agricultural front companies to supply pulp for the paper industry; and 4) Utilization of the vastly unregulated woodfuel and charcoal trade to conceal illegal logging in and outside protected areas, conduct extensive tax evasion and fraud, and supply fuel through the informal sector.

For pulp and paper production, networks of shell companies and plantations are actively used to by-pass logging moratoriums under the pretext of agricultural or palm-oil investments, used to funnel illegal timber through plantations, or to ship wood and pulp via legal plantations in order to re-classify pulp or wood as legal production, undermining also legal business and production.

These methods effectively bypass many current customs efforts related to the Lacey Act and the EU FLEGT programme to restrict the import of illegal tropical wood to the US and to the EU, respectively. Based on data from EUROSTAT, FAO and the International Tropical Timber Organization (ITTO), the EU and the US annually imports approximately 33.5 million tons of tropical wood in all its forms. It is estimated that 62–86% of all suspected illegal tropical wood entering the EU and US arrives in the form of paper, pulp or wood chips, not as roundwood or sawnwood or furniture products, which have received the most attention in the past.

In Africa 90% of wood consumed is used for woodfuel and charcoal (regional range 49–96%), with an official charcoal production of 30.6 million tons in 2012, worth approximately USD 9.2–24.5 billion annually. The unregulated charcoal trade alone involves an annual revenue loss of at least USD 1.9 billion to African countries. With current trends in urbanization and the projected population increase of another 1.1 billion people in Sub-Saharan Africa by 2050, the demand for charcoal is expected to at least triple in the coming three decades. This will generate severe impacts like large-scale deforestation, pollution and subsequent health problems in slum areas, especially for women. The increased charcoal demand will also strongly accelerate emissions from both forest loss and emissions of short-lived climate pollutants – black carbon. Internet listings reveal over 1,900 charcoal dealers in Africa alone. At least 300 of these are exporting minimum orders of 10–20 tons of charcoal per shipment. Their minimum daily orders exceed the official total annual exports for some countries. For East, Central and West Africa, the net profits from dealing and taxing unregulated, illicit or illegal charcoal combined is estimated at USD 2.4–9 billion, compared to the USD 2.65 billion worth of street value heroin and cocaine in the region.

Wildlife and forest crime has a serious role in threat finance to organized crime, and non-state armed groups including terrorist groups. Ivory also provides a portion of income raised by militia groups in the DRC and CAR, and is likely a primary source of income to the Lord’s Resistance Army (LRA) currently operating in the border triangle of South Sudan, CAR and DRC. Ivory similarly provides a source of income to Sudanese Janjaweed and other horse gangs operating between Sudan, Chad and Niger. However, given the estimated elephant populations and the number of projected killed elephants within the striking range of these militia groups, the likely annual income from ivory to militias in the entire Sub-Saharan range is likely in the order of USD 4.0–12.2 million.

Illicit taxing of charcoal, commonly up to 30% of the value, is conducted on a regular basis by organized criminals, militias and terrorist groups across Africa. Militias in DRC are estimated to make USD 14–50 million annually on road taxes. Al Shabaab’s primary income appears to be from informal taxation at roadblock checkpoints and ports. In one roadblock case they have been able to make up to USD 8–18 million per year from charcoal traffic in Somalia’s Badhadhe District. Trading in charcoal and taxing the ports have generated an estimated annual total of USD 38–56 million for Al Shabaab. The overall size of the illicit charcoal export from Somalia has been estimated at USD 360–384 million per year. For African countries with ongoing conflicts, including Mali, CAR, DRC, Sudan and Somalia, a conservative estimate is that the militia and terrorist groups in the regions may gain USD 111–289 million USD annually, dependent upon prices, from their involvement in, and taxing of, the illegal or unregulated charcoal trade. More investigation is needed to determine the role of charcoal for threat finance.
**Responses**

Illegal trade in forest and wildlife products, as well as the illegal exploitation of natural resources is now widely recognized as a significant threat to both the environment and to sustainable development. This is reflected in a range of decisions from CITES, from the UN Commission on Crime Prevention and Criminal Justice, INTERPOL and the UN Security Council, including on Somalia and DRC.

International enforcement collaboration, such as the International Consortium on Combating Wildlife Crime (ICCWC), which includes CITES, UNODC, INTERPOL, the World Bank and WCO, together with increased collaboration amongst agencies, such as with UNEP, and with countries, has created a more effective structure to provide support to countries in the fields of policing, customs, prosecution and the judiciary. These initiatives have revealed important and significant early results.

Poaching for Shahtoosh wool from Tibetan or Chiru antelopes caused a dramatic drop of likely 80–90% or nearly a million Chiru antelopes in China in the 1990–2000s and resulted in a significant environmental, police and military effort to prevent eradication. It was combined with the establishment of some of the largest protected areas in world. While populations are slowly recovering, they are still very vulnerable and more surveys urgently needed.

Brazil is probably one of the world’s leading countries in a wide enforcement effort to reduce illegal deforestation by tackling the full criminal chain and their networks. Deforestation in Brazil’s Amazon reached its lowest level in 2012, since monitoring of the forest began in 1988. It went down by 64–78%, depending upon estimates, primarily as a result of a coordinated enforcement approach using satellite imagery and targeted police operations and investigations. This was supported by large-scale efforts through REDD and other initiatives to strengthen the participatory processes of indigenous peoples, stake holders and alternative livelihoods. Many parts of the world could learn from the measures and actions undertaken by Brazil.

In Tanzania over 1,100 rangers have received specialized training in the past two years. The training covers tracking
Environmental crime network

Sources: UNODC Annual Reports 2010-2013; WWF-Australia; Global Timber.co.uk, Estimates of the percentage of "Illegal Timber" in the imports of wood-based products from selected countries, 2007; TRAFFIC; FAO; World Ocean Review Report 2013; Michigan State University, Human Trafficking Task Force; Greenpeace, The Toxic Ship, 2010; National Geographic press review.

Sources: TRAFFIC; FAO; UNODC; Global Financial Integrity
New and old trafficking routes

- Environment-related illegal trafficking
  - Includes wood, wildlife, animal parts (i.e., ivory, rhinoceros horns and fur) and wastes
- Main illegal, unreported and unregulated fishing areas
  - “Traditional” illegal trafficking
  - Includes heroin, cocaine and human beings
- Main destination country
- Main transit country
- Country of origin of “traditional” illegal trafficking
- Main country or region of origin of environmental related illegal trafficking


A growing sector

Annual revenue, higher estimates

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<th>Billion dollars</th>
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<td>Drugs</td>
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<td>Illegal logging and trafficking</td>
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<td>Illegal fishing</td>
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<td>Illegal trafficking of light weapons</td>
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Sources: TRAFFIC, FAO; UNODC; Global Financial Integrity

The pace, level of sophistication and globalized nature of wildlife and forest crime is beyond the capacity of many countries and individual organizations to address. Of particular relevance is the increasing involvement of trans-

of poachers, tactics and wildlife crime scene management, and it has been done under the auspices of INTERPOL and UNODC, and has resulted in a series of frontline arrests linking suspects to the scene of crime. The training has not only improved rangers’ ability to stop and arrest poachers, but it has also supported successful prosecutions and good enforcement ethics based on evidence, prosecution and trial in court. The work they are doing is critical and also dangerous. Over 1,000 rangers are claimed killed worldwide in service to protect wildlife in the last decades.

Improved intelligence sharing among agencies has also enabled INTERPOL to support countries in larger and more effective police operations, leading to larger seizures of illegal timber and wildlife products. In 2013 Operation Lead, under INTERPOL’s project LEAF, was conducted in Costa Rica and Venezuela. It resulted in 292,000 cubic meters of wood and wood products seized – equivalent to 19,500 truckloads (worth ca. USD 40 million). Operation Wildcat in East Africa involved wildlife enforcement officers, forest authorities, park rangers, police and customs officers from five countries – Mozambique, South Africa, Swaziland, Tanzania and Zimbabwe, resulting in 240 kg of elephant ivory seized and 660 arrests.

On customs, the UNODC-WCO Container Control Programme (CCP) has been successful in targeting sea and dry port container shipments in an increasing number of countries. Seizures include not only counterfeits and drugs, but also wildlife and timber products, such as ivory, rhino horn and rosewood.

An Indonesian case has shown how money-laundering measures can lead to prosecutions for illegal logging. A UNODC training course in 2012 involved Indonesian financial investigative and anti-corruption agencies (PPATK, KPK) ranging from the federal to the local levels. Methods learnt in the course were applied to detect, investigate and prosecute illegal logging. After the course the Financial Investigative Units detected highly suspicious transactions leading to the conviction of a timber-smuggling suspect who was sentenced to eight years of imprisonment with evidence showing how USD 127 million passed through his accounts.

However, the scale and coordination of the efforts must be substantially increased and a widened effort implemented. They must be combined with efforts on good governance, management and consumer awareness to ensure a long-term demand reduction. It is particularly crucial to support the countries directly, as financial resources need to be directed towards efforts with effect on the ground, whether in enforcement, governance or consumer awareness.
national organized crime in the illegal trade of wildlife and timber, as well as the significant impact on the environment and development.

Solutions will require a combination of efforts to address both supply and demand reduction, based on deterrence, transparency, legal enforcement, behavioral change and alternative livelihoods. Differentiated strategies for addressing illegal wildlife and timber trafficking must be developed across the relevant value chains (source, transit and destination countries).

A coherent effort to fully address the multiple dimensions of environmental crime and its implications for development is needed. This will require both national and international stakeholders to be involved in the process, including environmental, enforcement and development sectors, as well as stakeholders involved in security and peacekeeping missions. Environmental crime provides a serious threat to wildlife and plant species, ecosystems, their services, climate change and to good governance and sustainable development goals and requires a multi-faceted response.
Recommendations

1. Acknowledge the multiple dimensions of environmental crime and its serious impact on the environment and sustainable development goals, and help support and balance the appropriate coordination and sharing of information from stakeholders, such as civil society, private sector, indigenous peoples, governments and a wider UN system with the need and recognition of also the role of law enforcement in good environmental governance.

2. Implement a comprehensive coordinated UN system and national approach to environmental crime by helping coordinate efforts on environmental legislation and regulations, poverty alleviation and development support with responses from the enforcement sector to curb environmental crime, as part of a holistic approach to challenge the serious threat to both the environment and sustainable development caused by the continued environmental crime.

3. Support UNEP as the global environmental authority to address the serious and rising environmental impacts of environmental crime and to engage the relevant coordination mechanisms of the UN system to support countries and national, regional and international law enforcement agencies with relevant environmental information to facilitate their efforts to combat the illegal trade in wildlife species and their products, as well as illegal logging and illegal trade in timber.

4. Encourage the entire international and bilateral donor community to recognize and address environmental crime as a serious threat to sustainable development and revenues, and to support national, regional and global efforts for the effective implementation of, compliance with and enforcement of targeted measures to curb illegal trade in wildlife species and their products as well as illegal logging and illegal trade in timber.

5. Support immediate, decisive and collective action to narrow the gap between commitments and compliance, such as the ones expressed in multilateral environmental agreements, through national implementation and enforcement, including the relevant decisions and resolutions taken by their governing bodies intended to combat the illicit trade in wildlife and forest products.

6. Identify end-user markets and systematically design, support and implement where appropriate consumer awareness campaigns focusing on high consumer end-markets. Call upon both Governments and the UN system to effectively work with and engage civil society and the private sector in efforts to identify alternatives to consumer demands for traded wildlife species and forest products.

7. Strengthen awareness through certification schemes, such as e.g. the Forest Stewardship Council (FSC), to facilitate consumer recognition of legal and illegal products. This especially applies to such wood products as paper that currently include the largest share of import-exports of tropical wood, as well as to CITES-listed species and their products. To this end, both voluntary, market and legislative approaches could enhance collaboration between governments, civil society and the private sector.

8. Strengthen institutional, legal and regulatory systems to further combat corruption to effectively address wildlife-related offences and to ensure that legal trade is monitored and managed effectively.

9. Strengthen international and development support to the entire enforcement chain, including frontline, investigator, customs, prosecutors and the judiciary, with particular reference to environmental crime to support legal revenues and sustainable development, and to reduce the impacts on the environment from environmental crime.

10. Strengthen support to INTERPOL, UNODC, WCO and CITES, such as through ICCWC as well as individual programmes, to enable them to support member states and other relevant stakeholders to further identify, develop and implement the most appropriate responses to environmental crime, reflecting and acknowledging the serious threats and effects it has on environmental governance, wildlife, ecosystems and the services it provides.

11. Invest in capacity building and technological support to national environment, wildlife and law enforcement agencies to enable them to further protect key populations of iconic endangered species threatened by poaching, such as but not limited to, rhinos, tigers and the African elephant as a necessary response to safeguard these species from poaching, alongside renewed efforts to strengthening habitat protection and management.

12. Strengthen environmental legislation, compliance and awareness and call upon enforcement agencies and countries to reduce the role of illicit trade and taxing of forest and wildlife products for threat finance to non-state armed groups and terrorism. Strengthen specifically the research on the possible role of trade in wildlife and timber products including charcoal for threat finance and identify gaps in environmental legislation that may facilitate this.