



**MAPPING THE IMPACT OF ILLICIT TRADE
ON THE SUSTAINABLE DEVELOPMENT GOALS**

ABOUT TRACIT

The Transnational Alliance to Combat Illicit Trade (TRACIT) is an independent, private sector initiative to drive change to mitigate the economic and social damages of illicit trade by strengthening government enforcement mechanisms and mobilizing businesses across industry sectors most impacted by illicit trade.

FOR MORE INFORMATION

This report is available online in PDF format, along with an Executive Summary and ancillary documentation.

Visit www.tracit.org/publications.html

MEDIA

All media enquires should be directed to Cindy Braddon, Head of Communications and Public Policy, cindy.braddon@TRACIT.org

SOCIAL MEDIA

Twitter: [@TRACIT_org](https://twitter.com/TRACIT_org)

LinkedIn: www.linkedin.com/company/tracitorg

TABLE OF CONTENTS

Acknowledgements	2
Abbreviations and acronyms	3
Introduction	5
Chapter 1 SDGs and illicit trade in the agri-food industry	11
Chapter 2 SDGs and illicit trade in agrochemicals and pesticides	20
Chapter 3 SDGs and illicit trade in alcohol	31
Chapter 4 SDGs and illicit trade in counterfeit and pirated goods	42
Chapter 5 SDGs and illicit trade in forestry products	52
Chapter 6 SDGs and illegal, unreported, and unregulated fishing.....	61
Chapter 7 SDGs and illicit trade in petroleum products.....	71
Chapter 8 SDGs and illicit trade in pharmaceuticals	81
Chapter 9 SDGs and illicit trade in precious metals and gemstones.....	93
Chapter 10 SDGs and illicit trade in tobacco products	104
Chapter 11 SDGs and trafficking in persons.....	113
Chapter 12 SDGs and illicit trade in wildlife	120

ACKNOWLEDGEMENTS

Under the supervision of the Transnational Alliance to Combat Illicit Trade (TRACIT)'s Director-General Jeffrey Hardy, this publication was drafted by principal authors Ulrika Bonnier and Louis Bonnier, with research and editorial contributions from Stefano Betti, Suriya Padmanaabhan and Cindy Braddon.

TRACIT expresses its gratitude to its member companies for their support, valuable feedback and contributions of information, case studies and viewpoints on how illicit trade in their particular sector impacts the achievement of the UN Sustainable Development Goals.

TRACIT would like to thank the Secretariat of the UN Conference on Trade and Development (UNCTAD) for hosting the *Dialogue on Illicit Trade and the Sustainable Development Goals*, and assisting with sharing the study to UNCTAD Member States as part of the publication's public launch that took place in Geneva, Switzerland, on 18 July 2019.

ABBREVIATIONS AND ACRONYMS

AMR	Antimicrobial resistance
ASEAN	Association of Southeast Asian Nations
ASM	Artisanal and small-scale mining
CBP	United States Customs and Border Protection
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CSR	Corporate Social Responsibility
DDT	Dichlorodiphenyltrichloroethane
EEZ	Exclusive Economic Zones
EMA	Economically-motivated adulteration
EU	European Union
EUIPO	European Union Intellectual Property Office
FAO	Food and Agricultural Organization of the United Nations
FCTC	Framework Convention on Tobacco Control
FDA	United States Food and Drug Administration
FICCI	Federation of Indian Chambers of Commerce and Industry
G-20	Group of 20
GDP	Gross Domestic Product
HHPs	Highly hazardous pesticides
HMRC	Her Majesty's Revenue and Customs
HSI	United States Immigration and Customs Enforcement Homeland Security Investigations
ICE	United States Immigration and Customs Enforcement
ILO	International Labour Organization
INDCs	Intended Nationally Determined Contributions
INTA	International Trademark Association
IP	Intellectual Property
IPRs	Intellectual Property Rights
IUFOR	The International Union of Forest Research Organizations
IUU Fishing	Illegal, Unreported, and Unregulated Fishing
KP	Kimberly Process
KPCS	Kimberly Process Certification Scheme
MPA	Marine protected area

NRRA	National or Regional Regulatory Authority
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OLAF	European Anti-Fraud Office
OTC	Over-the-counter
PAH	Polycyclic aromatic hydrocarbons
POPs	Persistent organic pollutants
R&D	Research and development
RFMOs	Regional fisheries management organizations
SALT	The Seafood Alliance for Legality and Traceability
SDGs	Sustainable Development Goals
SMFEs	Small- and medium- forest enterprises
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICRI	United Nations Interregional Crime and Justice Research Institute
UNODC	United Nations Office on Drugs and Crime
UNWTO	The World Tourism Organization
USAID	United States Agency for International Development
VPA's	EU's Voluntary Partnership Agreements
WFF	Walk Free Foundation
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WWF	World Wildlife Fund

INTRODUCTION

Illicit trade and the UN SDGs

The UN Sustainable Development Goals (SDGs) lay out an ambitious set of 17 goals to address the world's most acute economic, social and environmental challenges. They cover everything from poverty eradication and zero hunger to clean water, decent jobs and peace. Since coming into effect in January 2016, governments, private sector and civil society have rallied around the SDGs to guide policy, implement investment strategies and allocate funding.

Among the portfolio of tools available to achieve the SDGs is the expansion of international trade.¹ This is because trade has historically proven to be an engine for development, boosting income generating capacity and contributing to unprecedented reductions in poverty levels.² Over the last few decades cross-border trade has expanded significantly, supporting rising living standards across the globe.

At the same time, the expansion in *legal* trade has been accompanied by the alarming emergence of *illicit* trade, with estimates quantifying it and associated transnational criminal activities at between 8 and 15 percent of global GDP.³

From smuggling, counterfeiting and tax evasion, to the illegal sale or possession of goods, services, humans and wildlife, illicit trade is compromising the attainment of the SDGs in significant ways, crowding out legitimate economic activity, depriving governments of revenues for investment in vital public services, dislocating millions of legitimate jobs and causing irreversible damage to ecosystems and human lives.

Mapping illicit trade against the SDGs

Despite the recognition of international trade as an important means to achieve the SDGs, insufficient attention has been given to the substantial impact that illicit trade has on holding back progress.

In order to help governments and business better understand how their efforts to achieve sustainable development must account for the negative forces of illicit trade, this study maps the 17 UN SDGs against the following sectors: agri-foods, alcohol, fisheries, forestry, petroleum, pharmaceuticals, precious metals and gemstones, pesticides, tobacco, wildlife and all forms of counterfeiting and piracy. These sectors were chosen because they participate significantly in international trade and they are particularly vulnerable to illicit trade. Trafficking in persons is also examined as a particularly abhorrent phenomenon affecting supply chains and basic human rights as well as contributing to illicit trade practices.

To the extent that an SDG—or one of the 169 targets established to track progress on the goals—is impacted by illicit trade, this study examines where and how illicit activity

undermines progress to achieve it. In some cases, illicit activity is mapped against an overall goal, such as SDG 3 (Good Health and Well-Being). In other cases, a specific target has been examined, such as SDG Target 8.7 (Eradicate forced labor, end modern slavery and human trafficking).

The examples featured in this study only reflect some of the most egregious impacts of illicit trade on the SDGs. More research will be required to create an exhaustive list of illicit trade's negative impact on sustainable development and to determine second- and third-order consequences for achievement of the SDGs.



Key findings

Based on the research undertaken in this study, the socio-economic impacts of illicit trade are all quantifiably negative and present significant deterrence to achieving all 17 of the SDGs.

There are notable “macro” impacts where illicit trade cuts deeply across many of the SDGs, undermining achievement of the economic goals for poverty reduction, decent jobs and economic growth (SDGs 1, 2, 3, 4 & 8), and robbing governments of taxable income that can be invested in public services (SDGs 9 & 17). When it generates revenue for organized criminal and terrorist groups, illicit trade undermines goals for peace and stability (SDG 16). Most forms of illicit trade plunder natural resources (SDGs 6, 14 & 15), abuse supply chains and ultimately expose consumers to fake and potentially harmful products (SDG 12). In all cases, illicit trades pushes achievement of the goals further away. For example:



Medicines with no active ingredient and toxic illicit alcoholic beverages set back progress on goals for good health and well-being.



Food fraud, commodity smuggling, and illegal agrochemicals undermine sustainable farming, limit crop yields and jeopardize delivery of fair, safe and sustainable food supplies, slowing progress on the goal for zero hunger.



Illegal logging destroys the carbon sink capacity of forests and restricts achievement of the goal to end climate change.



Illicit wildlife trade is almost entirely responsible for pushing some of the world's species to the brink of extinction and robs countries of their natural heritage, undermining goals to preserve life on land.

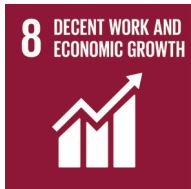
While findings show that illicit trade poses a threat to all 17 SDGs, nowhere is the nexus as evident than in SDG 16 (Peace, Justice and Strong Institutions) and SDG 8 (Decent Work and Economic Growth). Across the board, these two goals are negatively impacted by all types of illicit trade examined in this study.



In many ways, achieving SDG 16 is prerequisite for achieving all the goals, as it aims to deliver peaceful and inclusive societies with effective governance based on rule-of-law principles. Illicit trade—in all its forms—stands in direct juxtaposition to this goal and threatens SDG 16 and its underlying targets: Feeding violence (16.1), exploiting women and children (16.2), undermining

trust in institutions and the rule of law (16.3), generating enormous illicit financial flows (16.4), breeding corruption (16.5), and financing terrorism (16A).

Moreover, the links between illicit trade and organized crime are well established,⁴ from human trafficking networks⁵ and tobacco smuggling,⁶ to fuel theft by drug cartels⁷ and the involvement of the mafia and organized criminal groups in the trade of counterfeit goods.⁸ Communities and economies are further destabilized when billions of dollars of criminal profits are reinvested into other illicit activities.⁹ Perhaps most frightening are links to terrorist financing that heighten threats to national and global security.¹⁰



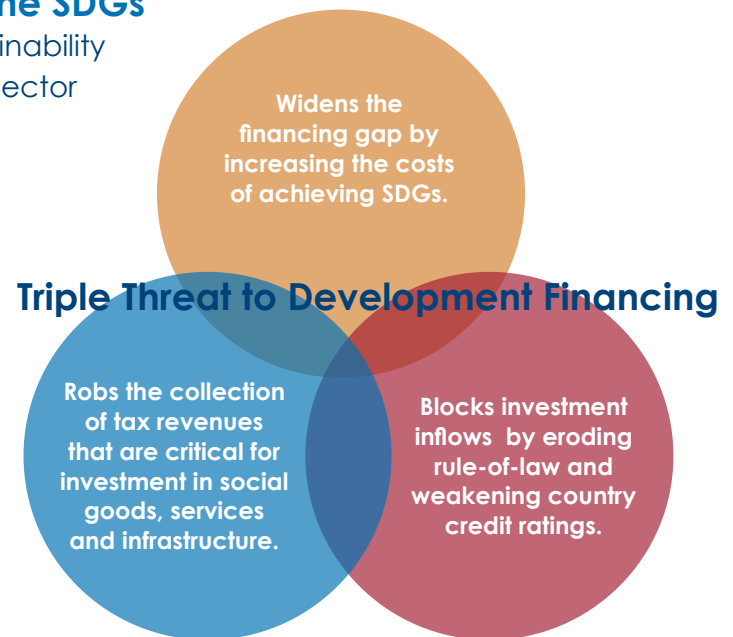
In addition to holding back progress, increasing costs and pushing the goals further away, all types of illicit trade threaten inclusive economic growth and significantly hinder achievement of SDG 8 (Decent Work and Economic Growth). Lost taxes of all kinds—corporate, sales, personal income, excise and value-added—rob governments of revenues intended for schools, infrastructure and other public services. Illegal and unfair competition reduces sales and dampens the ability of legitimate companies to create lasting and dignified job opportunities. The specter of criminality and associated instabilities erodes the rule-of-law that underpins investment and weakens a country's credit ratings, which are needed to secure financing and attract investment. Taken together, economic leakages across the sectors susceptible to illicit trade create an annual drain on the economy of US\$2.2 trillion,¹¹ and present a triple threat to financing the necessary "billions to trillions" dollar gap needed to reach the SDGs.¹²

Business is a partner for achieving the SDGs

As illicit trade weakens the viability and sustainability of industries, it simultaneously dilutes private sector contributions to achieving the SDGs.

For example, illicit trade is a form of unfair competition that undermines private sector contributions to economic growth and employment. It chokes off market growth, sabotages global supply chains, squanders natural resources and endangers market security. Fake products and inferior materials in supply chains harm consumers and tarnish consumer perception of a corporation's social responsibility (CSR) performance. In some cases, it poses significant threats to the safety and security of personnel and facilities, all adding to the increasing costs of doing business. Where proliferating illicit trade creates socio-economic instability, it dampens private sector investment, holds back research and development (R&D) and discourages technology transfer.

For these reasons, the private sector has a vital interest in defending against illicit trade, helping itself across industry sectors and playing an active role in promoting the SDGs.





The Transnational Alliance to Combat Illicit Trade (TRACIT) provides a platform for business and governments to collaborate holistically to mitigate the incumbrance of illicit trade on the SDGs. *Mapping the impacts of illicit trade on the UN Sustainable Development Goals* is part of TRACIT's contribution to the partnership approach

embodied in SDG 17 and a means by which business, the public sector and civil society—working in partnership—can more effectively achieve many of the SDG 17 Targets, such as to improve domestic capacity for tax and other revenue collection (17.1), especially in excise tax-heavy sectors like fuel, alcohol and tobacco; mobilize additional financial resources for developing countries (17.3); activate investment promotion regimes for least developed countries (17.5); expand access to science, technology and innovation (17.6); and increase the exports of developing countries (17.11).

The importance of enhanced global partnerships between governments, private sector, civil society and the UN system to mobilize all available resources—public and private—to achieve the 2030 Agenda is embodied in SDG 17 (Partnerships for the Goals).

Implications and next steps

The sweeping, negative impacts of illicit trade on the SDGs point to a wide range of challenges for both governments and business. Hence, it will be expedient to:

Attend to developing and least developed countries. The alarming consequences of illicit trade are especially evident in developing countries hard-pressed to monetize resources, commercialize innovation, attract investment, establish lasting job opportunities and create genuine, long-term economic growth. As such, it will be critical to support the capabilities of developing countries to better defend against illicit trade by *inter alia* taking stock of national government experiences, challenges, priorities and requests for assistance while also identifying where “in-country” efforts would be most valuable and most effective.

Account for the interconnected nature of the challenge. As noted by the UN, the SDGs are integrated and indivisible in nature with significant inter-linkages across the goals and targets. Ending poverty, for example, must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, job opportunities and environmental stewardship. By the same token, a holistic approach is needed to address the significant number of interdependencies and overlapping problems relating to multiple forms of illicit trade. The impacts of illicit trade cannot be examined effectively in isolation of other sectors, nor can they be addressed in isolation of the SDGs.

Promote shared responsibility. Improving public-private dialogue and promoting partnerships will be needed to address the global nature of illicit trade. Public and private actors can play an important role in determining a responsive, evidence-based work program for addressing illicit trade, including delineation of best practices, and, where applicable, development of regulatory standards.

Prioritize the policy response. The findings from this study demonstrate that illicit trade is a significant deterrent to achieving the SDGs. As governments go about formulating policies and implementing programs to achieve the SDGs, a first order consideration should be to reduce the deterrent forces of illicit trade and plug the fiscal leakages associated with it. This approach has the immediate effect of adding resources and revenues back into the

global economy, putting more policy tools back on the table, and reducing timelines, costs and other hurdles to achieving the goals. Consequently, a more level playing field, without the economic drags of illicit trade, can improve the efficiency and effectiveness of policies and programs governments are taking to stimulate growth, employment and investment to achieve the SDGs.

Foster political will and leadership. Addressing the threat of illicit trade on the SDGs will require political will of government officials at all levels to prioritize the problem, actively pursue solutions and invest in enforcement measures. This study provides a first step in raising awareness on the threat of illicit trade on achieving the SDGs. The work also serves as a roadmap to help policy makers identify areas that merit greater attention and to formulate effective strategies to address the serious threats posed by illicit trade.

NOTES

¹ UNCTAD. (2019). *Trade and the Sustainable Development Goals*. Geneva: UNCTAD.

² WTO. (2018). *Mainstreaming trade to attain the Sustainable Development Goals*. Geneva: WTO.

³ World Economic Forum. (2014). *Out of the Shadows: Why Illicit Trade and Organized Crime matter to us all, Global Agenda Council on Illicit Trade & Organized Crime 2012-2014*. Cologne and Geneva: World Economic Forum.

⁴ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing; World Economic Forum. (2013). *Out of the Shadows: Why Illicit Trade and Organized Crime matter to us all, Global Agenda Council on Illicit Trade & Organized Crime 2012-2014*. Davos-Klosters: World Economic Forum.

⁵ UNODC. (2012). *Human trafficking: organized crime and the multibillion dollar sale of people*. Vienna: UNODC.

⁶ Michalopoulos, S. (2017, February 7). EU anti-fraud official: Tobacco smuggling is 'major source' of organised crime. *EURACTIV*. Retrieved from <https://www.euractiv.com>

⁷ Woody, C. (2018, February 1). Mexican drug cartels are preying on a multibillion-dollar industry and taking a deadly toll on the workers who run it. *Business Insider*. Retrieved from <https://www.businessinsider.com>

⁸ UNODC. (2014). *Focus on: The Illicit Trafficking of Counterfeit Goods and Transnational Organized Crime*. Vienna: UNODC.

⁹ UNICRI. (2011). *Counterfeiting: a global spread, a global threat*. Turin: UNICRI.

¹⁰ Bindner, L. (2016). *Illicit Trade and Terrorism Financing December 2016 – Interim results*. n.p.: Center for the analysis of terrorism (CAT); Saidi, N. & Prasad, A. (2015). *Taxation, Illicit Trade in Tobacco Products and Finance of Terrorism*. n.p.: The CRE.; Vicky. (2017, October 14). How illicit trade of cigarettes is funding terrorism globally. *OneIndia*. Retrieved from <https://www.oneindia.com>; Hendawi, H. & Abdul-Zahra, Q. (2015, October 23). ISIS is making up to \$50 million a month from oil sales. *Business Insider*. Retrieved from <https://www.businessinsider.com>

¹¹ Global Financial Integrity. (2017). *Transnational Crime and the Developing World*. Washington D.C.: Global Financial Integrity.

¹² Australian Government Department of Foreign Affairs and Trade. (n.d.). *Financing the Sustainable Development Goals*. Canberra: DFAT.

¹³ United Nations. (2015). *Transforming our World: The 2030 Agenda for Sustainable Development, A/RES/70/1*. New York, NY: United Nations.

CHAPTER 1: SDGs AND ILLICIT TRADE IN THE AGRI-FOOD INDUSTRY



CHAPTER 1 SDGs AND ILLICIT TRADE IN THE AGRI-FOOD INDUSTRY

Illicit trade in the agri-food sector comes in many forms and manifestations, ranging from economically-motivated adulteration (EMA), commonly referred to as food fraud, to large scale smuggling of agriculture products.

Food fraud is the intentional sale of sub-standard food products or ingredients for the purpose of economic gain. It impacts many different types of foods, including meat, dairy products, fish and seafood, fruit juices, oils, honey, spices and wine. Common types of food fraud include substitution or dilution of an authentic ingredient with a cheaper product (such as replacing extra virgin olive oil with a cheaper oil), flavor or color enhancement using illicit or unapproved substances (such as unapproved dyes), and substitution of one species with another (such as the European horse meat scandal).¹

Smuggling of agriculture products is driven by a disparity between the price of a good at its origin and its (prohibited) destination, which includes price differentials deriving from government subsidies. This practice results in significant revenue losses to governments from the circumvention of taxes, tariffs and import/export duties. Additionally, smuggled agricultural goods can have severe knock-on effects on the economy as a whole: The availability of cheap smuggled goods creates unfair competition, constraining domestic markets and local producers. Smuggled agricultural goods can also introduce invasive species, disease-carrying pathogens or contaminants that threaten the health of humans and pose unique risks to the agricultural economy and the trade status of a country's exports.² For example, an outbreak of Exotic Newcastle Disease among poultry in California in 2003 is attributed to smuggled game birds from Mexico. As a result, California poultry farmers incurred eradication costs of approximately US\$168 million.³

Illicit trade in agri-food has wide-ranging effects on countries and regions in all corners of the world:

- In ASEAN, the regulatory and compliance environment has struggled to keep pace with the growing agri-food industry in the region. The high import and export tariffs in countries such as Indonesia and Thailand encourage the smuggling of certain foods and liquors.⁴ Further restrictions on import/distribution licensing arrangements, onerous product regulatory standards, and a lack of uniform food security and trade standards result in trade barriers, which create opportunities for criminals to engage in illegal agri-food trade.⁵
- Sugar smuggling has been a problem in Kenya, Somalia, Uganda, Mozambique, Myanmar, India, Sri Lanka, Vietnam, Guatemala and Mexico. For example, in South-East Asia sugar smuggling not only deprives governments of revenue, but also threatens local industries on which local farmers depend for their livelihoods. Confed, the largest organization of local sugarcane farmers in the Philippines, argued that continued illegal entry of cheap sugar “would ultimately gobble up the sugar industry.”⁶

- Tea smuggling represents a major strain on Pakistan's finances, one of the world's largest importers and consumers of tea. Reports indicate that the illicit tea business in the country accounts for more than a third of the total market. Consequently, Unilever Pakistan Limited has reported that, "business operations and profitability of legitimate commercial importers and packers have been severely curtailed."⁷
- The Ivory Coast lost an estimated 125,000 tons of cocoa to smuggling in the 2017-2018 season, equivalent of 9 percent of the harvest.⁸ These losses are significant in a country where cocoa accounts for roughly 20 percent of exports and where, according to the IMF, a 1 percent change in revenue from exports of the beans can lead to a 0.63 percent shift in government spending.⁹

Impact of illegal agri-food trade on achieving the UN Sustainable Development Goals

Agriculture constitutes a large portion of most economies' GDP and a healthy agricultural sector is vital to eradicating hunger and poverty. Together with food processing, food retail and food services, agriculture provides nearly 44 million jobs in the EU and annual exports worth over EUR120 billion.¹⁰ Agriculture, food, and related industries contributed US\$992 billion to US GDP in 2015, and 11 percent of total US employment.¹¹ ASEAN countries have witnessed phenomenal growth in agricultural production in recent years: Exports rose from around US\$6 billion in 1990 to approximately US\$50 billion in 2014.¹² This has led to an increase in incomes in the agri-industry across the region and considerable economic growth.

Consequently, strong, legal agricultural trade is crucial to achieving several SDGs, especially in developing and emerging economies. This, in turn, results in better quality of life,¹³ drives trade, investment and industrialization, and thereby creates jobs, security and overall economic prosperity.¹⁴

Conversely, illegal agri-food trade globally undermines farming and global food trade systems, destabilizes rural economies and jeopardizes production and delivery of fair, safe and sustainable food supplies.¹⁵

The illicit trade in agri-foods impacts achievement of six of the SDGs:

- SDG 1 (no poverty);
- SDG 2 (zero hunger);
- SDG 3 (good health and well-being);
- SDG 8 (decent work and economic growth);
- SDG 12 (responsible consumption and production); and
- SDG 16 (peace, justice and strong institutions).

Promoting good health and ending hunger and poverty



The prevalence of illegal agri-foods and the negative impacts on food sustainability are significant risks to some of the most urgent goals. Access to healthy and affordable food are prerequisites for addressing global poverty and hunger. Illicit trade in agri-food contributes directly to food insecurity, poverty and malnutrition by contaminating, counterfeiting and adulterating food products.

Fake infant milk powder, vegetable oil made of recycled oils unfit for human consumption and formalin—an embalming agent—used to keep meat and fish free from flies and seemingly fresh for days, are all examples of how adulterated food supplies can contribute to malnutrition.¹⁶ Illicit trade in agriculture perpetuates the vicious cycle of hunger and poverty, resulting in stunted human development and shorter, less productive lives.

Developing countries and low-income communities, which lack strong food-safety control systems or cannot afford to buy safer, but more expensive products, are particularly vulnerable to these illegal practices in agriculture sectors.¹⁷

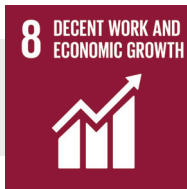
Illegal agri-food, driven by rapid population growth and increased demand, also may exacerbate unsustainable food production patterns, such as when illegally sourced seafood is fraudulently introduced into legitimate supply chains or when tropical forests not meant for agricultural land are illegally converted to palm oil plantations.

Unsustainable food production patterns contribute to declining arable land, degradation of key ecosystems, natural resource depletion, and deterioration of soil, water and biotic resource bases on which all food production depends.¹⁸

While many incidents of illegal agri-food are associated with economic, environmental and sustainability losses, there are equally as many instances where food fraud has had disastrous effects on health and well-being (SDG 3). Perhaps the most recognized case occurred in China in 2008 when Melamine-adulterated milk was used in the manufacture of infant formula, leading to six deaths and the hospitalization of more than 50,000 infants. Other examples include the selling of salmonella-contaminated peanuts in the US, causing a nationwide salmonella outbreak that sickened hundreds and killed 9 people.¹⁹ In Spain in 1981, nearly 700 people died and over 20,000 were made ill after consuming rapeseed oil intended for industrial purposes but sold on street markets as “olive oil.”²⁰

Food fraud conveys a number of severe indirect impacts on human health. For example, long term exposure to low-level toxic contaminants or the continuous omission of active or beneficial ingredients, such as preservatives or vitamins can have harmful health consequences. Likewise, health risks emerge when unlabeled or adulterated ingredients cause consumer allergy, intolerance, or sensitivity. Finally, food fraud also deceives some consumers into unknowingly consuming ingredients that would otherwise be avoided for religious or ethical reasons.²¹

Decent work and sustainable economic growth



Fake, substandard, smuggled and illegal agri-foods distort and destabilize food markets and cost the global food industry an estimated US\$30 to 40 billion each year, undermining economic growth, costing jobs and hurting entire sectors of the economy.²² For a legitimate company, this form of illegal competition reduces sales and employment opportunities and disincentivizes investment. This is especially the case for small-scale food producers and those in developing countries.

For example, sugar smuggling by illegal cartels in Kenya has drained tens of thousands of jobs²³ and strips the government of legitimate tax revenues.²⁴ In Asia, Cambodia's rice industry is on the “brink of collapse” due to unfair competition from cheaper illegal rice imports.²⁵ Elsewhere in the region, China and the Philippines report economic damage from illegal rice trade.²⁶

In cases where illegal agri-food trade results in injury or harm, a corporation's economic sustainability can be severely damaged. A study commissioned by the Grocery Manufacturers Association estimates that one adulteration incident can cost a company between 2-15 percent of yearly revenues.²⁷

Incidents of food fraud in a market also may have long-term effects on consumer trust. Once confidence in the food system is lost, even the rumor of food fraud can have far reaching damages. Unsubstantiated rumors of plastic rice on the markets in Africa²⁸ and plastic seaweed in China²⁹ circulating on social media platforms have stoked fear in consumers and damaged the brands, imports and profits of legitimate producers.

Ensure sustainable consumption and production patterns



In addition to its impact on health and economic growth, illicit agri-food also has a knock-on effect on SDG 12. Consumers' ability to make educated and eco-friendly decisions are undermined when certificates of origin are falsified, quality assurance programs hampered, claimed ingredients diluted with a cheaper product or entire species substituted. The practice of seafood mislabeling is a prime example of where food fraud strips the consumer's ability to make informed food choices, while simultaneously threatening ocean sustainability by creating or sustaining markets for illegally sourced fish to be laundered into the legal seafood trade.³⁰

Peace, justice and strong institutions



Organized crime plays a major role in the illicit trade of agri-food products, undermining SDG Target 16.4 (combat all forms of organized crime), as well as SDG Target 16.1 (significantly reduce all forms of violence and related death rates everywhere). In Italy, organized criminal groups are now involved in the commodity value chain of many Italian food products exported abroad.³¹ The Italian “Agromafia” has been known to copy fine olive oil, wine and cheese, fueling an explosion of food crime in Italy.³² This activity has spread to the US market where 75-80 percent of the “extra virgin” olive oil imported from Italy is not extra virgin.³³ Economic activities in the Italian agri-food sector managed by criminal organizations have nearly doubled from €12.5 billion in 2011 to more than €22 billion in 2018, growing at an average of 10 percent a year.³⁴

Given its linkages to organized criminal activity, illicit trade in agri-foods can underpin wider risks to national and regional security, further undermining SDG Target 16.3 (promote the rule of law) and SDG Target 16.5 (reduce corruption). This is especially the case when existing routes and markets for cross-border smuggling of foodstuffs are exploited by criminal groups, including non-state armed actors, for trafficking in high profile illegal goods, such as drugs and arms.³⁵ Examples include the lucrative sugar smuggling business in the Kenya–Somalia borderlands, which have been linked to Al-Shabaab militants,³⁶ and smuggling of subsidized foodstuffs in the Maghreb that finances organized crime and supports global illicit trade networks.³⁷

CONCLUSIONS

Illicit trade in agri-foods undermines the SDGs in many ways:



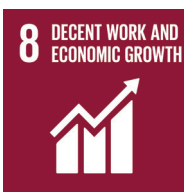
Undermines robust and resilient agricultural markets that support economic development and poverty reduction.



Destabilizes food security and undermines sustainable food production and access to food.



Exposes consumers to harmful ingredients or deprives them of active beneficial ingredients.



Siphons GDP, jobs and tax revenues from national economies and introduces health risks that can jeopardize corporate brands and economic sustainability.



Deprives consumers of choice and ability to make educated and eco-friendly decisions.



Illegal profits underwrite smugglers, breed corruption, subsidize wider criminal activity and threaten political and economic stability.

NOTES

- ¹ Johnson, R. (2014). Food Fraud and "Economically Motivated Adulteration" of Food and Food Ingredients. Washington, DC: Congressional Research Service. Retrieved from: <https://fas.org/sgp/crs/misc/R43358.pdf>
- ² Ferrier, P. (2009). *The Economics of Agricultural and Wildlife* [USDA-ERS Economic Research Report No. 81]. Washington, DC: United States Department of Agriculture. Retrieved from: https://www.ers.usda.gov/webdocs/publications/46261/11019_err81_1_.pdf?v=41056
- ³ Ferrier, P. (2009). *The Economics of Agricultural and Wildlife* [USDA-ERS Economic Research Report No. 81]. Washington, DC: United States Department of Agriculture. Retrieved from: https://www.ers.usda.gov/webdocs/publications/46261/11019_err81_1_.pdf?v=41056
- ⁴ ASEAN-BAC et al. (n.d.). *Position Paper: Agri Food*. n.p.: ASEAN-BAC et al. Retrieved from: <https://foodindustry.asia/documentdownload.axd?documentresourceid=634>
- ⁵ ASEAN-BAC et al. (n.d.). *Position Paper: Agri Food*. n.p.: ASEAN-BAC et al. Retrieved from: <https://foodindustry.asia/documentdownload.axd?documentresourceid=634>
- ⁶ GMA News Online. (2010, March 28). Sugar producers allege worsening smuggling problem. *GMA News Online*. Available at: <http://www.gmanetwork.com/news/money/content/187195/sugar-producers-allege-worsening-smuggling-problem/story/>
- ⁷ Baloch, F. (2014, February 23). Illicit Trade: Tea smuggling shaves Rs8.7b off potential tax revenues. *The Express Tribune*. Available at: <https://tribune.com.pk/story/675257/illicit-trade-tea-smuggling-shaves-rs8-7b-off-potential-tax-revenues/>
- ⁸ Mieu, B. (2018, February 28). Ivory Coast Lost 125,000 Tons of Cocoa to Smuggling. *Bloomberg*. Available at: <https://www.bloomberg.com/news/articles/2018-02-27/ivory-coast-is-said-to-lose-125-000-tons-of-cocoa-to-smuggling>
- ⁹ Mieu, B., Dzawu, M. M., and Monnier, O. (2017, August 31). Ivory Coast Said to Fear Losing Fifth of Cocoa to Smuggling. *Bloomberg*. Available at: <https://www.bloomberg.com/news/articles/2017-08-31/ivory-coast-is-said-to-fear-losing-fifth-of-cocoa-to-smuggling>
- ¹⁰ European Commission. (2015). *Food & Farming: Focus on Jobs and Growth*. Brussels: European Commission. Retrieved from: https://ec.europa.eu/agriculture/sites/agriculture/files/events/2015/outlook-conference/brochure-jobs-growth_en.pdf
- ¹¹ United States Department of Agriculture Economic Research Service. (2018). *Ag and Food Sectors and the Economy*. Washington, DC: United States Department of Agriculture Economic Research Service. Available at: <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/>
- ¹² OECD Global Forum on Agriculture. (2017). *Engaging in Global Agro-Food Value Chains: Policy Note for Session 4*. Paris: OECD Global Forum on Agriculture. Retrieved from: <https://www.oecd.org/tad/events/4-FINAL%20GVC%20policy%20note%2027%20April.pdf>
- ¹³ Charles, F. M. (2016). The Impact of Trade Facilitation on Agricultural Products Standard Compliance in Relation to Cameroon's Export Performance. *Journal of Food Process Technology*, 7 (10), 1-12. Retrieved from: <https://www.omicsonline.org/open-access/the-impact-of-trade-facilitation-on-agricultural-products-standard-compliancein-relation-to-camerouns-export-performance-2157-7110-1000624.pdf>
- ¹⁴ Charles, F. M. (2016). The Impact of Trade Facilitation on Agricultural Products Standard Compliance in Relation to Cameroon's Export Performance. *Journal of Food Process Technology*, 7 (10), 1-12. Retrieved from: <https://www.omicsonline.org/open-access/the-impact-of-trade-facilitation-on-agricultural-products-standard-compliancein-relation-to-camerouns-export-performance-2157-7110-1000624.pdf>
- ¹⁵ Anglin Treat, S. (2015). *States' Leadership on Healthy Food and Farming at Risk under Proposed Trade Deals*. Minneapolis: Institute for Agriculture and Trade Policy. Retrieved from: <https://tpplegal.files.wordpress.com/2015/12/states-leadership-on-healthy-food-and-farming.pdf>
- ¹⁶ Nwuneli, N. (2018, March 10). Fake processed food is becoming an epidemic in African urban life. *Quartz Africa*. Available at: <https://qz.com/1226112/fake-food-or-fraud-food-in-nigeria-kenya-and-other-african-countries/>
- ¹⁷ The Global Initiative Against Transnational Organized Crime. (2015). *Organized Crime: A Cross-Cutting Threat to Sustainable Development*. Geneva: The Global Initiative Against Transnational Organized Crime. Retrieved from: <http://globalinitiative.net/wp-content/uploads/2015/01/global-initiative-organized-crime-as-a-cross-cutting-threat-to-development-january-2015.pdf>
- ¹⁸ UNEP. (2018). *Sustainable Agri-Food Supply Chains*. Nairobi: UNEP. Available at: <https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/sustainable-lifestyles/sustainable-agri-food-supply>
- ¹⁹ Dennis, B. (2015, September 21). Executive who shipped tainted peanuts gets 28 years; 9 died of salmonella. *The Washington Post*. Available at: https://www.washingtonpost.com/national/health-science/a-life-sentence-for-shipping-tainted-peanuts-victims-families-say-yes/2015/09/19/e844a314-5bf1-11e5-8e9e-dce8a2a2a679_story.html?utm_term=.ba2aad89cb0
- ²⁰ Riding, A. (1989, May 21). Trial in Spain on Toxic Cooking Oil Ends in Uproar. *The New York Times*. Available at: <http://www.nytimes.com/1989/05/21/world/trial-in-spain-on-toxic-cooking-oil-ends-in-uproar.html>
- ²¹ Quagliani, D. (2016, July 1). The Shade Business of Food Fraud. *Food and Nutrition*. Available at: <https://foodandnutrition.org/july-august-2016/shady-business-food-fraud/>
- ²² PWC. (2016). *Fighting \$40bn food fraud to protect food supply* [Press release]. n.p.: PWC. Available at: <https://press.pwc.com/News-releases/fighting-40bn-food-fraud-to-protect-food-supply/s/44fd6210-10f7-46c7-8431-e55983286e22>
- ²³ Standard Reporter. (2016, January 18). COTU wants more action on sugar cartels to protect jobs. *Standard Digital*. Available at <https://www.standardmedia.co.ke/business/article/2000188522/cotu-wants-more-action-on-sugar-cartels-to-protect-jobs>
- ²⁴ Mwitii, L. (2016, February 26). KRA confiscates 16 containers loaded with illegal sugar. *Standard Digital*. Available at: <https://www.standardmedia.co.ke/business/article/2000193025/kra-confiscates-16-containers-loaded-with-illegal-sugar>

- ²⁵ Sokhomg, C. (2016, May 9). Illegal rice imports still pouring across border. *The Phnom Penh Post*. Available at <http://www.phnompenhpost.com/business/illegal-rice-imports-still-pouring-across-border>
- ²⁶ Nilar. (2015, May 13). Illegal Chinese rice purchases continue: ministry. *Eleven*. Available at <http://www.elevenmyanmar.com/business/9390>; Macairan, E. (2014, February 21). 5 firms tagged in illegal rice trade. *ABS CBN News / The Philippine Star*. Available at <http://news.abs-cbn.com/nation/02/20/14/5-firms-tagged-illegal-rice-trade>
- ²⁷ The Grocery Manufacturers Association. (2010). *Consumer Product Fraud: Deterrence and Detection*. Arlington: The Grocery Manufacturers Association. Retrieved from: <https://www.gmaonline.org/downloads/research-and-reports/consumerproductfraud.pdf>
- ²⁸ Munoz-Pineiro, A. & Toussaint, B. (2018). *'FAKE RICE' on African and Asian Markets. Rumour of Evidence?: Factsheet – December 2017*. Brussels: The Joint Research Centre (JRC). Retrieved from: <http://publications.jrc.ec.europa.eu/repository/handle/JRC110625>
- ²⁹ Huang, E. (2017, March 26). In China, consumers have to be on guard not just against fake food, but also fake news about food. *Quartz*. Available at: <https://qz.com/934038/in-china-fake-news-about-food-goes-viral-because-people-find-it-hard-to-trust-anyone/>
- ³⁰ Oceana. (2018). *The Campaign*. n.p.: OCEANA. Available at: http://oceana.org/our-campaigns/seafood_fraud/campaign
- ³¹ Bacchi, U. (2017, February 21). Italian police break mafia ring exporting fake olive oil to U.S. *Reuters*. Available at: <http://www.reuters.com/article/us-italy-crime-food-idUSKBN1602BD>
- ³² Whitaker, B. (2016, January 3). Agromafia. *CBS 60 Minutes*. Available at: <https://www.cbsnews.com/news/60-minutes-agromafia-food-fraud/>
- ³³ Olive Oil Times Staff. (2016, January 3). Mafia Control of Olive Oil the Topic of '60 Minutes' Report. *Olive Oil Times*. Available at: <https://www.oliveoiltimes.com/olive-oil-basics/mafia-olive-oil-on-60-minutes/50203>
- ³⁴ Roberts, H. (2018, November 8). How the mafia got to our food. *Financial Times*. Available at: <https://www.ft.com/content/73de228c-e098-11e8-8e70-5e22a430c1ad>
- ³⁵ Babuta, A. & Haenlein, C. (2018). *Commodity Smuggling in the Maghreb: A Silent Threat* [Policy Brief May 2018 PB-17/14]. Rabat: OCP Policy Center. Retrieved from: <http://www.ocppc.ma/publications/commodity-smuggling-maghreb-silent-threat>
- ³⁶ Rasmussen, J. (2017). *Sweet secrets: sugar smuggling and state formation in the Kenya-Somalia borderlands*. *DIIS WORKING PAPER 2017: 11*. Copenhagen: Danish Institute for International Studies (DIIS). Available at: <https://globalinitiative.net/sweet-secrets-sugar-smuggling-and-state-formation-in-the-kenya-somalia-borderlands/>
- ³⁷ Babuta, A. & Haenlein, C. (2018). *Commodity Smuggling in the Maghreb: A Silent Threat* [Policy Brief May 2018 PB-17/14]. Rabat: OCP Policy Center. Retrieved from: <http://www.ocppc.ma/publications/commodity-smuggling-maghreb-silent-threat>

CHAPTER 2: SDGs AND ILLICIT TRADE IN AGROCHEMICALS AND PESTICIDES



CHAPTER 2 SDGs AND ILLICIT TRADE IN AGROCHEMICALS AND PESTICIDES

Agrochemicals and specifically pesticides are an integral part of conventional agriculture. Insecticides, herbicides and fungicides help maximize crop quantity and quality by reducing the pests and diseases that cause damage to crops and limit crop yield.¹

Given the global widespread use of pesticides—a market projected to reach US\$90 billion by 2023²—it is not surprising that counterfeit and illegally-traded versions are finding their way into markets worldwide.³ Illegal agrochemicals include: obsolete or banned unauthorized pesticides; untested, unregulated, or unlicensed pesticides; unauthorized imports; counterfeit and fake pesticides; relabeled or mislabeled pesticides; and refilled pesticides containers.⁴

According to various estimates, the share of illegal pesticides on the global pesticide market is as high as 25 percent.⁵ These illegal pesticides are untested for safety and may contain unapproved and unknown impurities, uncertified chemicals, illegal formulations, incorrect proportions of active ingredients and have fraudulent or nonexistent guidelines for proper usage.

The proliferation of illicit pesticides presents a range of threats to farm yield, farmer health and safety, reputation of industry and environmental systems that support human, animal, plant and aquatic life. Farmers face potentially irreversible damage to their crops, fields and livelihoods, with large scale losses increasing poverty and contributing to social unrest in rural areas.^{6,7}

Illegal pesticides also generate a number of serious economic and social impacts and undermine the importance and value of legitimate crop protection products on sustainable development, global stability and national food security.⁸ In addition to crop loss and damage to soil fertility, the use of illegal pesticides can tarnish the reputation of trading partners and threaten export markets⁹ causing significant damage to local agricultural economies.

Finally, profits from illegal pesticides represent a highly lucrative activity for organized crime, with criminal networks hiding their operations in complex global supply chains including repackaging, remarking and changing labels.¹⁰ As a criminal enterprise, there is little threat to the profitability of criminal activities with illegal pesticides. Criminals are unlikely to be apprehended as authorities are under-resourced and the penal system does not usually create a significant deterrent.

Case study: Europol Operation Silver Axe III

European law enforcement authorities made the largest ever seizure of illegal pesticides, some 360 tons, as the result of Operation SILVER AXE III. The annual operation coordinated by Europol with the support of the European Anti-Fraud Office (OLAF) targets the illegal trade of pesticides, including their sale and placing on the market (imports). Run over the course of 20 days in April-May 2018, the action saw inspections being carried out at major seaports, airports and land borders, as well as production and repacking facilities in 27 participating countries. Cooperation with private industry was also crucial to the success of the action, with stakeholders from 43 private companies participating.

The record volume of hazardous substances seized in this operation underscores the importance of stemming the flow of these potentially lethal products. According to the investigators, the seized pesticides could have been used to spray 48,000 square kilometers of agricultural land, equaling an area nearly the size of the UK.

Source: Europol (11 July 2018) www.europol.europa.eu/newsroom/news/largest-ever-seizure-of-illegal-or-counterfeit-pesticides-in-europol-silver-axe-operation

Impact of illegal agrochemicals and pesticides on achieving the UN Sustainable Development Goals

The commercialization of a legal agricultural input, such as a pesticide, requires regulatory controls to ensure that the chemical is dealt with safely, from development to disposal. Illegal pesticides are not subject to regulatory controls. Manufacturers of illicit agrochemicals sidestep the regulatory process and do not account for safety risks associated with the use of mislabeled, unregulated, and unidentified substances and chemicals. These risks extend to the treated crops and surrounding ecosystems and also to the foods ultimately consumed by humans and animals.¹¹ The mitigation and eventual elimination of illegal pesticides is thus crucial to support sustainable agriculture without adverse impact on human health, land, water, biodiversity and climate change.

Illegal agrochemicals and pesticides negatively impact achievement of nine SDGs:

- SDG 1 (no poverty);
- SDG 2 (zero hunger);
- SDG 3 (good health and well-being);
- SDG 6 (clean water and sanitation);
- SDG 8 (decent work and economic growth);
- SDG 12 (responsible consumption and production);
- SDG 14 (life below water);
- SDG 15 (life on land); and
- SDG 16 (peace, justice and strong institutions).

Poverty, job creation and economic development



Agriculture drives economic development and provides a livelihood for many of the poorest and most vulnerable people. According to the World Bank, growth in agriculture sectors is at least twice as effective in reducing poverty as growth in any other sector.¹² There are multiple ways through which an increase in agricultural productivity can reduce poverty, including higher incomes and associated multiplier effects that stimulate employment in the rural and urban non-farm sectors.¹³

Consequently, the positive impact of authentic and legal pesticides in supporting agriculture productivity is inextricably linked to poverty eradication and economic growth, development and job creation. Agricultural applications are estimated to account for 86 percent of pesticide sales worldwide,¹⁴ with the global market for pesticides projected to grow from around US\$75 billion in 2017 to US\$90 billion by 2023.¹⁵

There are a number of negative economic impacts extending from the growth in illicit pesticides, starting with lost government revenues from uncollected taxes. For example, illegal agrochemicals represent as much as 15 to 20 percent of the market in Kenya,¹⁶ and the government is reported to be losing at least Sh120 billion (US\$1.19 billion) in revenue from unregistered agrochemical dealers and counterfeit pesticides, according to Agrochemicals Association of Kenya. This illicit activity exacerbates budget deficits and precludes government spending on health care, infrastructure and job creation. Governments also end up spending more on enforcement-related activities to clear markets of illicit products, further burdening limited resources that could be more efficiently used for raising awareness and preventing farmers from becoming victims of criminal trade.¹⁷

Legitimate producers and distributors are faced with unfair competition from low-cost substandard product, which also tarnishes their brands. But beyond financial losses, the presence of "look alike" and counterfeit versions of legitimate products also damages customer trust. For individual farmers, the use of counterfeit pesticides is a triple loss: money is wasted on pesticides that have little or no effectiveness in protecting crops, crop yields are reduced or even lost, and long-run environmental degradation is an ever-present risk.¹⁸

To illustrate the socio-economic losses to Europe, the EUIPO estimated that the knock-on effects due to illegal pesticides in the EU marketplace account for 11,700 lost jobs, €238 million drained from tax revenues and a staggering €1.3 billion annual burden on EU business.¹⁹

On a macro level, illicit pesticides can devastate markets for particular products by eroding public confidence in established producers, agricultural producing countries, and perceptions of food safety. They also cause reputational damage to established food producers, products, and brands and exporters.²⁰ One of the more well-known examples involved detection of isofenphos-methyl in pepper samples exported from Spain to Germany, Finland, Netherlands, UK and Russia. In the wake of the revelation, Spanish pepper exports dropped almost 20 percent and prices decreased by 60 percent. An investigation linked the banned chemical to

illicit pesticides used in the pepper fields, which led to production stoppages and the seizure of 2,200 liters of mixed illicit pesticides, with criminal charges and fines for the implicated farmers.²¹

In India, a 2015 study by the Federation of Indian Chambers of Commerce and Industry (FICCI) found that India's position as one of the leading food exporters in the world, a market worth INR 1,578 billion (US\$21 billion), could be at stake if false rumors about illegal pesticide use led importing countries to reduce or ban imports of crops from India.²²

Food stability and sustainable agriculture



Ending hunger, achieving food security, improving nutrition, and promoting sustainable agriculture (SDG 2) is closely connected to continued and productive application of pesticides. Consequently, it is imperative to protect markets from illegal pesticides which jeopardize crop yields and the production of safe, stable and nutritious food supplies.

Food security and hunger top the list of global challenges. The United Nations Food and Agriculture Organization (FAO) estimates that 793 million people are undernourished and lack food security.²³ Moreover, there is a looming challenge to feed the rapidly growing global population, which will require 69 percent more food calories in 2050 than it did in 2006.²⁴

Increasing farmers' access to legitimate pesticides is one of the most fundamental ways to increase agricultural productivity and output. Used properly, pesticides protect and increase agricultural yields and the number of times a crop can be grown on the same land each year. This is particularly important in countries that face food shortages.²⁵

Illegal pesticides in contrast are untested, contain an imbalance of chemicals or lack active ingredients, all of which can cause low yields, crop failure or result in high levels of pesticide residues on food products. Illegal pesticides also may render agricultural land infertile due to soil degradation and contamination of ground water. India, for example, loses about 10 million tons (about 4 percent) of food output a year due to fake pesticides.²⁶

Delivering good health



The use of illegal pesticides presents significant risks to human health (SDG 3) in the forms of food toxicity, exposure to unsafe chemicals, and safety hazards associated with transportation and handling.

- Undeclared active ingredients in illegal and counterfeit pesticides can leave unacceptable levels of toxic residues on crops, rendering them unfit for human (or animal) consumption.

- Exposure to and handling of illegal pesticides containing chemicals which are banned, obsolete or restricted—such as persistent organic pollutants (POPs) and other highly hazardous pesticides (HHPs)—can present significant long-term health, food and environmental risks to agricultural and farm workers.²⁷
- Falsely declared, counterfeit and illegal agrochemicals ignore the international labelling and safety requirements designed to reduce safety risks of transporting highly toxic, flammable or otherwise hazardous substances.²⁸

Finally, SDG 3 for good health is undermined when the sustained use of illegal, ineffective pesticides negatively impacts the nutritional value of harvests.

Peace, justice and strong institutions



According to a 2016 report by the United Nations Interregional Crime and Justice Research Institute (UNICRI), “Illicit pesticides represent a lucrative activity for organized crime and a concrete threat to security, development, health and the environment.” Similarly, Europol notes that, “The trade in illegal and counterfeit pesticides is organized by highly sophisticated criminal networks. Criminals have developed complex global supply chains and exploit legal companies to camouflage their activities. The global revenues associated with this crime are estimated to be billions of euros a year.”

Additionally, threats to peace and justice are increased when the lack of traceability of illegal pesticides makes available the chemical input components for use as homemade explosives.²⁹ Consequently, the trade in illegal pesticides undermines SDG Target 16.4 (combat all forms of organized crime), and SDG Target 16.1 (significantly reduce all forms of violence and related death rates everywhere).

Protecting the Environment



All chemicals have the potential to be toxic, and agrochemicals are no exception. If not handled properly they can harm rather than help the environment. Accordingly, governments implement strong regulations to monitor and regulate the use, handling and transport of agrochemicals.

However, these regulatory controls are worthless when illegal pesticides are used in the place of legal products, especially when they contain banned and highly persistent organic pollutants (POPs), such as DDT. For example, run-off and releases of the illicit products into waterways, rivers, seas and oceans can lead to widespread environmental contamination

and harmful accumulation in humans, local animals and marine life. Additionally, the long-term usage of illegal pesticides on agricultural land can cause resistance in pests, reduce soil fertility or render the land infertile, and contaminate ground water (SDGs 6, 14, 15). For example, the widespread use of illegal pesticides in Cameron Highlands in Malaysia has tainted rivers in the Bertam Valley, Kuala Terla and the district's tap water with toxic chemicals including globally banned substances such as Endosulfan.³⁰

In addition, criminals dealing in illegal pesticides facilitate the pollution of fresh water supplies by illegally—and irresponsibly—disposing harmful chemicals used in the manufacturing process. These practices circumvent safeguards and mechanisms required by governments and can result in serious long-term consequences on the local ecosystem.³¹ Illegal pesticides are also often sold without warning labels or directions for proper use or warnings. Illicit pesticides have also been reported to include false claims like “harmless to human beings and animals” and “safe to use.”³²

Even when illegal pesticides have been detected by authorities, their storage, destruction and disposal is beset with environmental risks and significant costs. Improper destruction of illegal pesticides may result in the release of toxic fumes, such as POPs and other toxins linked to serious adverse effects on human health (SDG 3). Improper storage and destruction may also pollute soils, groundwater or watercourses, with potentially devastating and long-term effects on soil fertility, clean water supplies, marine life and other natural resources vital for human wellbeing (SDGs 6, 14, 15).³³

Illegal pesticides present further health and safety risks associated with their proper disposal, preventing environmentally sound, life-cycle management of the chemical waste (SDG 12). For example, organic pesticides require high heat incineration (1100°C) for at least two seconds in specialist incineration facilities for proper disposal, and other pesticides containing heavy metals or mercury require alternative treatments such as alkaline hydrolysis.³⁴ For proper disposal, experts must therefore first determine the actual composition of the seized pesticides and its active ingredients before implementing the appropriate method of disposal. This process includes chemical and physical analysis in the field with specialized equipment or in an accredited laboratory. These are expensive and technical procedures, often not readily available in developing countries where technical capacity, appropriate storage and waste facilities, and regulatory controls can be limited.³⁵

CONCLUSIONS

Illicit trade in agrochemicals and pesticides undermines the SDGs in many ways:



Precludes agricultural productivity that can reduce poverty, create jobs and drive higher incomes and productivity.



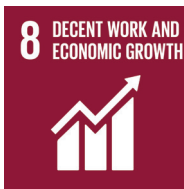
Limits agricultural yields for local consumption or export, keeping millions of people undernourished and lacking food security.



Presents significant risks to human health via direct exposure to unsafe chemicals, food toxicity, and safety hazards associated with transportation and handling.



Jeopardizes water quality and the protection of water-related ecosystems from contamination.



Drains farmer profitability through spending on ineffective pesticides, causing reductions in crop yields and knock-on effects on GDP, jobs and tax revenues.



Prevents environmentally sound, life-cycle management of chemicals and wastes.



Exacerbates prevention of harmful run-off and releases of toxic chemicals to water bodies.

15 LIFE ON LAND



Renders agricultural land infertile due to soil degradation, increase pest resistance and contaminated ground water.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Undermines governments' capacity to enforce policy, promote the rule of law, eradicate corruption and combat other forms of criminal activity.

NOTES

- ¹ Aktar, M. W., Sengupta, D., & Chowdhury, A. (2009). Impact of pesticides use in agriculture: their benefits and hazards. *Interdisciplinary Toxicology*, 2(1), 1–12. Available at: <http://doi.org/10.2478/v10102-009-0001-7>
- ² TechSci Research. (2018). *Global Pesticides Market By Type, By Application, By Formulation (Dry & Liquid), By Region, Competition Forecast & Opportunities, 2013 – 2023*. New York: TechSci Research. Available at: <https://www.techsciresearch.com/report/global-pesticides-market/1311.html>
- ³ Fishel, F. M. (2015). *The Global Increase in Counterfeit Pesticides*. Gainesville: IFAS Extension University of Florida. Retrieved from: <http://edis.ifas.ufl.edu/pdffiles/PI/PI21000.pdf>
- ⁴ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf; Agarwal, M. and Garg, S. (2015). *Study on Sub-Standard, Spurious/Counterfeit Pesticides in India 2015 – Report*. n.p.: FICCI. Retrieved from: <http://ficci.in/spdocument/20641/Pestiside-Report.pdf>
- ⁵ M. Malkov, M., Prischepa, S., and Kutonova, T. (2015). *Counteraction to Counterfeit and Contraband Pesticides: Methodology*. N.p.: OSCE / ENVSEC. Retrieved from: <https://www.osce.org/secretariat/192516?download=true>; Agarwal, M. and Garg, S. (2015). *Study on Sub-Standard, Spurious/Counterfeit Pesticides in India 2015 – Report*. n.p.: FICCI. Retrieved from: <http://ficci.in/spdocument/20641/Pestiside-Report.pdf>; Europol. (2012). Europol warns of growing trade of counterfeit pesticides worth billions of euros a year. The Hague: Europol Available at: <https://www.europol.europa.eu/newsroom/news/europol-warns-of-growing-trade-in-counterfeit-pesticides-worth-billions-of-euros-yea>
- ⁶ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf
- ⁷ For example: Chandigarh. (2015, October 4). Pesticide scam: Punjab farmers want agriculture minister sacked. *India Today*. Available at: <https://www.indiatoday.in/mail-today/story/pesticide-scam-punjab-farmers-want-agriculture-minister-sacked-266224-2015-10-04>; See also Agarwal, M. and Garg, S. (2015). *Study on Sub-Standard, Spurious/Counterfeit Pesticides in India 2015 – Report*. n.p.: FICCI. Retrieved from: <http://ficci.in/spdocument/20641/Pestiside-Report.pdf>
- ⁸ Crop Life International. (2015). *Industry Takes Positive Action on Management of HHPs: Proposed Global Alliance to Phase-Out HHPs is Redundant*. Brussels: Crop Life International. Retrieved from: <https://croplife.org/wp-content/uploads/2015/09/Statement-on-Alliance-to-Phase-Out-HHPs-FINAL.pdf>
- ⁹ Agarwal, M. and Garg, S. (2015). *Study on Sub-Standard, Spurious/Counterfeit Pesticides in India 2015 – Report*. n.p.: FICCI. Retrieved from: <http://ficci.in/spdocument/20641/Pestiside-Report.pdf>; Jacob, J. (2015, July 4). Pesticide use results in dwindling exports. *DownToEarth*. Available at: <https://www.downtoearth.org.in/news/pesticide-use-results-in-dwindling-exports-30383>; Das, K. N. (2015, November 19). Fake pesticides endanger crops and human health in India. *Reuters*. Available at: <https://www.reuters.com/article/us-india-pesticides/fake-pesticides-endanger-crops-and-human-health-in-india-idUSKCN0T830J20151120>
- ¹⁰ M. Malkov, M., Prischepa, S., and Kutonova, T. (2015). *Counteraction to Counterfeit and Contraband Pesticides: Methodology*. N.p.: OSCE / ENVSEC. Retrieved from: <https://www.osce.org/secretariat/192516?download=true>; UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf; Fishel, F. M. (2015). *The Global Increase in Counterfeit Pesticides*. Gainesville: IFAS Extension University of Florida. Retrieved from: <http://edis.ifas.ufl.edu/pdffiles/PI/PI21000.pdf>
- ¹¹ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf
- ¹² World Bank. (2007). *World Development Report 2008: Agriculture for Development*. Washington, DC: The International Bank for Reconstruction and Development / The World Bank. Retrieved from: https://siteresources.worldbank.org/INTWDR2008/Resources/WDR_00_book.pdf
- ¹³ Mollier, L., Seyler, F., Chotte, J-L., and Ringler, C. (2017). *SDG 2 End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture*. Paris: International Science Council. Retrieved from: <https://www.icsu.org/cms/2017/03/SDGs-interactions-2-zero-hunger.pdf>
- ¹⁴ AGROW. (2007). *Agrow's Top 20: 2007 Edition*, Company Report Series, London: Informa UK Ltd.
- ¹⁵ TechSci Research. (2018). *Global Pesticides Market By Type, By Application, By Formulation (Dry & Liquid), By Region, Competition Forecast & Opportunities, 2013 – 2023*. New York: TechSci Research. Available at: <https://www.techsciresearch.com/report/global-pesticides-market/1311.html>
- ¹⁶ Kivuva, E. (2018, August 7). Counterfeit pesticides cost farmers Sh120bn. *The Star, Kenya*. Available at: https://www.the-star.co.ke/news/2018/08/07/counterfeit-pesticides-cost-farmers-sh120bn_c1798482
- ¹⁷ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf
- ¹⁸ Das, K. N. (2015, November 19). Fake pesticides endanger crops and human health in India. *Reuters*. Available at: <https://www.reuters.com/article/us-india-pesticides/fake-pesticides-endanger-crops-and-human-health-in-india-idUSKCN0T830J20151120>
- ¹⁹ EUIPO. (2017). *The economic cost of IPR infringement in the pesticides sector: Quantification of infringement in Manufacture of pesticides and other agrochemicals*. Alicante: EUIPO. Retrieved from: https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/resources/research-and-studies/ip_infringement/study10/pesticides_sector_en.pdf; see also European Commission DG Health and Food Safety. (2015). *Ad-hoc study on the trade of illegal and counterfeit pesticides in the EU: Executive summary*. Brussels: EC-DG Santé.
- ²⁰ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf

- ²¹ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf
- ²² Agarwal, M. and Garg, S. (2015). *Study on Sub-Standard, Spurious/Counterfeit Pesticides in India 2015 – Report*. n.p.: FICCI. Retrieved from: <http://ficci.in/spdocument/20641/Pestiside-Report.pdf>
- ²³ World Resources Institute. (2013). *Creating a Sustainable Food Future: A menu of solutions to sustainably feed more than 9 billion people by 2050*. Washington, DC: World Resources Institute.
- ²⁴ Searchinger, T., Hanson, C., and Lacape, J-M. (2014). *Crop Breeding: Renewing the Global Commitment* [World Resources Institute Working Paper: Installment 7 of "Creating a Sustainable Food Future."]. Washington, D.C.: World Resources Institute.
- ²⁵ WHO. (2018). *Pesticides residues in food*. Geneva: WHO. Available at: <http://www.who.int/mediacentre/factsheets/pesticide-residues-food/en/>
- ²⁶ Das, K. N. (2015, November 19). Fake pesticides endanger crops and human health in India. *Reuters*. Available at: <https://www.reuters.com/article/us-india-pesticides/fake-pesticides-endanger-crops-and-human-health-in-india-idUSKCN0T830J20151120>
- ²⁷ UNICRI. (2016). *Illicit Pesticides, Organized Crime, and Supply Chain Integrity*. Torino: UNICRI. Retrieved from: http://www.unicri.it/in_focus/files/The_problem_of_illicit_pesticides_low_res1.pdf
- ²⁸ European Crop Protection. (n.d.). *Counterfeit and Illegal Pesticides*. Brussels: ECPA. Available at: <http://www.ecpa.eu/stewardship/counterfeit-illegal-pesticides#section4075>
- ²⁹ Europol. (2012). *Europol warns of growing trade of counterfeit pesticides worth billions of euros a year*. The Hague: Europol. Available at: <https://www.europol.europa.eu/newsroom/news/europol-warns-of-growing-trade-in-counterfeit-pesticides-worth-billions-of-euros-yea>
- ³⁰ Fong, F. (2018, April 1). Illegal pesticide use rampant in Cameron Highlands; toxins entering water supply. *New Straits Times*. Available at: <https://www.nst.com.my/news/nation/2018/04/351767/illegal-pesticide-use-rampant-cameron-highlands-toxins-entering-water>
- ³¹ International Council for Science. (2017). *A guide to SDG Interaction: from science to implementation*. Paris: International Council for Science. Retrieved from: <https://council.science/cms/2017/05/SDGs-Guide-to-Interactions.pdf>; see also Europol. (2011). Growth in the trade in counterfeit and other illegal pesticides across Europe [OC-Scan Policy Brief for Threat Notice No. 2521- 93, 011-2011]. The Hague: Europol.
- ³² NPIC. (n.d.). *Illegal or Counterfeit Pesticides*. Corvallis: NPIC. Available at: <http://npic.orst.edu/ingred/ptype/illegal/index.html>
- ³³ Guard, M. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods – Full Study. Advisory Committee on Enforcement, Twelfth Session, Geneva, September 4 to 6, 2017. WIPO/ACE/12/3 REV*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3.pdf
- ³⁴ Guard, M. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods – Full Study. Advisory Committee on Enforcement, Twelfth Session, Geneva, September 4 to 6, 2017. WIPO/ACE/12/3 REV*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3.pdf
- ³⁵ Guard, M. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods – Full Study. Advisory Committee on Enforcement, Twelfth Session, Geneva, September 4 to 6, 2017. WIPO/ACE/12/3 REV*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3.

CHAPTER 3: SDGs AND ILLICIT TRADE IN ALCOHOL



 <p>3 GOOD HEALTH AND WELL-BEING</p>	 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	 <p>17 PARTNERSHIPS FOR THE GOALS</p>
--	---	---	--	---

CHAPTER 3 SDGs AND ILLICIT TRADE IN ALCOHOL

Illicit trade in alcohol is widespread, representing significant percentages of alcohol consumption worldwide and stripping governments of billions of dollars in tax revenues. According to Euromonitor's 2018 Global Study on Illicit Alcohol, 1 in 4 alcohol bottles are illicit, representing 25.8 percent of all global consumption.¹ These findings correspond to World Health Organization (WHO) estimates that unrecorded alcohol² accounts for 25.5 percent of total worldwide adult alcohol consumption and is projected to increase to 27.7 percent in 2020.³

According to the European Union Intellectual Property Office (EUIPO) study carried out in 2016, "the legitimate [alcohol] industries lose approximately €1.3 billion of revenue annually due to the presence of counterfeit spirits and wine in the EU marketplace, corresponding to 3.3 percent of the sectors' sales."⁴

Although market characteristics differ across countries, the problem of illicit alcohol exists in every region, in developed and developing countries, urban and rural areas, and higher-income and lower-income neighborhoods alike. Similarly, there are a wide variety of factors that drive markets for illicit alcohol, related to consumers, business practices and government policies.

Main Drivers and Enablers of the Illicit Alcohol Trade

Consumers	Business environment	Government
<ul style="list-style-type: none"> • Lower-priced products • Greater availability or more convenient locations of illicit alcohol • Aspirational access to premium brands • Social acceptability of illicit trade • Limited knowledge about the risks of illicit alcohol and how to identify illicit beverages • Local customs and traditions, especially involving artisanal alcohol 	<ul style="list-style-type: none"> • Price gap between licit and illicit alcoholic beverages • High excise taxes and excessive restrictions on licit alcoholic beverages • Availability of production inputs for alcoholic beverages 	<ul style="list-style-type: none"> • Inadequate or partial regulations and laws about alcoholic beverages • Excessive regulations and restrictions on licit alcoholic beverages • Ineffective enforcement • Low penalties for activities related to illicit alcohol • Corruption

In almost all cases, illicit trade in alcohol results in serious health risks to consumers, revenue loss, and brand degradation for legitimate manufacturers, as well as reduced tax revenue for governments. Health risks tend to affect the poorest and most vulnerable consumers by contributing to widening health inequalities.

Illicit trade in alcohol encompasses a wide variety of illegal activity that is typically characterized as:⁵

- **Contraband/Smuggled Alcohol:** Alcohol with original branding that has been illegally imported/smuggled into a jurisdiction and sold, evading tariffs/customs. This includes beverages brought across the border via organized smuggling or in excess of the applicable traveler's regulated allowance. Smuggling of alcoholic beverages mirrors the illicit tobacco market and petroleum fuels theft, where criminals move products

across borders with the express purpose of evading the payment of excise duties or profiting from tax arbitrage by reselling product in higher tax markets.

- **Counterfeit Alcohol:** Fraudulent imitations of legitimate branded products, including refilling, falsification and tampering. These beverages infringe the intellectual property rights of legitimate producers and present brand reputational risk and potential liability. It is often produced in illicit factories and sometimes substitutes lower grade alcohol not intended for human consumption such as denatured ethyl alcohol.
- **Illicit Artisanal:** Alcoholic beverages produced following artisanal practices, including home production. Artisanal alcoholic beverages are considered illicit if they are produced for commercial purposes, and if their production and/or sale violate local law.
- **Tax Leakage:** Legally produced alcohol beverages on which the required excise tax is not paid in the jurisdiction of production.
- **Non-conforming Alcohol:** Products that are not compliant with production processes, guidelines, or labeling legislation. Includes products produced with industrial alcohol and products not meant for human consumption but diverted to the market for alcoholic beverages (i.e., pharmaceutical alcohol, mouthwash, perfume.)

Impact of illicit trade in alcohol on achieving the UN Sustainable Development Goals

The illicit trade in alcohol impacts achievement of five SDGs:

- SDG 3 (good health and well-being);
- SDG 8 (decent work and economic growth);
- SDG 9 (industry, innovation and infrastructure);
- SDG 16 (peace, justice and strong institutions); and
- SDG 17 (partnerships for the goals).

Ensuring healthy lives and promote well-being for all at all ages



Illicit alcohol is one of the worst forms of harmful consumption globally. As such, it is the target of the WHO global strategy to reduce the harmful use of alcohol, which calls for *inter alia* the regulation of sales of alcohol beverages informally produced, their inclusion in tax systems and the promotion of cooperation among national and international authorities to exchange relevant information on the fight against illicit alcohol. Bringing unregulated alcohol production into the regulated sector and tackling illicit alcohol is essential in supporting the WHO's whole-of-society response to the harmful use of alcohol.

SDG Targets 3.4 and 3.5 call on countries to “reduce by one third premature mortality from non-communicable diseases” and to “strengthen the prevention and treatment of substance abuse, including [...] harmful use of alcohol.”

Several categories of illicit alcohol expose consumers to the “harmful use of alcohol” delineated in SDG Target 3.5, as well as to the “premature mortality from non-communicable diseases” delineated in SDG Target 3.4.

The main health risks associated with illicit trade in alcohol are created by counterfeit alcohol, fictitious brands and, to a lesser extent, home production.⁶ These are all linked to the absence of controls in the manufacturing phase, which lead to end-products that do not comply with sanitary, quality and safety regulations. In addition, the unpredictable levels of ethanol and possible methanol content may have fatal health effects as seen in many countries like India, where in February 2019, more than 300 people died after consumption of illegally made country liquor tainted with methanol.

The presence of cheap illicit alcohol on the market may undermine government policies aimed at reducing the harmful consumption of alcohol. While smuggled original brands are unlikely to pose health issues that differ from those caused by legally traded products, readily available and lower-priced illegal alternatives drive consumption of lower quality alcohol products. Furthermore, as unrecorded alcohol is usually the least expensive form of alcohol available in many countries, it may contribute to higher rates of chronic and irregular heavy drinking.⁷

SDG Target 3.9 sets the objective of substantially reducing the number of deaths and illnesses from hazardous chemicals and includes the “mortality rate attributed to unintentional poisoning” as one of the key indicators to measure the achievement of this target. Again, certain types of illicit alcohol increase the health risks associated with its consumption. For example, the WHO has stressed the potentially detrimental effects on health posed by surrogate and home-produced alcohol due to contamination with substances added either as a denaturant (methanol) or inadvertently introduced during home-production (ethyl carbamate).⁸ The biggest problem may be caused by methanol additives, which have led to several outbreaks of acute poisoning.⁹ These findings are corroborated by the World Customs Organization (WCO) seizure records, which show that “in many instances, these [illicit] products are produced using other, cheaper types of alcohol which can have serious adverse health effects. Commonly used substitutes for ethanol include chemicals used in cleaning fluids, nail polish remover and automobile screen wash, as well as methanol and isopropanol which are used in antifreeze and in some fuels.”¹⁰

Decent work, economic growth and revenue collection



Illicit trade in alcohol undermines sustainable economic growth, full and productive employment and decent work for all (SDG 8), as it diverts income from the balance sheets of legitimate businesses. Unfair competition from illicit trade undermines their ability to create jobs and pay taxes. Lost corporate and personal income taxes, along with avoided excise duties, strips governments of income intended for public investment, with relatively more severe impacts on developing countries.

According to a multi-regional study by Euromonitor International, the fiscal loss to governments across 24 countries in Africa, Eastern Europe and Latin America is as much US\$3.6 billion every year.¹¹ The same study found that illicit alcohol, as a proportion of total alcohol consumed, was highest in Africa, followed by Eastern Europe and Latin America (40 percent, 27 percent, and 15 percent, respectively).¹²

Illicit alcohol is prevalent in both developed and developing countries, with no country immune to this threat. For example, the UK government lost £1.3 billion in excise tax revenue in the period 2015-16,¹³ and Dutch authorities estimate the annual revenue losses from illicit trade in alcohol at €100 million.¹⁴ Liquor bootlegging in New York City alone is estimated to have cost the city US\$1 billion in lost taxes over the past 15 years.¹⁵ A 2016 report by the EU Intellectual Property Office (EUIPO) shows that legitimate industries in the EU lose €1.3 billion of revenue annually due to the production of fake spirits and wine, corresponding to 3.3 percent of the sectors' sales. If the knock-on effects on other industries and on government revenue are added, this leads to a loss of €1.2 billion in government revenues, of which €739 million are excise duties, and a loss of 23,400 jobs.¹⁶

For developing countries, widespread smuggling and local production of illicit and counterfeit alcoholic drinks can have a particularly debilitating effect on efforts to improve domestic resource mobilization (SDG Target 17.1), by denying the government a significant source of potential tax income.

- Fake and unlicensed alcoholic products in Kenya are estimated to be 30 percent¹⁷ of the market and include the use of fake Kenya Revenue Authority (KRA) stamps to evade taxes. The illicit products have led to government losses of billions of shillings in unpaid taxes.¹⁸
- Myanmar's government lost US\$50 million in tax to beer smugglers in 2016, with up to 30 percent of all the beer sold in the country illegally imported.¹⁹
- The national health authority in Mexico has seized more than 1.4 million gallons of adulterated alcohol since 2010—ranging from small local establishments to large hotels and other entertainment areas, according to a 2017 report by the country's Federal Commission for Protection against Health Risks.²⁰ As much as 36 percent of the alcohol consumed in the country is illegal, according to a 2017 report by Euromonitor International.²¹

Generally, illicit alcohol trade promotes informality, prevents small business from building legal operations and frustrates integration in the mainstream economy.

Industry, innovation and infrastructure



According to SDG 9.5, countries are expected to “enhance scientific research [...] including, by 2030, encouraging innovation and substantially increasing the number of research and development workers [...]” Legitimate alcohol companies spend a lot of time and money in developing a product and protecting their intellectual property through patents, copyrights, design rights and trademarks. This investment is undermined

by counterfeiters copying legal brands which can have a highly adverse effect on investment into scientific research and the industrial growth of the market. Unless intellectual property is protected, innovation and technology development will not be properly incentivized, consequently undermining industrialization and sustainable economic development.

In addition, illicit players worldwide take advantage of distribution channels that are unregulated or poorly regulated, which in turn undermines the security and efficiency of supply chain infrastructure. Historically, illicit alcoholic beverages were more likely to be found in informal channels, such as street stalls, traditional markets, or small independent stores that did not pay all the required taxes. However, the distribution landscape has become increasingly complex because of globalization and technological developments.

Peace, justice and strong institutions



SDG Target 16.4, calls on countries to “combat all forms of organized crime.” The involvement of organized criminal groups (OCGs) in illicit trade in alcohol has been well documented in a number of countries.²² Furthermore, experts note that “drug markets have a resemblance to counterfeit alcohol markets in that they share the illicit nature of the product and the need to distribute the product at the ‘street’ level.”²³ This is evident when viewing criminal activities in terms of *source*, *transit*, and *market*,²⁴ where the transit stage functions as a middle market.

In light of this, and despite the complex and varying nature of operating models employed by OCGs, middle market operations play a crucial role in the criminal supply chain. In the context of illicit markets including *inter alia* antiquities,²⁵ drugs,²⁶ and alcohol,²⁷ the middle market displays strong criminal tendencies as networks of criminal groups operate to facilitate illicit flows. To exemplify this, the middle market functions as a ‘bridging node’ which is able to facilitate the purchase and movement of illicit alcohol from one network to another.²⁸ And while illicit trade in alcohol can be carried out by single individuals, there is clear evidence suggesting that large-scale production and smuggling operations are carried out by OCGs.

For example, OCGs in the UK appear to be active in all stages of the supply chain, “from the suppliers to those holding goods in duty suspense, haulers, excise warehouses, lock-ups and cash-and-carry stores, corner shops and other outlets.”²⁹ In this regard, the structure of counterfeit alcohol markets relies on actors capable of developing networks of commercial collaborators, who by virtue of their position are able to conceal their illicit actions.³⁰

SDG Target 16.5 also demands that countries “substantially reduce corruption and bribery in all their forms.” The available literature links illicit trade in all its forms—including alcohol—to corruption in law enforcement, customs and tax collection.³¹

On the other hand, in many developing countries, illicit trade is often socially accepted.

In some countries, consumers do not consider buying illicit alcohol to be a serious crime. On the contrary, these consumers perceive these purchases to be good deals. In these situations, there is insufficient social pressure to dissuade them from participating in the illicit alcohol

trade. Consumers in countries with widespread corruption may be particularly willing to purchase illicit products they know full well are illicit because they are so accustomed to illicit activity being a part of their society.

Consequently, illicit trade in alcohol can provide a significant and steady source of income that perpetuates the viability of OCGs, subsidizes further criminal activity, and drives corruption in public institutions and local societies.

Case study: DIAGEO

The legitimate alcohol sector has taken a number of initiatives that support delivery of the SDGs, including through their partnerships with the agriculture industry in developing economies. One example of this engagement is Diageo, a company that is committed to sourcing raw materials from local agri-business, thereby promoting the development of sustainable local value chains and supporting farmers to develop economically, environmentally and socially sustainable farming practices.

Diageo has pledged to source 80 percent of its raw materials locally in Africa by 2020, including direct sourcing of sorghum, barley and maize. In some countries these programs go beyond supporting the local agri-business and are targeted to have a direct impact on the illicit alcohol market. In Kenya during the 1990's a series of tax increases aimed at reducing alcohol consumption and raising revenue saw the legal alcohol market shrink from around 400 million litres in 1991 to about 240 million litres in 2001. By 2003 the illicit alcohol market was estimated to be around 56 percent of total alcohol consumption and was still growing.

In response, Diageo developed a new beer called Senator Keg, aimed at lower income consumers, and priced as an affordable alternative to illicit alcohol. Diageo was supported by the Kenyan Government through an excise tax remission which meant the new product was commercially viable and Diageo was able to launch Senator Keg at a price only slightly higher than local illicit spirits.

By 2013, Senator Keg had brought a range of socio-economic and commercial benefits. These included employment of over 12,000 sorghum farmers, KSH 1.5 billion in VAT revenues and a fall in illicit alcohol to around 50%. However, products such as Senator Keg aimed at drawing consumers away from cheap illicit alcohol are highly price sensitive, and this was demonstrated in 2013 when the level of tax remission in Kenya was reduced from 100 to 50 percent. The impact was an 86 percent fall in Senator Keg volumes. Following the collapse of volumes in 2013, many partners in the distribution chain withdrew from Senator Keg sales. Some stopped trading, others resorted to illicit brew or selling cheap spirits. The number of outlets fell from a high of 12,900 at the beginning of 2013 to a low of 6,750 by the end of the year. Critically the market for sorghum dropped and with it the loss of income for thousands of local farmers.

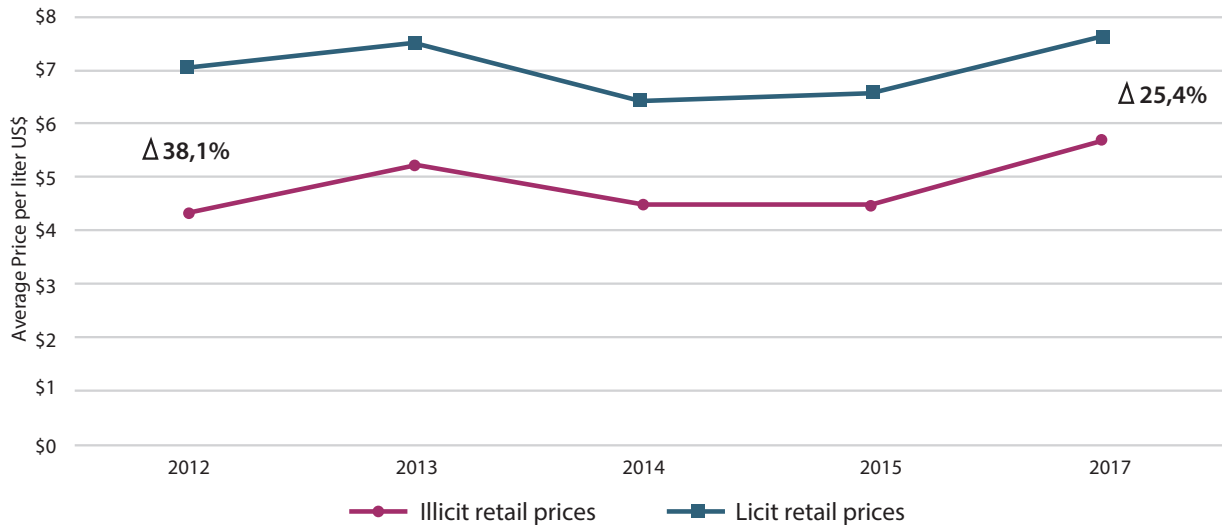
In 2015, the remission was increased again to 90 percent which allowed Diageo to reduce the price, leading to an immediate increase in volumes, tax remittances, farmer and retailer recruitment and capital investment in the sorghum growing areas: The increased volumes led to increased demand for local sorghum from 2,060 metric tons in 2015 to 21,500 metric tons in 2016. The number of contracted farmers increased from a low of 2,500 in 2015 to 30,000 in 2016, and farmer revenues increased from KSH 67 million in 2015 to KSH 709 million in 2016, an increase of 1,043 percent. Following the return of the remission, the number of outlets had risen to 13,500. The return of the remission saw the creation of over 98,000 direct jobs throughout the value chain.

In 2017 Diageo announced that it was investing KSH 15 billion in a new Senator Keg brewery in Kisumu that is intended to make further inroads into the illicit alcohol market and bring over 110,000 direct and indirect jobs throughout the supply chain. The brewery opened earlier this year with the benefits already being realised.

Case study: AB InBev – Peru

In the last 5 years, the illicit alcohol market has decreased from 31 to 26 percent of the total alcohol market. At the same time, the difference between the prices of licit and illicit alcoholic beverages in Peru has narrowed significantly from 38 to 25 percent.

Peru – Illicit alcohol market Price Evolution 2012 – 2017 (US\$) per LAE (liter of alcohol equivalent)



Source: Euromonitor International

Elements of the strategy initiated by AB InBev in 2011, in partnership with governmental authorities and a public-private sector coalition against illicit alcohol include:

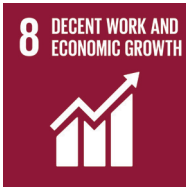
- An increased awareness in the population on the health risk of consuming this type of beverages. This is proven by the decreased consumption of artisanal illegal alcohol and alcohol not suitable for human consumption in the last 7 years.
- There is a growing interest in formalizing the producers of artisanal alcoholic beverages, which seeks to legalize the consumption of these traditional beverages, which are of great importance to Peruvians.
- Customs authorities are stricter in the importation processes, especially in documentary control and physical verification of merchandise, especially in Puerto de Callao, which makes it difficult to smuggle illicit alcohol across borders.
- Continuous coordination and follow up has been successful thanks to the Multisectorial Technical Table Against Illicit Alcohol, where initiatives are being developed for the implementation of regulations against illegal alcoholic beverages.
- Improvements in ethanol regulation and control.
- Incorporation of inputs such as sugarcane and ethanol into the VAT deduction system to avoid tax evasion and hinder the action of illegality by increasing their costs.

CONCLUSIONS

Illicit trade in alcohol undermines the SDGs in many ways:



Hazardous ingredients and unsanitary production expose consumers to health risks.



GDP, jobs and tax revenues are drained from economies and limit public investment, with relatively more severe impacts on developing countries.



Unless intellectual property is protected, innovation and technology development will not be properly incentivized, consequently undermining industrialization and sustainable economic development.



Illicit trade in alcohol provides a significant and steady source of revenue that perpetuates the viability of OCGs, subsidizes further criminal activity, and drives corruption in public institutions and social unrest in local communities.



Widespread illicit trade in alcohol has a debilitating effect on efforts to improve domestic resource mobilization by denying the government a significant source of potential tax income.

NOTES

- ¹ Euromonitor International. (2018). *Size and Shape of the Global Illicit Alcohol Market*. London: Euromonitor International. Available at: https://www.tracit.org/uploads/1/0/2/2/102238034/illicit_alcohol_-_white_paper.pdf
- ² Unrecorded alcohol is alcohol not reflected in official statistics of the country of production, the country of consumption or both.
- ³ World Health Organization. (2018). *Global status report on alcohol and health 2018*. Geneva: World Health Organization. Available at: <http://apps.who.int/iris/bitstream/handle/10665/274603/9789241565639-eng.pdf?ua=1>
- ⁴ EUIPO. (2016). *The economic cost of IPR infringements in spirits and wine*. Alicante: European Union Intellectual Property Office.
- ⁵ International Alliance for Responsible Drinking. (2016). *Policy Review: Unrecorded Alcohol*. Washington, DC: The International Alliance for Responsible Drinking. Available at: <http://www.iard.org/wp-content/uploads/2016/01/PR-Unrecorded.pdf>
- ⁶ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing.
- ⁷ Rehm, J., Kailasapillai, S., Larsen, E., Rehm, M. X., Samokhvalov, A. V., Sheild, K. D., Roerecke, M., & Lachenmeier, D. (2014). A systematic review of the epidemiology of unrecorded alcohol consumption and the chemical composition of unrecorded alcohol, *Addiction*, 109 (6), 880-893.
- ⁸ WHO Regional Office for Europe. (2009). *Evidence for the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harm*. Copenhagen: WHO Regional Office for Europe. Available at: http://www.euro.who.int/__data/assets/pdf_file/0020/43319/E92823.pdf?ua=1
- ⁹ Lechenmeier, D. W. (2012). *Unrecorded and Illicit Alcohol*. n.p.: WHO/Europe. Available at: http://www.euro.who.int/__data/assets/pdf_file/0020/191360/2-Unrecorded-and-illicit-alcohol.pdf
- ¹⁰ WCO. (2016). *Illicit Trade Report 2015*. Brussels: World Customs Organization. Available at: http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/illicit-trade-report/itr_2015_en.pdf?db=web
- ¹¹ Euromonitor International. (2018). *Size and Shape of the Global Illicit Alcohol Market*. London: Euromonitor International. Available at: https://www.tracit.org/uploads/1/0/2/2/102238034/illicit_alcohol_-_white_paper.pdf
- ¹² Euromonitor International. (2018). *Size and Shape of the Global Illicit Alcohol Market*. London: Euromonitor International. Available at: https://www.tracit.org/uploads/1/0/2/2/102238034/illicit_alcohol_-_white_paper.pdf
- ¹³ HMRC. (2017). *Measuring tax gaps 2017 Edition*. n.p.: HM Revenue and Customs. p. 32. Available at: <https://www.gov.uk/government/statistics/measuring-tax-gaps>
- ¹⁴ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. OECD Publishing: Paris. p. 228.
- ¹⁵ Elstein, A. (2016, November 12). High taxes and limited enforcement have New York City awash in illegal booze and cigarettes. *Crain's New York Business*. Available at: <http://www.crainsnewyork.com/article/20161113/SMALLBIZ/161119958/new-york-city-is-awash-in-illegal-booze-and-cigarettes-thanks-to-bootlegging-as-high-taxes-and-limited-enforcement-on-alcohol-and-cigarette-sales-make-the-state-prime-for-bootlegging>
- ¹⁶ EUIPO. (n.d.). *Spirits and wine sector*. Available at: https://euiipo.europa.eu/ohimportal/en/web/observatory/ipr_infringement_wines_and_spirits
- ¹⁷ Kamau, M. (2017, November 21). Counterfeit and illicit alcoholic drinks back on the shelves. *The Standard*. Available at: <https://www.standardmedia.co.ke/business/article/2001260841/illicit-alcoholic-drinks-back-on-the-shelves>
- ¹⁸ CapitalNews. (2018, January 17). President Uhuru Kenyatta petitioned over illicit liquor racket. *CapitalNews*. Available at: <https://www.capitalfm.co.ke/news/2018/01/president-uhuru-kenyatta-petitioned-illicit-liquor-racket/>
- ¹⁹ Euromonitor. (2018). *Alcoholic Drinks in Myanmar*. London: Euromonitor International. Available at: <http://www.euromonitor.com/alcoholic-drinks-in-myanmar/report>; Myo Pa Pa San. (2017, November 24). Myanmar Govt Lost \$50 million in Tax to Beer Smugglers in 2016. *The Irrawaddy*. Available at: <https://www.irrawaddy.com/news/burma/myanmar-govt-lost-50-million-tax-beer-smugglers-2016.html>
- ²⁰ Comisión Federal para la Protección contra Riesgos Sanitarios. (n.d.). *Sistema Federal Sanitario suma acciones en favor de la salud*. Available at: <https://www.gob.mx/cofepris/prensa/113399>
- ²¹ Gajanan, M. (2017, August 15). 10,000 Gallons of Tainted Alcohol Were Seized From Mexican Resorts. *Time*. Available at: <http://time.com/4900991/mexican-resort-alcohol/>
- ²² Australia: Fitts, M. S. et. al. (2017). 'Sly grog' and 'homebrew': a qualitative examination of illicit alcohol and some of its impacts on Indigenous communities with alcohol restrictions in regional and remote Queensland (Australia). *BMC Research Notes*, 10 (1), 360.;
- China: Shen, A. and Antonopoulos, G. A. (2016). 'No banquet can do without liquor': alcohol counterfeiting in the People's Republic of China. *Trends in Organized Crime*, 20 (3), 273-295.
- Estonia: Lang, K. (2007). The Composition of Surrogate and Illegal Alcohol Products in Estonia. *Alcohol and Alcoholism*, 41 (4), 446-450.
- Europe: Lord, N. et. al (2017). A script analysis of the distribution of counterfeit alcohol across two European jurisdictions. *Trends in Organized Crime*, 20 (3-4), 252-272.
- Israel: Shapira, B. et. al (2018). The methanol content of illicit alcoholic beverages seized in a low socio-economic area of Tel-Aviv: public health impact and policy implications. *Journal of Public Health*, 27 (1), 1-6.
- Russia: Kotelnikova, Z. (2017). Explaining Counterfeit Alcohol Purchases in Russia. *Alcoholism: Clinical and Experimental Research*, 41 (4), 810-819.

Tatarstan Republic: Karatayev, O. R. (2015). Dynamics of counterfeit alcohol and tobacco goods in the Tatarstan Republic Market. *Actual Problems of Economics and Law*, 9 (4), 123-130.

²³ Spencer, J. et. al. (2018). 'C' is for commercial collaboration: enterprise and structure in the 'middle market' of counterfeit alcohol distribution. *Crime, Law and Social Change*, 70 (5), 1-18.

²⁴ Mackenzie, S. (2011). The Market as Criminal and Criminals in the Market: Reducing Opportunities for Organised Crime in the International Antiquities Market'. In S. Manacorda and D. Chappell (Eds.), *Crime in the Art and Antiquities World: Illegal Trafficking in Cultural Property* (pp. 69-85). New York: Springer.

²⁵ Yates, D. (2016), The Global Traffic in Looted Cultural Objects. In Rafter, N. and Carribine, E. (Eds.), *The Oxford Encyclopedia of Crime, Media, and Popular Culture*. Oxford: Oxford University Press.

²⁶ Bagley, B. M. & Rosen, J. D. (2016). *Drug trafficking, organized crime, and violence in the Americas today*. Gainesville: University Press of Florida.

²⁷ Bellotti, E., Lord, N., Spencer, J. and Benson, K. (2018). Counterfeit Alcohol Distribution: a Criminological Script Network Analysis. *European Journal of Criminology*. Available at: <https://doi.org/10.1177/1477370818794870>

See also: Lord, N., Spencer, J., Benson, K., and Belotti, E. (2017). A Script Analysis of the Distribution of Counterfeit Alcohol across Two European Jurisdictions. *Trends in Organised Crime*, 20 (3-4), 252-272.

²⁸ Spencer, J. et. al. (2018). 'C' is for commercial collaboration: enterprise and structure in the 'middle market' of counterfeit alcohol distribution. *Crime, Law and Social Change*, 70 (5), 1-18.

²⁹ Ellis, C. (2017). *On Tap Europe - Organised Crime and Illicit Trade in Tobacco, Alcohol and Pharmaceuticals*. London: Royal United Services Institute (RUSI)

³⁰ Spencer, J. et. al. (2018). 'C' is for commercial collaboration: enterprise and structure in the 'middle market' of counterfeit alcohol distribution. *Crime, Law and Social Change*, 70 (5), 1-18.

³¹ OECD. (2017). *Global Trade without Corruption: Fighting the Hidden Tariff*. Paris: OECD Publishing; OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing.

CHAPTER 4: SDGs AND ILLICIT TRADE IN COUNTERFEIT AND PIRATED GOODS



CHAPTER 4 SDGs AND ILLICIT TRADE IN COUNTERFEIT AND PIRATED GOODS

The global trade in counterfeit and pirated goods accounts for the largest economic value of all forms of illicit trade, robbing the legitimate economy of jobs and economic growth, while at the same time putting consumers at risk to unsafe, inferior and ineffective products.¹

The Organization for Economic Co-operation and Development (OECD) reports that counterfeiting and piracy in international trade alone has grown from US\$250 billion annually in 2007² to more than US\$461 billion in 2013. This is an increase of more than 80 percent in less than 5 years and represents more than 2.5 percent of world trade and as much as 5 percent of all goods imported into the European Union.³ Moreover, the growth of illicit digital trade of copyrighted works continues to grow; the value of digital piracy in music, movies and software in 2015 alone was estimated to be more than US\$200 billion.⁴

Examples include:

- High-end luxury goods such as counterfeit watches, perfumes and leather goods;
- Personal electronic products, such as mobile phones, personal computers, TVs and gaming devices;
- Household and personal care products such as laundry detergents, toys, cosmetics and shampoos;
- Pharmaceuticals and medical devices, such as antibiotics, radiotherapy machines and dental drills, vehicle spare parts, including brakes, batteries and airbags, alcohol and cigarettes; and
- Copyright piracy of movies, television, music, live performances, computer software and video games.

The ubiquity and high profits from counterfeit and pirated goods, coupled with low risks of detection, prosecution and penalties, generates significant illicit proceeds for criminal enterprises. As a result, money laundering is frequently an indispensable element of IPR crime, with illicit proceeds also be used to finance other crimes, such as drug and human trafficking.⁵ As noted by Europol “Trading in counterfeit products is a relatively low risk activity, involving minimal penalties whilst providing high profits, and will increasingly attract [organized crime groups] previously involved in other crime areas.”⁶

Effective IPR enforcement is crucial in safeguarding the health of consumers, maximizing the value of human creativity and innovation, promoting economic development and deploying modern technologies.

Impact of illicit trade in counterfeit and pirated goods on achieving the UN Sustainable Development Goals

The illicit production and trafficking of counterfeit and pirated goods is an accelerating global phenomenon that represents a direct threat to the achievement of the SDGs. Counterfeit and pirated goods are produced outside the normal channels of commerce with little regard

to environment, health and safety regulations and standards—and as a result pose risks to long term economic growth, consumer health, livelihoods and the environment.

Consequently, it is not surprising that illicit trade in counterfeit and pirated goods negatively impacts nine of the seventeen SDGs:

- SDG 1 (no poverty);
- SDG 3 (good health and well-being);
- SDG 4 (quality education);
- SDG 6 (clean water and sanitation);
- SDG 8 (decent work and economic growth);
- SDG 9 (industry, innovation and infrastructure);
- SDG 12 (responsible consumption and production);
- SDG 15 (life on land); and
- SDG 16 (peace, justice and strong institutions).

Note: The health, environment and economic risks associated with falsified and substandard pharmaceutical products and counterfeit pesticides are covered in more detail in their own chapters.

Health and safety



The prevalence of counterfeit goods poses direct and indirect health and safety risks to consumers and the broader society, thereby undermining SDG 3 (health and well-being for all).

Legal manufacturers abide by regulations and invest heavily in innovation and product development, with brands serving as guarantees of quality and safety. In contrast, counterfeiters make their money by sidestepping product safety regulations, environmental controls and labor laws—and by free-riding on the research and development (R&D) of others. As a result, counterfeit goods are often of sub-standard quality or of unknown and sometimes dubious chemical/material composition.⁷ Examples include counterfeit batteries and cigarette lighters that explode, toys with paint toxicity, baby formula that provides no nourishment, and counterfeit electronic goods that may cause serious injury and even death through explosions, unregulated heat burns and electric shock. Semi-conductors, for example, are integral parts of modern electronics. But counterfeit versions have been found in everything from automated external defibrillators, potentially leading to the electrocution of a patient, to airport landing lights and microcontrollers intended for use in brake systems in high-speed trains in Europe.⁸

Even relatively innocuous goods, such as watches, apparel and handbags can pose health risks for consumers when counterfeiters use potentially harmful materials (allergenic and/

or toxic).⁹ Examples include the use of prohibited carcinogenic dyes to color fabrics and children's clothing made from highly flammable fabrics that burn quickly and intensively.¹⁰ Counterfeit cosmetics and personal care products containing dangerous levels of lead, mercury, cyanide and other carcinogens can cause severe allergic reactions and pose a particular threat to pregnant women and their unborn babies.¹¹

Counterfeits also pose risks to specific SDG 3 health targets. For example:

- SDG Target 3.6 aims to halve the number of global deaths and injuries from road traffic accidents. However, the rapid growth¹² in counterfeit auto parts, including substandard, malfunctioning airbags¹³ and brake pads¹⁴ poses real dangers to drivers.¹⁵
- SDG Target 3.9 aims to reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination. However, counterfeit inputs, such as industrial chemicals and electronic components have been found to include harmful toxic substances such as lead, mercury, cadmium, and arsenic.

Economic growth and development



The ubiquity of counterfeit and pirated goods has a significant negative impact on economic growth and job creation. According to the OECD, international trade in fake goods was more than US\$461 billion in 2013, with as much as 5 percent of all goods imported into the European Union being counterfeit.¹⁶ That figure excludes digital piracy, which in 2015 alone was estimated to be more than US\$200 billion.¹⁷ For governments and business, the losses include illegal acquisition of IP, reduced returns to innovators and creators, lost tax revenue, and the diversion of public and private resources from more productive ends. These costs create a significant drag on the growth of knowledge-based economies, but also result in significant job losses.

A series of studies published by the EUIPO in 2016 found that counterfeiting and piracy costs the EU economy over €83 billion and 790,000 jobs every year, as well as €14.3 billion in government revenue (income tax and value added tax).¹⁸ A 2017 global study by Frontier Economics estimates that the wider social and economic impacts on displaced economic activity, investment, public fiscal losses and criminal enforcement from counterfeit and piracy could reach as much as US\$1.9 trillion by 2022, draining US\$4.2 trillion from the global economy and putting 5.4 million legitimate jobs at risk.¹⁹

In addition to displacing legitimate jobs and economic activity,²⁰ counterfeiting also presents challenges to UN objectives for fair and legal employment. Fakes are often produced under unethical, unregulated and poor working conditions, utilizing child labor and coerced migrants.²¹ At best, workers receive derisory wages without benefit from legal, social or medical safeguards.²² As these situations create opportunities for labor exploitation, they hamper efforts to achieve SDG Target 8.8 (protect labor rights and promote safe and secure working environments for all workers).

The importance of trademarks and copyright to jobs and economic growth

Trademarks support the development of products and services that consumers want and depend on, creating new jobs and entire industries. Trademark-intensive industries alone contributed 23.7 million jobs in the USA in 2014 (up from 22.6 million in 2010) and 27.8 percent of employment and 42 percent of GDP in the EU during the period 2011-2013.²³ A 2017 study by INTA estimated that Trademark-Intensive Industries in Indonesia, Malaysia, the Philippines, Singapore, and Thailand contributed from 27 to 60 percent of each country's share of exports and between 17 and 50 percent of GDP.²⁴ Similar studies in Latin America have found comparable correlations between trademark-intensive industries and gross domestic product (GDP), employment and productivity.²⁵

Copyright serves as a critical tool to finance cultural production, including educational materials, musical and artistic works, such as poetry, novels, movies, songs, and computer software. As noted by WIPO Director General Francis Gurry, "Copyright is the central mechanism in the creation of the market for creative works - if you like, the dominant interface between the world of creativity and the economy. It is the means by which the market exchange of creative works occurs. As such, it is also the principal means for the financing of the production of creative works, enabling the creator to control the commercial exploitation of her works, thereby returning economic value to the creator and ensuring livelihood for the individual creator, and economic sustainability for the creative industries."²⁶

Industry, innovation and infrastructure



Today's increasingly knowledge-based economy is driven by innovation. In addition to stimulating economic growth, innovation has the potential to address some of the world's most intractable challenges, including climate change, decent employment, food security, combating infectious diseases, and ensuring access to affordable and clean energy. To the extent that counterfeiting and piracy disincentivize innovation (SDG 9), they necessarily generate a negative ripple effect on several other SDGs that depend on innovation, such as SDG 1 (End poverty in all its forms everywhere), SDG 4 (Ensure inclusive and equitable quality education), and SDG 8 (Promote inclusive and sustainable economic growth, employment and decent work for all).

A critical factor in maximizing the value and benefits of innovation is a clear legal and regulatory system that recognizes the importance of the underlying intellectual property rights (IPRs). Accordingly, the role that IPR protection and enforcement has in facilitating innovation and thereby contributing to the achievement of the 2030 sustainable development agenda has received broad international recognition, including by the Group of 20 (G-20) heads of State.²⁷

In contrast, IP theft in the form of trademark counterfeiting and copyright piracy, stifles economic growth and job creation by discouraging innovation, reducing incentives for companies to invest in R&D and inhibiting creative industries from realizing their full potential.

Environmental impacts



The environmental cost of counterfeit and pirated goods can extend from cradle to grave: From manufacture to final destruction and disposal, counterfeit and pirated goods pose an ongoing threat to the environment and the various SDGs dedicated to environmental protection.

The importance of proper waste management and sustainable consumption and production patterns are enshrined in SDG 6 (clean water and sanitation) and SDG 12 (responsible consumption and production). Specifically, SDG Targets 6.3 (reduce water pollution by eliminating dumping and minimizing release of hazardous chemicals and materials), 12.4 (achieve the environmentally sound management of chemicals and all wastes throughout their life cycle) and 12.5 (substantially reduce waste generation through prevention, reduction, recycling and reuse) call for a life-cycle approach to sustainable production, consumption and disposal.

Legitimate business responds to these challenges by increasingly incorporating environmental sustainability into core business models, with companies making substantial investments in waste management and adopting zero-waste strategies.

In contrast, counterfeiters have no responsibilities for compliance with environmental standards and regulations and no incentive to keep toxic chemicals out of their products. Examples of violations include the unlawful disposal of hazardous toxic substances into air and water²⁸ and the use of harmful chemicals and other contaminants in clothing.²⁹ Counterfeit electronics created from e-waste introduce potentially hazardous waste streams into water ways, creating health and environmental hazards for workers and nearby communities.³⁰

The sub-standard quality and/or dubious and unknown composition of counterfeits introduces additional environmental risks—and costs—associated with their destruction and disposal (e.g., high heat incineration or encapsulation for hazardous materials).³¹ In some cases, the cost of destruction can exceed the cost of original production.³² The situation is particularly acute in countries where technical capacity, appropriate storage and waste facilities, and regulatory control are limited.

Common methods of destruction such as open burning, disposal into open landfills or improper recycling may result in the release of toxic gases, such as persistent organic pollutants (POPs) and other toxins linked to serious adverse effects on human health (SDG 3). Improper storage and destruction also may pollute soils, groundwater or watercourses, with potentially devastating and long-term effects on soil fertility, clean water supplies, marine life and other natural resources vital for human wellbeing (SDGs 6, 15).³⁴

The health and environmental impacts from the inappropriate destruction or disposal of counterfeits may thus prove to be equal to or even more damaging than the negative economic impacts.

Peace, justice and strong institutions



IP crime has emerged as a lucrative and growing business opportunity for organized criminal networks — largely due to the high profits, low risk of discovery, and inadequate or minor penalties when and if caught.³⁵ As noted by the United Nations Interregional Crime and Justice Research Institute (UNICRI), counterfeiting and piracy play a key role in the operations of transnational criminal organizations and “helps fund other criminal activities such as extortion, illegal drugs and human trafficking, compromises the international financial system for money laundering purposes and, ultimately, makes it more difficult for existing law enforcement measures to be effective”.³⁶ The involvement of organized crime in trademark counterfeiting and copyright piracy accordingly undermines the underlying principles of SDG 16 (Peace, justice and strong institutions) and SDG Target 16.4 in particular, which calls on countries to significantly reduce illicit financial flows and combat all forms of organized crime.

CONCLUSIONS

Illicit trade in counterfeiting and piracy undermine the SDGs in many ways:



Stifles economic growth, prevents legal job growth and drains over US\$700 billion from the global economy.



Consumers are exposed to harmful ingredients and faulty products that pose clear health and safety risks.



Pirating copyrighted works erodes investment and production of cultural and educational materials.

6 CLEAN WATER AND SANITATION



Irresponsible disposal of hazardous and toxic substances into air and water jeopardizes groundwater and watercourse.

8 DECENT WORK AND ECONOMIC GROWTH



Drains GDP, displaces legitimate jobs and economic activity; creates opportunities for labor exploitation and unsafe working conditions.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



IP theft deters and discourages innovation, reducing incentives for companies to invest in R&D and inhibits creative industries from realizing their full potential.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Drives production under unethical, unregulated and poor working conditions, utilizing child labor in its production and coerced migrants smuggled into a country selling counterfeit goods.

15 LIFE ON LAND



Generates environmental hazards to soil and land from unregulated manufacturing and improper waste disposal.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Helps fund other criminal activities, fosters corruption, and undermines the rule of law.

NOTES

- ¹ May, C. (2017). *Transnational Crime and the Developing World*. Washington DC: Global Financial Integrity. Retrieved from: http://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf
- ² OECD. (2009). *Magnitude of Counterfeiting and Piracy of Tangible Products: An Update*. Paris: OECD. Retrieved from: <http://www.oecd.org/sti/ind/44088872.pdf>
- ³ The OECD notes that the increase in volume between the two studies may in part be attributed to improved methodology and data collection. OECD/EUIPO. (2016). *Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact*. Paris: OECD Publishing. Available at: https://read.oecd-ilibrary.org/governance/trade-in-counterfeit-and-pirated-goods_9789264252653-en#page1
- ⁴ Frontier Economics. (2016). *The Economic Impacts of Counterfeiting and Piracy*. Brussels, Cologne, Dublin, London, Madrid, Melbourne & Sydney: Frontier Economics. Retrieved from: https://www.inta.org/communications/documents/2017_frontier_report.pdf
- ⁵ Europol / EUIPO. (2017). *2017 Situation Report on Counterfeiting and Piracy in the European Union*. The Hague & Alicante: Europol and EUIPO. Retrieved from: <https://www.europol.europa.eu/publications-documents/2017-situation-report-counterfeiting-and-piracy-in-european-union>
- ⁶ SOCTA. (2013). *EU serious and organised crime threat assessment (SOCTA 2013)*. The Hague: European Police Office. Available at: <https://www.europol.europa.eu/activities-services/main-reports/eu-serious-and-organised-crime-threat-assessment-socta-2013>
- ⁷ WIPO. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3_ppt.pdf
- ⁸ Semi-Conductor Industry Association. (2017). *Combat Counterfeit Semiconductors*. Washington, DC: Semi-Conductor Industry Association. Accessed on 16 October 2018. Available at: http://www.semiconductors.org/issues/anticounterfeiting/anti_counterfeiting/
- ⁹ Federation of the Swiss Watch Industry. (2018). *Thinking of buying a counterfeit product? Shame!* n.p.: Federation of the Swiss Watch Industry. Accessed 16 October 2018. Available at: http://www.fhs.swiss/eng/buy_counterfeit.html
- ¹⁰ ITV. (2015, November 4). UK's first Fake Shop reveals danger of counterfeit goods. *ITV*. Available at: <http://www.itv.com/news/westcountry/2015-11-04/rat-droppings-in-cigarettes-and-urine-in-perfume-fake-shop-reveals-danger-of-counterfeit-goods/>
- ¹¹ Greenwood, C. (2015, May 17). Warning on fake make-up tainted by CYANIDE and other dangerous chemicals: Counterfeit versions of leading brands are being cooked up by criminals in squalid underground labs. *Daily Mail*. Available at: <http://www.dailymail.co.uk/news/article-3085665/Warning-fake-make-tainted-cyanide-dangerous-chemicals-Counterfeit-versions-leading-brands-cooked-criminals-squalid-underground-labs.html>
- ¹² National IPR Coordination Center. (n.d.). *Counterfeit Automotive Parts Safety Hazard to the Public*. Arlington, VA: National IPR Coordination Center. Retrieved from: <https://www.iprcenter.gov/reports/public-service-announcements/counterfeit-auto-parts-view>
- ¹³ Department of Justice U.S. Attorney's Office. (2016). *Two Men Charged With Importing And Selling Counterfeit Airbags* [Press release]. Buffalo, NY: Department of Justice. Available at: <https://www.justice.gov/usao-wdny/pr/two-men-charged-importing-and-selling-counterfeit-airbags>
- ¹⁴ Dowling, J. (2015, November 1). Toyota issues a warning about thousands of counterfeit brake pads containing deadly asbestos. *News.com.au*. Available at: <http://www.news.com.au/finance/business/manufacturing/toyota-has-issued-a-warning-about-thousands-of-counterfeit-brake-pads-containing-deadly-asbestos/news-story/b367ae352c742f7da14a02967b49fd3e>
- ¹⁵ WIPO. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3_ppt.pdf
- ¹⁶ The OECD notes that the increase in volume between the two studies may in part be attributed to improved methodology and data collection. OECD/EUIPO. (2016). *Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact*. Paris: OECD Publishing. Available at: https://read.oecd-ilibrary.org/governance/trade-in-counterfeit-and-pirated-goods_9789264252653-en#page1
- ¹⁷ Frontier Economics. (2016). *The Economic Impacts of Counterfeiting and Piracy*. Brussels, Cologne, Dublin, London, Madrid, Melbourne & Sydney: Frontier Economics. Retrieved from: https://www.inta.org/communications/documents/2017_frontier_report.pdf
- ¹⁸ Schmitz-Fohrmann, V., Böckenholt, R. and Schwab, F. (2018, May 24). Border seizure measures in the European Union. *World Trademark Review*. Available at: <http://www.worldtrademarkreview.com/Intelligence/Anti-counterfeiting/2018/Regional-focus/Border-seizure-measures-in-the-European-Union>
- ¹⁹ Frontier Economics. (2016). *The Economic Impacts of Counterfeiting and Piracy*. Brussels, Cologne, Dublin, London, Madrid, Melbourne & Sydney: Frontier Economics. Retrieved from: https://www.inta.org/communications/documents/2017_frontier_report.pdf
- ²⁰ Frontier Economics. (2016). *The Economic Impacts of Counterfeiting and Piracy*. Brussels, Cologne, Dublin, London, Madrid, Melbourne & Sydney: Frontier Economics. Retrieved from: https://www.inta.org/communications/documents/2017_frontier_report.pdf
- ²¹ UNODC. (2014). *Focus on the Illicit Trafficking of Counterfeit Goods and Transnational Organized Crime*. Vienna: UNODC. Retrieved from: https://www.unodc.org/documents/counterfeit/FocusSheet/Counterfeit_focussheet_EN_HIRES.pdf
- ²² Federation of the Swiss Watch Industry. (2018). *Thinking of buying a counterfeit product? Shame!* n.p.: Federation of the Swiss Watch Industry. Accessed 16 October 2018. Available at: http://www.fhs.swiss/eng/buy_counterfeit.html

- ²³ Antonipillai, J. And Lee, M. K. (2016). *Intellectual Property and the US Economy: 2016 Update*. n.p.: Economics and Statistics Administration / USPTO. Retrieved from: <https://www.commerce.gov/sites/commerce.gov/files/media/files/2016/ipandtheuseconomysept2016.pdf> ; EUIPO / EPO. (2016). *Intellectual property rights intensive industries and economic performance in the European Union: Industry-Level Analysis Report, October 2016, Second edition*. Munich and Alicante: EPO and EUIPO. Retrieved from: https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/performance_in_the_European_Union/performance_in_the_European_Union_full.pdf
- ²⁴ INTA. (2017). *The Economic Contribution of Trademark-Intensive Industries in Indonesia, Malaysia, the Philippines, Singapore, and Thailand*. New York: INTA. Available at: <https://www.inta.org/communications/pages/impact-studies.aspx>
- ²⁵ INTA. (2016). INTA's Impact Studies Committee Publishes Latin America Economic Impact Study and Seeks Input on gTLD Study. INTA Bulletin, 71 (21). Available at: https://www.inta.org/INTABulletin/Pages/Impact_Studies_Committee_Update_7121.aspx
- ²⁶ WIPO. (2016). *Conference on the Global Digital Content Market Opens at WIPO* [Press release PR/2016/790]. Geneva: WIPO. Available at: http://www.wipo.int/pressroom/en/articles/2016/article_0005.html
- ²⁷ G20 China. (2016). *G20 Action Plan on the 2030 Agenda for Sustainable Development*. n.p.: G20 China, p.13. Retrieved from: https://www.b20germany.org/fileadmin/user_upload/G20_Action_Plan_on_the_2030_Agenda_for_Sustainable_Development.pdf
- ²⁸ UNODC. (2014). *Focus on the Illicit Trafficking of Counterfeit Goods and Transnational Organized Crime*. Vienna: UNODC. Retrieved from: https://www.unodc.org/documents/counterfeit/FocusSheet/Counterfeit_focussheet_EN_HIRES.pdf
- ²⁹ Peebles, L. (2014, February 1). Counterfeit Super Bowl Fan Gear May Be Tainted With Toxins. *HuffPost*. Available at: https://www.huffingtonpost.com/2014/02/01/super-bowl-counterfeit_n_4706609.html
- ³⁰ The Committee's Investigation Into Counterfeit Electronic Parts in the Department of Defense Supply Chain, Hearing Before the Committee on Armed Services United States Senate, One Hundred Twelfth Congress, First Session, November 8, 2011. Washington, DC: US Government Printing Office. Retrieved from: <https://www.gpo.gov/fdsys/pkg/CHRG-112shrg72702/pdf/CHRG-112shrg72702.pdf>
- ³¹ WIPO. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3_ppt.pdf
- ³² Europol / EUIPO. (2015). *2015 Situation Report on Counterfeiting in the European Union*. The Hague and Alicante: Europol / EUIPO. Available at: <https://www.europol.europa.eu/publications-documents/2015-situation-report-counterfeiting-in-european-union>.
- ³³ WIPO. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3_ppt.pdf
- ³⁴ WIPO. (2017). *The Environmentally Safe Disposal and Destruction of Intellectual Property Infringing Goods*. Geneva: WIPO. Retrieved from: http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_12/wipo_ace_12_3_ppt.pdf
- ³⁵ UNICRI. (2011). *Counterfeiting, a Global Spread, a Global Threat, 2011 Edition*. UNICRI: Turin. Available at http://www.unicri.it/topics/counterfeiting/organized_crime/reports/CTF_2011_Unedited_Edition_Final.pdf
- ³⁶ UNICRI/ICC-BASCAP. (2013). *Confiscation of the Proceeds of Crime: a Modern Tool for Deterring Counterfeiting and Piracy*. UNICRI: Turin. Available at: http://www.unicri.it/topics/counterfeiting/organized_crime/confiscation/

CHAPTER 5: SDGs AND ILLICIT TRADE IN FORESTRY PRODUCTS



CHAPTER 5 SDGs AND ILLICIT TRADE IN FORESTRY PRODUCTS

The estimated annual retail value of illegal logging is US\$52 to 157 billion, making it the world's most profitable natural resource crime, with knock-on effects of reducing government tax revenue on sales and exports.¹ Illegal logging and illicit trade in timber undermines sustainable economic growth, economic development and environmental conservation. It not only puts the livelihoods of forest-dependent communities at risk, but also undermines legitimate commerce within the forestry sector by distorting timber markets and reducing profitability.

The forest industry needs a stable business environment to make the long-term investments necessary to ensure the supply of raw material. Illegal logging and trade in illicit timber undermine incentives for the private sector to invest in sustainable forest management, as the presence of illegal timber distorts global markets and affects the competitiveness of legitimate producers who operate in compliance with national and international environmental and trade rules.

Notably, it is only in the past decade that illegal logging and trade in illegal timber has been recognized as a global criminal problem by international organizations and law enforcement agencies.² Nonetheless, forestry crime has not generated nearly as much official scrutiny or media coverage as trafficking in drugs, humans and weapons.

Slowly consumer awareness is growing and the public is becoming increasingly aware of environmental and sustainability risks and is demonstrating greater concern in the origins of the products they buy and the processes that go into making them. This trend is increasingly being reflected in business operations, where companies seek to ensure that the wood and paper-based products they sell are legal, responsibly-sourced, and sustainable – thereby demonstrating corporate social responsibility and commitment to addressing negative impacts on climate change and biodiversity arising from deforestation.

Combatting illegal logging and illicit trade in timber is consequently a business imperative and an environmental imperative for responsible corporations operating in the forest sector.

What is illegal logging and illicit timber trade?

The International Union of Forest Research Organizations (IUFRO) broadly defines illegal logging and related timber trade as including “all practices related to the harvesting, processing and trading of timber inconsistent with national and sub-national law.”³ This definition also may be extended to include violations of ratified international treaties and conventions.

Such practices include, for instance, operating under a license that has been obtained illegally (e.g., involving corruption or collusion), logging in protected areas, exceeding permitted harvest quotas, processing logs without the necessary licenses, tax evasion and exporting products without paying export duties.” The definition also encompasses “related trade” when timber-based products are exported or imported in contravention to import or export laws.

Impact of illicit trade in forestry products on achieving the UN Sustainable Development Goals

Illicit trade in the forestry sector directly impacts several of the UN Sustainable Development Goals (SDGs). Forests cover 30 percent of the Earth's surface. In addition to providing food security and shelter, forests are essential to combating climate change, protecting biodiversity, supporting economic development, future employment opportunities, and the livelihoods of 1.6 billion people—many of whom live in developing countries.^{4 5}

The illegal forestry industry impacts achievement of seven SDGs:

- SDG 1 (no poverty);
- SDG 8 (decent work and economic growth);
- SDG 11 (sustainable cities and communities);
- SDG 12 (responsible consumption and production);
- SDG 13 (climate action);
- SDG 15 (life on land); and
- SDG 16 (peace, justice and strong institutions).

Social and economic development



A well-functioning and sustainably managed forest sector plays an important part in the surrounding local economy, providing an anchor for economic development, employment opportunities and public sector tax revenues, thereby contributing to SDG 1 (end poverty) and SDG 8 (productive employment and decent work for all). Forest products also supply more than 20 percent of the household income for local families in developing countries, thereby supporting rural livelihoods and poverty reduction.⁶

These benefits are, however, threatened by serious and increasingly sophisticated illegal logging and illicit timber trade. According to UNEP and INTERPOL, forestry crimes such as illegal logging generate an estimated US\$51 to 152 billion in illicit revenues that are unaccounted for and untaxed in the legitimate economy. This compares to the total annual global official development assistance (ODA) commitments of about US\$135 billion,⁷ and highlights the magnitude of financial losses that could be ascribed more beneficially. Moreover, lost government tax revenues of between US\$9 to 26 billion per year⁸ deprives developing economies of billions in public resources and squandered development opportunities, while yielding a massive windfall of profits to criminals and corrupt government officials.⁹

Because of the fleeting, unsustainable nature of illegal logging, good and reliable employment opportunities are precluded, undermining SDG 8 (decent work and economic growth) in four ways:

- The forestry sector employs some 13.7 million formal workers,¹⁰ but according to the World Bank, an additional 41 million people work *informally* in the timber sector.¹¹ In the EU alone, forest-based industries provide nearly 3.5 million jobs. Small- and medium- forest enterprises (SMFEs) are the primary source of forest sector employment in most developing countries, accounting for 80 to 90 percent of formal and informal employment in all forest enterprises.¹² Therefore, legalizing the sizeable illicit portion of the logging business has the potential to create millions of legitimate employment opportunities.
- Unsustainable forest practices leave large areas deforested, barren and unable to renew harvests for decades. Consequently, local employment opportunities are lost forever.
- Forest work is one of the most hazardous industrial sectors globally. While the companies engaged in sustainable and legal timber trade regularly implement sustainability requirements on human and labor rights, occupational health and safety, environmental commitments, and responsible business practices,¹³ illicit actors show little regard for secure and safe employment opportunities, undermining SDG Target 8.8 (protect labor rights and promote safe and secure working environment for all workers).
- Illegal logging and illicit timber trade also threaten jobs within the tourism industry, valued at 5 to 10 percent of national economies, when protected forests and animal habitats are damaged.¹⁴

Environmental impact



Deforestation and forest degradation – often driven by illegal logging and the clandestine profits from illicit timber trade – disrupt and undermine nations' efforts to address climate change and sustainable forest governance.

Deforestation and forest degradation contribute more than 17 percent of all man-made greenhouse gas emissions, more than the emissions from the world's entire transport sector.¹⁵ The impact of illegal logging on carbon emissions is particularly profound in tropical regions, where deforestation accounts for 10 to 20 percent of global carbon emissions.¹⁶ Illegal logging accounts for 50 to 90 percent of all forestry activities in key producer tropical forests, such as those of the Amazon Basin, Central Africa and Southeast Asia, making illicit trade in forestry a primary malefactor in the fight against climate change.¹⁷

Forests also play an important role as “carbon sinks” in climate systems through carbon dioxide absorption. Forests absorb 2.6 billion tons of carbon dioxide each year, which by comparison is equal to about one-third of the carbon dioxide released from the burning of fossil fuels.¹⁸ Consequently, forests are crucial in achieving SDG 13 (take urgent action to combat climate change and its impacts). In a testament to the importance of forests to mitigating climate change, many countries have included them in their Intended Nationally Determined Contributions (INDCs) submitted under the UN Framework Convention on Climate Change, with several of these INDCs specifying sustainable forest management practices.¹⁹

Illegal logging also represents a significant threat to SDG Target 11.4 (protect and safeguard the world’s cultural and natural heritage). For example, only three years after being listed as a World Heritage site, Madagascar’s Rainforests of the Atsinanana acquired UNESCO “in danger” status in 2010, due to illegal logging of ebony and rosewood.²⁰

The importance of sustainable forest management practices is also identified by SDG Target 12.2 (sustainable management and efficient use of natural resources) and SDG Target 15.2 in particular, which calls for promoting the implementation of sustainable management of all types of forests, halting deforestation and restoring degraded forests.

Forests supply vital services, such as buffering effects of extreme weather such as floods, drought and landslides. Forests also protect the environment by preserving the soil, minimizing erosion, purifying water, protecting aquifers, improving air quality, absorbing carbon, mitigating climate change, and preserving biodiversity. However, forests can only play those roles if they are managed well and fairly.

Sustainability and consumer awareness on sustainable choices



The infiltration of illegally sourced timber into the legal wood trade also impedes the achievement of SDG Target 12.6 (encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability) and SDG Target 12.8 (ensure the public have the relevant information and awareness for sustainable development in harmony with nature). However, industry efforts to achieve these goals—through education, public awareness and programs to control illegal timber—are undercut by sophisticated criminals who shift goods between the illegal and the legal worlds to give the timber the appearance of legality and legitimacy. This allows illegally sourced timber to enter the legitimate supply chain as “clean” wood, circumventing national legislation aimed at prohibiting both the import and processing of illegally logged timber, and maximizing the criminals’ profits. This process, facilitated by large-scale corruption and criminal networks, ensures that both companies and consumers—despite conscious efforts to purchase sustainably—are largely unaware of the illegal origins of the goods.

Peace, justice and strong institutions



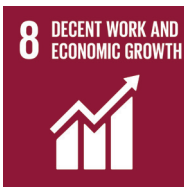
Illegal logging and organized forest crime generate billions in illicit profits for criminals, who are also involved in money laundering, tax fraud and tax evasion, and other forms of trafficking.^{21 22 23} Corruption is entrenched in illegal logging operations, with a wide range of people involved at all stages of the supply chain, from field officers to high-level representatives (e.g. to obtain logging permits, to avoid controls, and to export and import illegal timber).²⁴ Moreover, some non-state armed groups, terrorist groups and criminal networks finance their criminal activities by exploiting forestry resources in conflict areas. A 2016 study by INTERPOL and the UN Environment Programme (UNEP) found links between forestry crime and drug trafficking, especially in Latin America, as well as links between the illegal charcoal trade in Africa and non-state armed groups and terrorist organizations.²⁵ As noted by the study, “the involvement of terrorist organizations and armed groups in illegal logging and associated crimes also suggests human rights abuses, which are inherent in the methods used by these groups.”²⁶ Intensifying the battle against forestry crimes is thus paramount to achieve SDG 16, particularly SDG Target 16.1 (significantly reduce all forms of violence and related death rates everywhere), SDG Target 16.4 (combat all forms of organized crime) and SDG Target 16.5 (substantially reduce corruption and bribery in all their forms).

CONCLUSIONS

Illicit trade in forestry products undermines the SDGs in many ways:



Robs the surrounding local economy of its anchor for economic development, employment and tax revenues that could be used for public investment.



Displaces legal employment opportunities, up to 80 percent in small- and medium- forest enterprises (SMFEs) in developing countries; threatens tourism jobs by damaging protected forests and animal habitats.



Endangers precious rainforests and other World Heritage sites; threatens tourism jobs by damaging protected forests and animal habitats.



Denies consumers of the relevant information to make choices, based on awareness for sustainable development in harmony with nature, including consumption of rare woods and woods sourced unsustainably.



Exacerbates deforestation and forest degradation, accelerates contributions to CO2 emissions and precludes massive CO2 absorption critical to fighting climate change.



Undermines sustainable management of forests to preserve soil, minimize erosion, purify water, protect aquifers, improve air quality, preserve biodiversity and protect wildlife habitats.



Poses a serious threat to peace and security and damages public trust and institutional structures.

NOTES

- ¹May, C. (2017). *Transnational Crime and the Developing World*. Washington, DC: Global Financial Integrity. Retrieved from: http://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf
- ²Kleinschmit, D., Mansourian, S., Wildburger, C., and Purret, A. (2016). *Illegal Logging and Related Timber Trade - Dimensions, Drivers, Impacts and Responses* [IUFRO World Series Volume 35]. Vienna: International Union of Forest Research Organizations. Retrieved from: https://www.iufro.org/download/file/25744/6360/ws35-low-res_pdf/
- ³Kleinschmit, D., Mansourian, S., Wildburger, C., and Purret, A. (2016). *Illegal Logging and Related Timber Trade - Dimensions, Drivers, Impacts and Responses* [IUFRO World Series Volume 35]. Vienna: International Union of Forest Research Organizations. Retrieved from: https://www.iufro.org/download/file/25744/6360/ws35-low-res_pdf/
- ⁴United Nations. (2016). *15 Life on Land: Why it Matters*. n.p.: United Nations. Retrieved from: http://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/15_Why-it-Matters_Goal15_Life-on-Land_3p.pdf
- ⁵Illegal Logging Portal. (2018). *Sustainable Development Goals (SDGs)*. n.p.: Illegal Logging Portal. Available at: <https://www.illegal-logging.info/topics/sustainable-development-goals-sdgs>
- ⁶Angelsen, A. et. al. (2014). Environmental Income and Rural Livelihoods: A Global-Comparative Analysis. *World Development*, 64 (S1), S12-S28. Available at: <https://www.sciencedirect.com/science/article/pii/S0305750X14000722>
- ⁷Nellemann, C., Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., Mrema, E., and Barrat, S. (Eds). (2016). *The Rise of Environmental Crime – A Growing Threat to Natural Resources Peace, Development and Security*. A UNEP- INTERPOL Rapid Response Assessment. Nairobi: United Nations Environment Programme and RHIPTO Rapid Response–Norwegian Center for Global Analyses. Available at: http://pfbcbf.org/news_en/items/unep-interpol-enen.html
- ⁸Nellemann, C., Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., Mrema, E., and Barrat, S. (Eds). (2016). *The Rise of Environmental Crime – A Growing Threat to Natural Resources Peace, Development and Security*. A UNEP- INTERPOL Rapid Response Assessment. Nairobi: United Nations Environment Programme and RHIPTO Rapid Response–Norwegian Center for Global Analyses. Available at: http://pfbcbf.org/news_en/items/unep-interpol-enen.html
- ⁹Nellemann, C., Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., Mrema, E., and Barrat, S. (Eds). (2016). *The Rise of Environmental Crime – A Growing Threat to Natural Resources Peace, Development and Security*. A UNEP- INTERPOL Rapid Response Assessment. Nairobi: United Nations Environment Programme and RHIPTO Rapid Response–Norwegian Center for Global Analyses. Available at: http://pfbcbf.org/news_en/items/unep-interpol-enen.html
- ¹⁰ILO. (2018). *Forestry, wood, pulp and paper sector*. Geneva: ILO. Available at: <http://www.ilo.org/global/industries-and-sectors/forestry-wood-pulp-and-paper/lang--en/index.htm>
- ¹¹The World Bank. (2016). *Forests Generate Jobs and Incomes* [Brief]. Washington, DC: The World Bank. Available at: <http://www.worldbank.org/en/topic/forests/brief/forests-generate-jobs-and-incomes>
- ¹²The World Bank. (2016). *Forests Generate Jobs and Incomes* [Brief]. Washington, DC: The World Bank. Available at: <http://www.worldbank.org/en/topic/forests/brief/forests-generate-jobs-and-incomes>
- ¹³For example, the EU's Voluntary Partnership Agreements (VPAs) include minimum age and wage requirements, health and safety procedures, and freedom to organize and form unions. See also Stora Enso Supplier Code of Conduct, available at: http://assets.storaenso.com/se/com/DownloadCenterDocuments/SE%20_Supplier%20_CodeOfConduct.pdf
- ¹⁴UNEP. (2011). *Towards a green economy: pathways to sustainable development and poverty eradication*. Nairobi: United Nations Environment Programme. Retrieved from: https://sustainabledevelopment.un.org/content/documents/126GER_synthesis_en.pdf
- ¹⁵IUCN. (2012). *Facts and figures on Forests*. Gland: IUCN. Available at: <https://www.iucn.org/content/facts-and-figures-forests>
- ¹⁶See Asner, G. P. (2009). *Measuring Carbon Emissions from Tropical Deforestation: An Overview*. Environmental Defense Fund. New York, NY. Available at https://www.edf.org/sites/default/files/10333_Measuring_Carbon_Emissions_from_Tropical_Deforestation--An_Overview.pdf; and Union of Concerned Scientists. (2013). *Measuring the Role of Deforestation in Global Warming*. Cambridge, MA: Union of Concerned Scientists. Available at: <https://www.ucsusa.org/global-warming/solutions/stop-deforestation/deforestation-global-warming-carbon-emissions.html#.W9c4o6eZNo4>
- ¹⁷INTERPOL (2017). *PROJECT LEAF Global Forestry Enforcement*. Lyon: INTERPOL. Available at: https://www.interpol.int/content/download/35230/458253/version/6/file/LEAF%20Prospectus%20NOV17_web.pdf
- ¹⁸Center for International Forestry Research. (2018). *Forests and Climate Change*. Bogor: Center for International Forestry Research. Available at: <https://www.cifor.org/forests-and-climate-change/>
- ¹⁹EU FLEGT Facility. (2016). *VPAs for SDGs: How Voluntary Partnership Agreements contribute to global development goals* [Factsheet]. Barcelona: EU FLEGT Facility. Available at: <http://www.euflegt.efi.int/es/publications/vpas-for-sdgs>
- ²⁰IUCN. (2017). *Illegal activities threaten natural World Heritage, pushing the vaquita to the brink and depleting forests – IUCN*. Gland: IUCN. Available at: <https://www.iucn.org/news/iucn-41whc/201706/illegal-activities-threaten-natural-world-heritage-pushing-vaquita-brink-and-depleting-forests---iucn>
- ²¹UNODC. (n.d.). *SDG 14: Conserve and Sustainably Use the Oceans, Seas and Marine Resources for Sustainable Development and SDG 15: Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss*. Retrieved from: <https://www.unodc.org/unodc/en/about-unodc/sustainable-development-goals/sdg14-and-15.html>
- ²²INTERPOL. (n.d.). *Environmental Crime: Projects*. Lyon: INTERPOL. Retrieved January 22, 2019, from: <https://www.interpol.int/Crime-areas/Environmental-crime/Projects/Project-Leaf>

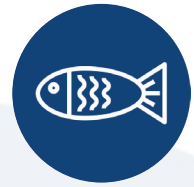
²³ INTERPOL & UNEP. (2016). *Strategic Report: Environment, Peace and Security - a Convergence of Threats*. Lyon: INTERPOL. Available at: <http://www.interpol.int/en/Media/Files/News-Media-releases/2016/2016-165-INTERPOL-UNEP-Strategic-Report-Environment,-Peace-and-Security>

²⁴ INTERPOL & UNEP. (2016). *Strategic Report: Environment, Peace and Security - a Convergence of Threats*. Lyon: INTERPOL. Available at: <http://www.interpol.int/en/Media/Files/News-Media-releases/2016/2016-165-INTERPOL-UNEP-Strategic-Report-Environment,-Peace-and-Security>

²⁵ INTERPOL & UNEP. (2016). *Strategic Report: Environment, Peace and Security - a Convergence of Threats*. Lyon: INTERPOL. Available at: <http://www.interpol.int/en/Media/Files/News-Media-releases/2016/2016-165-INTERPOL-UNEP-Strategic-Report-Environment,-Peace-and-Security>

²⁶ INTERPOL & UNEP. (2016). *Strategic Report: Environment, Peace and Security - a Convergence of Threats*. Lyon: INTERPOL. Available at: <http://www.interpol.int/en/Media/Files/News-Media-releases/2016/2016-165-INTERPOL-UNEP-Strategic-Report-Environment,-Peace-and-Security>

CHAPTER 6: SDGs AND ILLEGAL, UNREPORTED, AND UNREGULATED FISHING



CHAPTER 6 SDGs AND ILLEGAL, UNREPORTED, AND UNREGULATED FISHING

Illegal, Unreported, and Unregulated Fishing—known as IUU Fishing—is an example of illicit trade in a global natural resource with significant economic, societal and environmental costs.

IUU fishing has thus far been primarily viewed by governments as a lack of compliance with technical regulations. As a result, IUU fishing is in many locations only lightly criminalized or treated as a minor infraction under national fishery codes, with limited domestic resources assigned to monitoring or enforcement.

With respect to the SDGs, however, IUU fishing is far from a harmless compliance issue. Large-scale IUU fishing plunders the oceans, endangers food security, weakens economies, depletes fish stocks, and undermines conservation and management efforts. Furthermore, it deprives coastal fishing communities of income, undermines the rule of law, deprives states of revenues and distorts free and fair competition for law-abiding commercial fishermen. IUU fishing also supports associated illegal activity, including money laundering and tax evasion, and it creates a market for slave labor. For these reasons, response strategies are evolving beyond national regulatory review to include international multi-stakeholder efforts, including those by the World Wildlife Fund (WWF) and the Seafood Alliance for Legality and Traceability (SALT).

Further downstream, IUU fishing presents problems to retailers when IUU products enter legitimate channels. This can undermine consumer confidence in sustainable seafood products, generate reputational damage for retailers, loss of license and/or market share, and pose significant liabilities for companies.¹ Collectively, these problems can lead to real disincentives for sustainably managed fisheries and hinder efforts to protect populations of the most vulnerable and valuable species. The prevalence of IUU fishing and the associated mislabeling of seafood products also means that consumers may be deceived into consuming endangered species caught in protected areas.

While the pervasiveness of IUU fishing is well-documented, the clandestine nature and lack of data masks the true extent of the threat. Nonetheless, global losses to IUU fishing have been estimated at US\$15 to 36 billion, representing 14 to 33 percent of global marine capture value.² In West African waters—which face some of the highest levels of IUU fishing in the world—IUU fishing may account for as much as 37 percent of all fish caught.³ These estimates illustrate a systematic, high-volume scale of IUU fishing globally.

What is IUU fishing?

Illegal, unregulated and unreported fishing (IUU) refers broadly to fishing activities that contravene regional, national or international fisheries conservation or management measures, or occurs outside the reach of these laws and regulations.⁴ IUU consists of these distinct but related elements:

- Illegal fishing refers to activities conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations. It also may include violations of the laws, regulations, and conservation and management measures adopted by a fishing vessel's flag State; and violations of national laws or international obligations, including the obligations of cooperating states to relevant regional fisheries management organizations (RFMOs).
- In practical terms, illegal fishing can include: fishing without a license; fishing in a closed area or marine protected area (MPA); under-reporting catches; keeping undersized fish; using prohibited fishing gear types; or illegally transshipping fish.
- Unreported fishing refers to fishing activities (i) which have not been reported or have been misreported to the relevant national authority in contravention of national laws and regulations; or (ii) undertaken in the area of competence of a relevant RFMO which have not been reported or have been misreported in contravention of the reporting procedures of that organization.
- Unreported fishing includes cases where fishers may only report a portion of a catch so as to fall within quotas, may fail to report the harvest of non-targeted species, or simply avoid reporting all together. Examples include keeping two fishing logs: an official log for the inspectors and a 'confidential' log for the owner. Fishers also may falsely record vessel locations or offload fish at ports with low regulatory and inspections standards, so called 'ports of convenience.'⁵
- Unregulated fishing is a broader term, which refers to fishing activities conducted by vessels without nationality, or those flying the flag of a country not party to a RFMO within the jurisdiction of that RFMO, or more generally fishing in a manner which contravenes the regulations of the RFMO. This also includes fishing in areas or for fish where there are no applicable conservation or management measures, and where such activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.

It is important to note that some forms of IUU fishing, particularly unregulated fishing, may not explicitly break existing laws. Fishing vessels that fish in areas or for fish stocks where there are no applicable conservation or management measures in place⁶ are thereby deliberately circumventing and violating the *spirit* of the law, but not operating in direct contravention of them. Similarly, fishing at the edge of marine protected areas may not be illegal, but nonetheless can have a serious impact on those protected ecosystems.⁷

Impact of Illegal Unreported and Unregulated Fishing on achieving the UN Sustainable Development Goals

The fisheries sector is one of the most important industries for global food security, poverty alleviation and human prosperity. Fish and fish products are a vital source of protein for millions of people, including some of the world's poorest and most vulnerable. Over 10 percent of the global population depends directly or indirectly on the fishery industry for their livelihoods.⁸ Sustainable fishing practices are therefore a prerequisite for achieving the objectives of the SDGs to end poverty, protect the planet and ensure prosperity for everyone by 2030.

In contrast, IUU fishing threatens the sustainability of global fisheries resources by contributing to their overexploitation, impeding their recovery and undermining the viability of legal fishing operations.⁹

The state of the world's marine fish stocks has seen a worrisome decline over the past three decades. In 1974, 90 percent of global marine fish stocks were fished within biologically sustainable levels. By 2015, this percentage had fallen to 67 percent, with stocks fished at biologically un-sustainable levels increasing from 10 to 33 percent.¹⁰ Regional statistics can be even more alarming, with the Mediterranean and Black Sea, the Southeast Pacific and the Southwest Atlantic all having close to 60 percent un-sustainably fished populations.¹¹ IUU fishing has rapidly accrued and intensified overfishing, presenting the most severe threats to developing countries that lack the capacity and resources for effective monitoring, control, and surveillance of their exclusive economic zones (EEZ).¹²

In 2014, the United Nations General Assembly declared IUU fishing one of the biggest threats to sustaining fish stocks globally.¹³ If IUU fishing is allowed to continue unabated, it will be almost impossible for the international community to achieve many of the SDGs.

The illicit trade in IUU fishing impacts achievement of six of the SDGs:

- SDG 1 (no poverty);
- SDG 2 (zero hunger);
- SDG 8 (decent work and economic growth);
- SDG 11 (Sustainable cities and communities);
- SDG 14 (life below water); and
- SDG 16 (peace, justice and strong institutions).

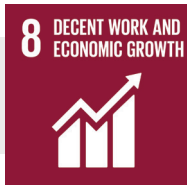
Food security and poverty alleviation



Fisheries contribute significantly to global food security, with around 3.2 billion people receiving almost 20 percent of their average per capita intake of animal protein from fish in 2015.¹⁴ For developing countries like Sri Lanka, Indonesia, Cambodia and Bangladesh, or in densely populated or small-island states, fish constitutes at least 50 percent of total animal protein intake.¹⁵

IUU fishing serves as both cause and consequence of poverty. Large scale IUU fishing can lead to the collapse of local fisheries, resulting in a decrease in income and threatening livelihoods of fishing communities in some of the most vulnerable regions of the world. At the same time, poverty can serve as a driver of IUU fishing when fishers operating at very narrow profit margins are tempted to violate fishing quotas and regulations. This results in a circle of diminishing fish stocks, which in turn exacerbate poverty and augment food insecurity and drive fishermen further into illegal fishing.¹⁶

Decent work and economic growth



The importance of a sustainable fishing sector for attaining SDG 8, which seeks to ensure sustainable economic growth, cannot be overstated. Fish and fish products represent some of the most traded food items in the world, with around 35 percent of global fish production entering international trade in 2016. Developing countries have been among the primary beneficiaries from this trade, with growth rate of exports increasing faster than from developed countries during the past 40 years.¹⁷ The UN's Food and Agriculture Organization (FAO) has found that marine and coastal resources represent 5 percent of the world's GDP, and that over 10 percent of the global population depends directly or indirectly on the fishery industry for their livelihoods.¹⁸ Women play an important role in this workforce and represent about 14 percent of the people employed in the primary fisheries and aquaculture sector or around 50 percent when including the secondary sector.¹⁹

By depleting fish stocks, IUU fishing threatens economic and employment opportunities for communities that depend on fishing for their livelihoods. It is estimated that West Africa alone could be losing US\$1.3 billion per year to IUU fishing and related processes.²⁰

In addition, IUU fishing poses a threat to several of the SDG 8 Targets, including SDG Target 8.5 (full and productive employment), SDG Target 8.7 (eradicate forced labor, end modern slavery and human trafficking), SDG Target 8.8 (protect labor rights and promote safe and secure working environments) and SDG Target 8.9 (promote sustainable tourism).

For those people employed by IUU fishing vessels, the situation can be dire. Vessels engaged in IUU fishing are often old and unsafe and must make riskier trips further out to sea.²¹ These circumstances make the hiring of qualified crew more difficult and expensive, leading unscrupulous operators to use forced labor and practice other human rights violations, which are reinforced by the isolation of the workplace, strong competition within the industry, and the ready supply of vulnerable workers.²²

Fishers, often migrant workers, are vulnerable to being deceived and coerced by brokers and recruitment agencies and forced to work on board vessels under the threat of force or by means of debt bondage.²³ A survey of fishers in 2012 found that almost 20 percent "reported working against their will with the menace of a penalty preventing them from leaving."²⁴ If deemed flight risks, laborers are imprisoned in spaces barely big enough to lie down, stuck until the next boat forces them back to sea.²⁵ Investigative journalists have also reported that

captains have forced workers to drink unclean water and work 20 to 22 hours per day without days off. Laborers also experience physical abuse, with reports revealing that, “almost all were kicked, whipped with toxic stingray tails or otherwise beaten if they complained or tried to rest [and] were paid little or nothing.”²⁶

Sustainable cities and communities



IUU fishing is threatening some of the world's most precious and iconic natural marine sites, thereby preventing the achievement of SDG Target 11.4 (strengthen efforts to protect and safeguard the world's cultural and natural heritage). Illegal and unsustainable fishing practices are a significant threat to the 29 UNESCO marine sites around the world.²⁷ Unsustainable fishing has been identified as one of the most pervasive threats to coral reefs, with over 55 percent of the world's reefs threatened by overfishing and/or destructive fishing. This figure can reach as much as 95 percent in some regions in Southeast Asia.²⁸

IUU fishing can have wide-ranging consequences for the increasingly important ecotourism industry by depleting the very wildlife upon which it depends.

The Belize Barrier Reef system was designated a World Heritage site in 1996 and provides 15 percent of Belize GDP,²⁹ with income generated through reef tourism and fisheries supporting more than half of the entire population.³⁰ The reef system and the economy that it supports are under constant threat from IUU fishing.³¹

Sustainable management of marine sites can be net positive for tourism and society as a whole. For example, the illegal harvesting of a shark fin can yield US\$108 on the black market, but the annual value of an individual reef shark to the shark-diving tourism industry in Palau can be as much as US\$1.9 million.³²

Sustainable oceans



The global recognition of the significance of the ocean and the resources that lie beneath is underlined by the adoption of the ambitious SDG 14 (life below water), which emphasizes the need to conserve the ocean, seas and marine resources as critical contributors to the achievement of the SDGs. SDG Target 14.4 (end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices by 2020) specifically recognizes that IUU fishing practices frustrate global efforts to ensure a sustainable marine environment and that IUU fishing has a debilitating impact on the sustainability of both coastal and offshore fisheries and the livelihoods of those living and working in fisheries-dependent economies.

Similarly, SDG Target 14.6 calls for the elimination of certain subsidies that contribute to IUU fishing. Subsidies to the fisheries sector, roughly US\$35 billion annually,³³ can exacerbate unsustainable fishing practices by artificially increasing fishing capacity – which in turn promotes overfishing and other destructive fishing practices. By some estimates these subsidies have helped produce a worldwide fishing fleet that is up to 250 percent larger than is economically and environmentally sustainable, driving overexploitation of already depleted resources.³⁴

Peace, justice and strong institutions



In addition to a significant transnational crime in itself that deprives governments of billions in economic losses annually,³⁵ the criminal individuals involved in illegal fishing operations have also been found to make use of fishing vessels for related criminal activities, such as drugs, weapons and human trafficking, money laundering, tax fraud, bribery, migrant smuggling, and acts of terrorism.³⁶ Consequently, IUU fishing undermines SDG 16, and in particular SDG Target 16.1 (significantly reduce all forms of violence and related death rates everywhere), 16.3 (promote the rule of law), SDG Target 16.4 (combat all forms of organized crime) and SDG Target 16.5 (Substantially reduce corruption and bribery in all their forms).

CONCLUSIONS

Illegal fishing undermines the SDGs in many ways:



Drains the economic viability of legal fishing industries and destabilizes the livelihoods of those living and working in fisheries-dependent economies.



Jeopardizes global fish supplies as a vital component of global food security.



Economic instabilities threaten the industry's long-run contributions to GDP and employment; IUU fishing is an ugly source of forced labor and other human rights abuses.



Threatens 29 UNESCO marine sites around the world and strips significant revenues from the marine-tourism industry.



Hinders efforts to protect populations of the most vulnerable and valuable species and undermines ocean and marine sustainability.



Undermines governments' capacity to enforce policy, promote the rule of law, eradicate corruption and combat other forms of criminal activity.

NOTES

- ¹ Bernd Cordes & California Environmental Associates. (2015). *Illegal, Unreported and Unregulated (IUU) Fishing: A Whitepaper*. n.p.: Bernd Cordes & California Environmental Associates. Retrieved from: <https://www.packard.org/wp-content/uploads/2016/03/Packard-White-Paper-on-IUU-for-Packard-website.pdf>; Sustainable Seafood Finance. (2018). *Seafood and Finance*. n.p.: Sustainable Seafood Finance. Accessed 18 October 2018. Available at: <http://sustainableseafoodfinance.org/background/>
- ² Channing, M. (2017). *Transnational Crime and the Developing World*. Washington, DC: Global Financial Integrity. Retrieved from: http://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf; see also FAO. (2018). *The State of Fisheries and Aquaculture. Meeting the Sustainable Development Goals*. Rome: FAO. <http://www.fao.org/3/I9540EN/i9540en.pdf>
- ³ Agnew, D. J., Pearce, J., Pramod, G., Peatman, T., Watson, R., et al. (2009). Estimating the Worldwide Extent of Illegal Fishing. *PLoS One*, 4 (2), 1-8.
- ⁴ The Pew Charitable Trusts. (2013). *FAQ: Illegal, Unreported, and Unregulated Fishing* [Fact sheet]. Philadelphia, Washington DC, and London: Pew Charitable Trusts. Retrieved from: <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2013/08/27/faq-illegal-unreported-and-unregulated-fishing>; FAO. (2001). *International Plan of Action to Prevent, Deter and Eliminate IUU Fishing*. Rome: FAO.
- ⁵ Phelps Bondaro, T. N., Reitano, T. and van der Werf, W. (2015). *The Illegal Fishing and Organized Crime Nexus: Illegal Fishing as Transnational Organized Crime*. Geneva and Amsterdam: The Global Initiative Against Transnational Organized Crime and The Black Fish. Retrieved from: <http://globalinitiative.net/wp-content/uploads/2015/04/the-illegal-fishing-and-organised-crime-nexus-1.pdf>
- ⁶ FAO. (2001). *International Plan of Action to Prevent, Deter and Eliminate IUU Fishing*. Rome: FAO.
- ⁷ Phelps Bondaro, T. N., Reitano, T. and van der Werf, W. (2015). *The Illegal Fishing and Organized Crime Nexus: Illegal Fishing as Transnational Organized Crime*. Geneva and Amsterdam: The Global Initiative Against Transnational Organized Crime and The Black Fish. Retrieved from: <http://globalinitiative.net/wp-content/uploads/2015/04/the-illegal-fishing-and-organised-crime-nexus-1.pdf>
- ⁸ FAO. (2012). *Fisheries and aquaculture – enabling a vital sector to contribute more* [Press release]. Rome: FAO. Available at: <http://www.fao.org/news/story/en/item/150839/icode/>
- ⁹ WWF. (2018). *Policy Brief: A Vision for Achieving Sustainable Fisheries in Regional Fisheries Management Organisations*. Brussels: WWF European Policy Office. Retrieved from: http://awsassets.panda.org/downloads/achieving_sustainable_fisheries_in_rfmos.pdf
- ¹⁰ FAO. (2018). *State of World Fisheries and Aquaculture, Committee on Fisheries, Thirty-third Session Rome, 9–13 July*. Rome: FAO. Retrieved from: http://www.fao.org/fileadmin/user_upload/COFI/COFI33Documents/MX204en.pdf
- ¹¹ WWF. (2018). *Policy Brief: A Vision for Achieving Sustainable Fisheries in Regional Fisheries Management Organisations*. Brussels: WWF European Policy Office. Retrieved from: http://awsassets.panda.org/downloads/achieving_sustainable_fisheries_in_rfmos.pdf
- ¹² UNCTAD / FAO / UNEP. (2018). *Achieving the targets of Sustainable Development Goal 14: Sustainable fish and seafood value chains and trade*. Background Note for the Second Oceans Forum 16–17 July, 2018 Geneva, Switzerland. Retrieved from: <http://unctad.org/meetings/en/SessionalDocuments/Background-Note-Second-Oceans-Forum-July2018-v4.pdf>
- ¹³ United Nations. (2015). 69/109. *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments*. Resolution adopted by the General Assembly on 9 December 2014. A/RES/69/109. New York: United Nations. Retrieved from: <http://undocs.org/A/RES/69/109>
- ¹⁴ FAO. (2018). *State of World Fisheries and Aquaculture, Committee on Fisheries, Thirty-third Session Rome, 9–13 July*. Rome: FAO. Retrieved from: http://www.fao.org/fileadmin/user_upload/COFI/COFI33Documents/MX204en.pdf
- ¹⁵ FAO. (2016). *The State of World Fisheries and Aquaculture: Contributing to Food Security and Nutrition for All*. Rome: FAO. Retrieved from: <http://www.fao.org/3/a-i5555e.pdf>
- ¹⁶ Phelps Bondaro, T. N., Reitano, T. and van der Werf, W. (2015). *The Illegal Fishing and Organized Crime Nexus: Illegal Fishing as Transnational Organized Crime*. Geneva and Amsterdam: The Global Initiative Against Transnational Organized Crime and The Black Fish. Retrieved from: <http://globalinitiative.net/wp-content/uploads/2015/04/the-illegal-fishing-and-organised-crime-nexus-1.pdf>
- ¹⁷ FAO. (2018). *State of World Fisheries and Aquaculture, Committee on Fisheries, Thirty-third Session Rome, 9–13 July*. Rome: FAO. Retrieved from: http://www.fao.org/fileadmin/user_upload/COFI/COFI33Documents/MX204en.pdf
- ¹⁸ FAO. (2012). *Fisheries and aquaculture – enabling a vital sector to contribute more* [Press release]. Rome: FAO. Available at: <http://www.fao.org/news/story/en/item/150839/icode/>
- ¹⁹ FAO. (2018). *State of World Fisheries and Aquaculture, Committee on Fisheries, Thirty-third Session Rome, 9–13 July*. Rome: FAO. Retrieved from: http://www.fao.org/fileadmin/user_upload/COFI/COFI33Documents/MX204en.pdf
- ²⁰ Copeland, D. (2014). West Africa has vast marine wealth but it is being depleted by the world's highest levels of illegal fishing. *The World Today*, 70 (1). Available at: <https://www.chathamhouse.org/publications/twt/archive/view/197223>
- ²¹ Gianni, M. and Simpson, W. (2005). *The Changing Nature of High Seas Fishing: How Flags of Convenience Provide Cover for Illegal, Unreported and Unregulated Fishing*. Canberra, London, Gland: Australian Department of Agriculture, Fisheries and Forestry, International Transport Workers' Federation and WWF International. Retrieved from: <http://assets.wwf.org.uk/downloads/flagsofconvenience.pdf>
- ²² ILO. (2013). *Caught at Sea: Forced Labour and Trafficking in Fisheries*. Geneva: ILO. Retrieved from: https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_214472.pdf

- ²³ ILO. (2018). *Forced labour and human trafficking in fisheries*. Geneva: ILO. Accessed 18 October 2018. Available at: <http://www.ilo.org/global/topics/forced-labour/policy-areas/fisheries/lang-en/index.htm>
- ²⁴ ILO. (2013). *Employment Practices and Working Conditions in Thailand's Fishing Sector*. Bangkok: ILO. p. 75.
- ²⁵ McDowell, R., Mason, M., and Mendoza, M. (2015, 25 March). AP Investigation: Slaves may have caught the fish you bought. AP. Available at: <https://www.ap.org/explore/seafood-from-slaves/ap-investigation-slaves-may-have-caught-the-fish-you-bought.html>
- ²⁶ McDowell, R., Mason, M., and Mendoza, M. (2015, 25 March). AP Investigation: Slaves may have caught the fish you bought. AP. Available at: <https://www.ap.org/explore/seafood-from-slaves/ap-investigation-slaves-may-have-caught-the-fish-you-bought.html>
- ²⁷ Lamb, K. (2018, 18 April). Destroying the world's natural heritage: 'Komodo is reaching a tipping point. *The Guardian*. Available at: <https://www.theguardian.com/environment/2018/apr/18/destroying-the-worlds-natural-heritage-komodo-is-reaching-a-tipping-point>
- ²⁸ Burke, L., Reyntar, K., Spalding, M., and Perry, A. (2011). *Reefs at Risk Revisited*. Washington DC: World Resources Institute (WRI), The Nature Conservancy, WorldFish Center, International Coral Reef Action Network, UNEP World Conservation Monitoring Centre and Global Coral Reef Monitoring Network. Retrieved from: http://www.reefresilience.org/pdf/Reefs_at_Risk_Revisited.pdf
- ²⁹ Lakhani, N. (2017, 22 August). Spectacular rebirth of Belize's coral reefs threatened by tourism and development. *The Guardian*. Available at: <https://www.theguardian.com/environment/2017/aug/22/belize-coral-reefs-improving-grassroots-restoration>
- ³⁰ McGrath, M. (2017, 18 April). Crime 'threatens nearly half the world's natural heritage sites'. *BBC News*. Available at: <http://www.bbc.com/news/science-environment-39590117>
- ³¹ Root, T. (2018, April 11). How One Country is Restoring its Damaged Ocean. *National Geographic*. Available at: <https://news.nationalgeographic.com/2018/04/belize-restores-coral-reefs-oil-drilling-ban-environment/>
- ³² Pew Charitable Trusts. (2011). *Million-Dollar Reef Sharks*. Philadelphia, Washington DC, London: Pew Charitable Trusts. Available at: <https://www.pewtrusts.org/en/research-and-analysis/reports/2011/05/02/milliondollar-reef-sharks>
- ³³ Rashid Sumaila, U., Lam, V., Le Manach, F., Swartz, W., and Pauly, D. (2016). Global fisheries subsidies: An updated estimate. *Marine Policy*, 69. 189-193. Available at: <http://www.sciencedirect.com/science/article/pii/S0308597X16000026>; United Nations. (2017). *Next month's ocean conference eyes cutting US\$35 billion in fisheries subsidies – UN trade officials* [News]. New York: United Nations. Available at: <http://www.un.org/sustainabledevelopment/blog/2017/05/next-months-ocean-conference-eyes-cutting-35-billion-in-fisheries-subsidies-un-trade-officials/>
- ³⁴ OCEANA. (2009). *Fisheries Subsidies, Overcapacity and Overfishing*. Washington DC: OCEANA. Retrieved from: http://oceana.org/sites/default/files/Fisheries_Subsidies_Backgrounder_REVISED_Oct09_FINAL_0.pdf
- ³⁵ Liddick, D. (2014). The dimensions of a transnational crime problem: the case of IUU fishing. *Trends in Organized Crime*, 17 (4), 290-312. Available at: <http://dx.doi.org/10.1007/s12117-014-9228-6>
- ³⁶ UNODC. (2011). *Transnational Organized Crime in the Fishing Industry*. Vienna: United Nations Office on Drugs and Crime. Available at: http://www.unodc.org/documents/human-trafficking/Issue_Paper_-_TOC_in_the_Fishing_Industry.pdf; OECD. (2016). *Conference: Combating Tax Crime and Other Crimes in the Fisheries Sector, OECD-FAO Conference and Workshop, 13-14 October 2016, Paris, France*. <http://www.oecd.org/tad/events/combating-crimes-fisheries-conference-2016.htm>

CHAPTER 7: SDGs AND ILLICIT TRADE IN PETROLEUM PRODUCTS



CHAPTER 7 SDGs AND ILLICIT TRADE IN PETROLEUM PRODUCTS

Oil and fuel theft along with various forms of fuel fraud are persistent and growing forms of illicit trade, with direct links to organized crime and terrorist groups.¹ Every year, it is estimated that US\$133 billion of fuels are illegally stolen, adulterated, or defrauded from legitimate petroleum companies,² with equally significant losses to governments through subsidy abuse and tax evasion.³ Several well-documented examples paint an alarming picture of how pervasive oil and fuel theft is:

- The African Development Bank estimates the value of illicit oil trade in Africa is worth nearly US\$100 billion a year.⁴
- Mexico is possibly the hardest-hit by fuel theft, losing 20,000 barrels per day.⁵ The National Citizens' Observatory, a think tank in Mexico, estimates the national black market for fuel is worth US\$2 to 4 billion a year.⁶
- Estimates on the value of the illegal fuel trade in Southeast Asia ranges from US\$2 to 10 billion a year, or around 3 percent of Southeast Asia's total fuel consumption.⁷
- The EU loses more than US\$4 billion yearly in tax revenue to fuel fraud.⁸

Improperly taxed and untaxed fuel are a major concern for governments. For example, international oil companies operating in Bulgaria estimate that between 20 and 40 percent of oil products sold were illegal and circumvented payment of excise duties and VAT.⁹ In Northern Ireland, diesel tax fraud was estimated at £80 million, or 13 percent of total taxable revenue from mineral oils.¹⁰

In addition to tax fraud, illicit petroleum exacts a toll on corporate profitability, increased expenses for security, and significant environmental impacts. Moreover, this illegal activity intersects with other transnational crimes and helps fund terrorist and other criminal undertakings.¹¹

Despite its severe negative effects on governments, business, consumers and the environment, the global problem of oil and fuel theft has so far been largely unchecked and remains mostly hidden from international attention.

While the most immediate effects may be in the country or countries where fuel is being stolen or smuggled, the ripple effects cross the global marketplace include undercutting economic development, hastening environmental degradation and facilitating illegal global financial flows, money laundering, organized criminal activity and terrorism. Fighting illicit trade in petroleum is therefore a global responsibility, as well as a prerequisite for sustainable development and achievement of the UN SDGs.

How illicit trade in petroleum happens

By installing illicit taps, thieves can divert oil or other refined products from pipelines. Pemex, the Mexican state oil company, lost about US\$1.6 billion in 2016 from fuel stolen from over 6,800 pipeline taps across the country.¹²

Stolen crude oil or refined products are siphoned off to small barges and waiting boats, which are then either refined locally or sent to sea to deliver the product to larger vessels/tankers. Bunkering tactics include “hot” or “pressure” tapping while the pipeline is still in operation, or “cold bunkering,” where a pipeline is blown up and thieves install a permanent underground tap leading to a storage facility while the line is out of operation.¹³

This involves unloading stolen or smuggled fuel to another vessel with the aim of avoiding detection and passing off the illegal fuel as legitimate imports.¹⁴

The use of the threat of violence to command a truck or ship and steal its cargo. A major driver behind piracy in the Gulf of Guinea has been the theft of oil. Pirates will hijack a tanker ship, disable its tracking devices, and transfer its cargo to smaller vessels for distribution on the black market.¹⁵

The petroleum sector is particularly susceptible to integrity violations due to the high complexity of activities, the close interaction between the public and private sectors, and the vast sums of money generated. By some estimates, more than 57 percent of all fraud cases in the oil and gas sector relates to corruption schemes.¹⁶

Smugglers exploit price differentials between countries by smuggling cheaper, untaxed or heavily subsidized fuel into higher priced jurisdictions, enabling a profitable and less traceable sale. Higher-priced, nonsubsidized, and taxed fuels also may be diluted with smuggled lower-priced or subsidized fuels.

Adulteration is the process where lower-cost additives are mixed with higher-cost fuels and then sold at full price. The process of adding kerosene to gasoline or diesel is a simple, difficult-to-detect way to increase profit margins. This practice of degrading the quality of fuel results in lower fuel efficiencies, engine damage and increased spending on vehicle maintenance.

Impact of illicit trade in petroleum on achieving the UN Sustainable Development Goals

Access to affordable, reliable and modern energy services is central to fulfilling almost all of the SDGs, namely eradicating poverty through advancements in health, education and safe water; improving agricultural productivity; and combating climate change.¹⁷ While a global shift towards renewable energy sources is underway, hydrocarbons are expected to remain the dominant source of energy in the coming decades.¹⁸ Consequently, governments have a vested interest in preventing oil and fuel theft and ensuring the efficient and effective use of the world's petroleum resources.

Oil and fuel production can support and contribute to the achievement of the SDGs by providing access to affordable energy; opportunities for decent employment; business and skills development; increased fiscal revenues; and improved infrastructure. Conversely, illicit trade of oil and fuel represents a significant threat to local and regional prosperity and to global stability and security.

The illicit trade in petroleum impacts achievement of nine SDGs:

- SDG 3 (good health and well-being);
- SDG 6 (clean water and sanitation);
- SDG 7 (affordable and clean energy);
- SDG 8 (decent work and economic growth);
- SDG 9 (industry, innovation and infrastructure)
- SDG 14 (life below water);
- SDG 15 (life on land);
- SDG 16 (peace, justice and strong institutions); and
- SDG 17 (partnership for the goals).

Economic growth and job creation



The petroleum sector is a multi-billion-dollar industry, featuring six of the world's ten largest companies.¹⁹ Globally, the sector employs nearly 6 million and generates another 60 million indirect jobs.²⁰ The sector is therefore a key contributor to GDP, government revenue and domestic employment:

- Earnings from the oil industry accounted for about 32 percent of Mexico's total government revenues in 2016,²¹ and the state-controlled oil company Pemex employs more than 120,000.²²
- Venezuela's oil revenues account for about 95 percent of export earnings, with the oil and gas sector contributing 25 percent of overall GDP.²³
- The petroleum sector in Saudi Arabia accounts for roughly 87 percent of revenues, 42 percent of GDP, and 90 percent of export earnings.²⁴
- 185,000 people were directly or indirectly employed in the Norwegian petroleum and petroleum-related industries in 2016, which represents roughly 7 percent of total employment in Norway.²⁵
- In Africa, fuel taxes account for a significant share of total tax revenues: 4 percent in South Africa, 5 to 7 percent in Kenya and Tanzania, 12 percent in Mozambique and 16 percent in Uganda.²⁶

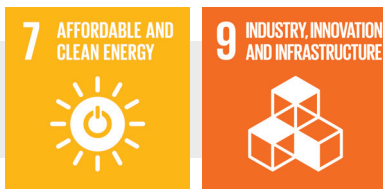
Given its impact on economic growth and source of employment, the petroleum sector drives economic growth, employment and quality of life, and is thus a critical component in achieving the goals of SDG 8 to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Illicit trade in petroleum and petroleum products works directly against sustainable development generally; specifically, it deprives governments of tax income, robs the energy industry of billions in revenues and causes the loss of legitimate jobs. Oil companies are also exposed to significant reputational damage, when illicit traders cause oil spills or other environmental hazards.

Oil and fuel theft have severe effects on tax revenue, especially in resource-rich, developing countries where petroleum industry royalties and tax payments are used to stimulate economic growth and finance development. Along with the associated money laundering and illicit financial flows, this illegal activity severely undermines the effectiveness of tax systems and their ability to generate the domestic resources needed to promote inclusive economic growth (SDG target 17.1). Where fuel costs represent a relatively greater portion of GDP, developing countries may experience more severe fiscal impact from fuel theft, diversion and smuggling. Nigeria is Africa's largest oil producer, but it is also a victim of massive fuel theft,²⁷ with as much as 30 percent of all refined products stolen and smuggled into neighboring states.²⁸ Given that oil contributes two-thirds of government revenues and around 35 percent of GDP,²⁹ these losses are a significant dislocation for the Nigerian economy. Compounding the economic losses, the Nigerian government spends US\$1.5 billion per month combatting oil theft and diversion.³⁰

Nigeria is by no means alone. Mexico forfeits more than US\$1 billion in annual revenue from fuel theft.³¹ This is a serious loss because oil revenues customarily subsidize roughly a third of the government's budget.³² The Philippines loses about US\$750 million annually in tax revenue due to adulterated fuel products entering its supply chain from smuggling.³³

Infrastructure and energy access



Excise taxes on transportation fuels are a significant source of revenue needed to fund infrastructure investments (SDG 9). For example, the US gas tax is the single most important source of funding transportation infrastructure, generating 85 percent of the revenue entering into the nation's transportation spending account.³⁴ Other examples include Costa Rica's fuel tax, which allocates 29 percent of revenues to the National Road Council.³⁵ In short, tax revenues stolen by smuggling and fuel fraud are revenues unavailable for constructing new infrastructure or upgrading aging infrastructure systems.

More directly, persistent pipeline sabotage—from illegal taps to blowing up pipelines—damages existing energy infrastructure and discourages much needed private investments in new infrastructure.³⁶

Illicit petroleum trade also has negative effects on energy access. The diversion of subsidized kerosene for use as an adulterant in costlier, nonsubsidized diesel and gasoline robs the most vulnerable citizens of their access to kerosene as cooking fuel and consequently undermines government subsidy programs aiming to deliver access to affordable, reliable, sustainable and modern energy (SDG 7). Kerosene subsidies are targeted at households in the poorest

nations, who spend as much as 10 percent of their incomes on modern energy, with most of this going to cover basic necessities, such as cooking or boiling water for drinking.³⁷ When kerosene is diverted and misused as an ingredient of fuel fraud in the transport sector, people are deprived of their everyday cooking and lighting fuel.

Environment and climate change



While the legal petroleum industry invests significantly in environmental stewardship, criminals show little regard to the environment when stealing oil and fuel. Illegal tapping, bunkering and ship transfers carry a higher probability for oil spills and blown pipelines and can cause significant damage to soil fertility, clean water supplies, marine life and other natural resources vital for human wellbeing (SDGs 6, 14 and 15).

For example, illegal refining and third-party interference are the main sources of pollution in the Niger Delta.³⁸ Oil pollution has degraded both land and water in the region, rendering once flourishing fishing and farming occupations impracticable.³⁹ Moreover, illegal fuel-laundering plants often indiscriminately dump waste products,⁴⁰ causing additional environmental damage and secondary impacts on human health, livelihoods, food and fuel stocks.

Fuel fraud, smuggling, and adulteration also may be counterproductive to environmental policies (e.g. excise taxes) aimed at reducing driving, improving substitution of more efficient vehicles and encouraging transition to cleaner alternative fuels (SDG 7). Additionally, other negative externalities such as air pollution can be reduced (SDG 3). Fuel tax revenues may also be used to offset the cost other environmental programs, such as subsidizing renewable energy and public transportation.

Fuel theft and adulteration also have secondary effects, such as producing higher levels of harmful exhaust emissions—including known carcinogens like polycyclic aromatic hydrocarbons (PAH)—and reducing fuel efficiency resulting in increased pollution.⁴¹ This is particularly true when the adulterant used is not meant for combustion.⁴²

Finally, adulterated products or products refined illegally also may not meet environmental specifications, such as phasing out lead, with further negative consequences for health, pollution and greenhouse gas emissions.

Peace, justice and strong institutions



Oil smuggling and fuel theft present a global security concern, generating a lucrative source of financial income for organized crime, non-state actors and terrorist groups, with examples ranging from Islamic State terrorists to Niger Delta militants and Mexican drug cartels.^{43, 44, 45} This activity significantly threatens national and regional stability, supports corrupt practices and creates significant deterrents for business investment, which thrives in stable, peaceful environments. Oil smuggling and fuel theft can also exact a deadly toll: Attempts to steal fuel from a pipeline north of Mexico City in January 2019 caused an explosion that killed at least 79 people and injured 81 others.⁴⁶ Unless addressed, the illicit trade in petroleum will remain a significant impediment to achieving SDG Target 16 (Peace, justice and strong institutions) and in particular SDG Target 16.1 (significantly reduce all forms of violence and related death rates everywhere), SDG Target 16.3 (promote the rule of law), SDG Target 16.4 (combat all forms of organized crime) and SDG Target 16.5 (reduce corruption).

CONCLUSIONS

Illicit trade in petroleum products undermines the SDGs in many ways:

3 GOOD HEALTH AND WELL-BEING



Adulterated fuels produce higher levels of harmful auto emissions and known carcinogens that impact air quality and climate.

6 CLEAN WATER AND SANITATION



Increased risks of water contamination from oil spills and blown pipelines jeopardize clean water supplies.

7 AFFORDABLE AND CLEAN ENERGY



Diversion of kerosene for use as a transportation fuel adulterant robs poor and vulnerable citizens of access to modern energy for cooking and lighting.

8 DECENT WORK AND ECONOMIC GROWTH



Fuel theft, smuggling and diversion siphon GDP, jobs and tax revenues needed to stimulate economic growth and finance development. Impacts are generally more severe in developing countries.



Robbs governments of excise taxes revenues to help fund infrastructure investments.



Illegal tapping, bunkering and ship transfers carry a higher probability for spills that harm life below water.



Risk of contamination from oil spills and blown pipelines accelerates degradation of ecosystems and jeopardizes biodiversity.



Facilitates and intensifies criminality and corruption, threatens national security and economic stability, which are necessary ingredients for business investment.



Widespread illicit trade in petroleum and fuels has a debilitating effect on efforts to improve domestic resource mobilization by denying the government a significant source of potential tax income.

NOTES

- ¹ Desjardins, J. (2017, May 7). Fuel theft is a big problem. *Business Insider*. Available at: <https://www.businessinsider.com/fuel-theft-is-a-big-problem-2017-5>
- ² Desjardins, J. (2017, May 7). Fuel theft is a big problem. *Business Insider*. Available at: <https://www.businessinsider.com/fuel-theft-is-a-big-problem-2017-5>
- ³ Scott, A. (2016). How Chemistry is Helping Defeat Fuel Fraud, *Chemical & Engineering News*, 94(5). 20 – 21.
- ⁴ African Development Bank. (2016). *Illicit trade in natural resources in Africa — A forthcoming report from the African Natural Resources Center*. Abidjan: African Development Bank. Retrieved from: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Events/IFF/Documents_IFF/ANRC_ILLICIT_TRADE_IN_NATURAL_RESOURCES.pdf
- ⁵ Martínez, R. (2016, 17 October). Mexico loses millions of dollars daily to fuel theft. *GlobalPost*. Available at: <https://www.pri.org/stories/2016-10-17/mexico-loses-millions-dollars-daily-fuel-theft>
- ⁶ Martínez, R. (2016, 17 October). Mexico loses millions of dollars daily to fuel theft. *GlobalPost*. Available at: <https://www.pri.org/stories/2016-10-17/mexico-loses-millions-dollars-daily-fuel-theft>
- ⁷ Gloystein, H. & Geddie, J. (2018, 17 January). Shady triangle: Southeast Asia's illegal fuel market. *Reuters*. Retrieved from: <https://www.reuters.com/article/us-singapore-oil-theft-southeast-asia-an/shady-triangle-southeast-asias-illegal-fuel-market-idUSKBN1F70TT>
- ⁸ Rozhnov, K. & Strzelecki, M. (2013, August 27). Fuel Fraud Costing Europe More Than \$4 Billion in Lost Taxes. *Bloomberg*. Available at: <https://www.bloomberg.com/news/articles/2013-08-26/fuel-smugglers-costing-europe-more-than-4-billion-in-lost-taxes>
- ⁹ Center for the Study of Democracy. (2011). *Serious and organised Crime Threat Assessment 2010 – 2011*. Sofia: Center for the Study of Democracy. Available at: <http://www.csd.bg/fileSrc.php?id=20796>
- ¹⁰ British-Irish Parliamentary Assembly. (2015). *Report from Committee A (Sovereign Matters) on Cross-border Police Cooperation and Illicit Trade*. n.p.: British-Irish Parliamentary Assembly. Retrieved from: <http://www.britishirish.org/assets/NewFolder-2/235.-BIPA-report-from-Committee-A-Sovereign-Matters-on-Cross-border-Police-Cooperation-and-Illicit-Trade-2015.pdf>
- ¹¹ Calcuttawala, Z. (2017, 1 June). A look at oil theft around the world. *Business Insider*. Available at: <http://www.businessinsider.com/oil-theft-by-transnational-gangs-and-separatist-organizations-2017-6>; FDI. (2012). *The Threat of Organized Crime to the Oil Industry*. Nedlands: Future Directions International. Available at: <http://www.futuredirections.org.au/publication/the-threat-of-organised-crime-to-the-oil-industry/>; Marcel, V. (2014). *ISIS and the Dangers of Black Market Oil*. London: Chatham House. Available at: <https://www.chathamhouse.org/expert/comment/15203>
- ¹² Authentix. (2017). *The Harmful Implications of Illicit Fuel Trade—the economy, the people, the environment*. Addison: Authentix. Available at: <https://authentix.com/blog/the-harmful-implications-of-illicit-fuel-trade-the-economy-the-people-the-environment/>
- ¹³ Hallmark, T. (2017, 26 May). The Murky Underworld of Oil Theft and Diversion. *Forbes*. Available at: <https://www.forbes.com/sites/uenergy/2017/05/26/the-murky-underworld-of-oil-theft-and-diversion/>
- ¹⁴ Desjardins, J. (2017, May 7). Fuel theft is a big problem. *Business Insider*. Available at: <https://www.businessinsider.com/fuel-theft-is-a-big-problem-2017-5>
- ¹⁵ Raiby, I. M. (2017). *Downstream Oil Theft: Global Modalities, Trends, and Remedies*. Washington, DC: Atlantic Council Global Energy Center. Retrieved from: http://www.eurocontrol.ca/images/euo_content_images/euo_pdfs_in_articles/AtlanticCouncil_Report-Downstream_Oil_Theft_January_2017.pdf
- ¹⁶ EY. (2015). *Fraud risk management: Oil and gas sector*. London: Ernst & Young. Retrieved from: [http://www.ey.com/Publication/vwLUAssets/EY-fraud-risk-management-oil-and-gas-sector/\\$FILE/EY-fraud-risk-management-oil-and-gas-sector.pdf](http://www.ey.com/Publication/vwLUAssets/EY-fraud-risk-management-oil-and-gas-sector/$FILE/EY-fraud-risk-management-oil-and-gas-sector.pdf)
- ¹⁷ United Nations Economic and Social Council. (2016). *Progress towards the Sustainable Development Goals: Report of the Secretary-General, E/2016/75*. New York: United Nations. Retrieved from: <https://unstats.un.org/sdgs/files/report/2016/secretary-general-sdg-report-2016--en.pdf>; United Nations Economic and Social Council. (2016). *Progress towards the Sustainable Development Goals: Report of the Secretary-General, E/2016/75*. New York: United Nations. Retrieved from: <https://unstats.un.org/sdgs/files/report/2016/secretary-general-sdg-report-2016--en.pdf>
- ¹⁸ BP. (2017). *BP Energy Outlook: 2017 Edition*. n.p.: BP. Retrieved from: <http://www.bp.com/content/dam/bp/pdf/energy-economics/energy-outlook-2017/bp-energy-outlook-2017.pdf>
- ¹⁹ Statista. (2018). *Global Oil Industry and Market – Statistics & Facts*. n.p.: Statista. Available at: <https://www.statista.com/topics/1783/global-oil-industry-and-market/>
- ²⁰ Gronholt-Pedersen, J. (2015, 25 October). As oil industry bleeds jobs, Asia's green energy drive offers bright spot. *Reuters*. Available at: <https://www.reuters.com/article/us-energy-employment/as-oil-industry-bleeds-jobs-asias-green-energy-drive-offers-bright-spot-idUSKCN0SJ0WY20151025>
- ²¹ export.gov. (2018). *Mexico - N. Oil and Gas*. Washington, DC: The International Trade Administration, U.S. Department of Commerce. Available at: <https://www.export.gov/article?id=Mexico-Upstream-Oil-and-Gas>
- ²² Energia16. (n.d.). Pemex to continue staff cuts in 2017. *Energia16*. Available at: <https://www.energia16.com/pemex-to-continue-staff-cuts-in-2017/?lang=en>
- ²³ OPEC. (2018). *Venezuela facts and figures*. n.p.: OPEC. Accessed 18 October 2018. Available at: http://www.opec.org/opec_web/en/about_us/171.htm, The World Bank. (2018). *The World Bank in Venezuela*. Washington DC: The World Bank. Available at: <http://www.worldbank.org/en/country/venezuela/overview>
- ²⁴ Forbes. (2018). *Saudi Arabia*. n.p.: Forbes. Accessed on 18 October 2018. Available at: <https://www.forbes.com/places/saudi-arabia/>

- ²⁵ Norwegian Petroleum. (2018). *Employment in the Petroleum Industry*. Oslo: Norwegian Ministry of Petroleum and Energy. Available at: <http://www.norskpetroleum.no/en/economy/employment/>
- ²⁶ UNDP. (n.d.). *Taxes on Fuel*. n.p.: UNDP. Available at: <http://www.undp.org/content/sdfinance/en/home/solutions/fuel-tax.html>
- ²⁷ Katsouris, C. and Sayne, A. (2013). *Nigeria's Criminal Crude: International Options to Combat the Export of Stolen Oil*. London: Chatham House. Retrieved from: https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Africa/0913pr_nigeriaoil.pdf
- ²⁸ Ralby, I. M. (2017). *Downstream Oil Theft: Global Modalities, Trends, and Remedies*. Washington, DC: Atlantic Council Global Energy Center. Retrieved from: http://www.eurocontrol.ca/images/euo_content_images/euo_pdfs_in_articles/AtlanticCouncil_Report-Downstream_Oil_Theft_January_2017.pdf
- ²⁹ Jenkins, S. (2017, April 1). Low oil price and currency controls hit Nigeria hard. *FT*. Available at: <https://www.ft.com/content/77886786-0fc9-11e7-b030-768954394623>; OPEC. (2018). *Nigeria facts and figures*. n.p.: OPEC. Accessed 18 October 2018. Available at: http://www.opec.org/opec_web/en/about_us/167.htm
- ³⁰ Hallmark, T. (2017, May 26). The Murky Underworld of Oil Theft and Diversion. *Forbes.com*. Retrieved from <https://www.forbes.com/sites/uhenergy/2017/05/26/the-murky-underworld-of-oil-theft-and-diversion/>
- ³¹ Stargardter, G. (2018, January 24). Mexico's drug cartels, now hooked on fuel, cripple the country's refineries. *Reuters Investigates*. Available at: <https://www.reuters.com/investigates/special-report/mexico-violence-oil/>
- ³² Reuters. (2016, April 1). UPDATE 1 - Mexico Plans Fresh Budget Cuts in 2017 as Oil Slump Bites. *Reuters*. Available at: <http://www.reuters.com/article/mexico-budget-idUSL2N17502A>
- ³³ ADB. (2015). Fuel-Marking Programs: Helping Governments Raise Revenue, Combat Smuggling, and Improve the Environment. *The Governance Briefs*, 24. Retrieved from: <https://www.adb.org/sites/default/files/publication/174773/governance-brief-24-fuel-marking-programs.pdf>
- ³⁴ ITEP. (2013). *A Federal Gas Tax for the Future*. Washington, DC: Institute on Taxation and Economic Policy (ITEP). Retrieved from: <https://itep.org/wp-content/uploads/fedgastax0913.pdf>
- ³⁵ Blackman, A., Osakwe, R., and Alpizar, F. (2009). *Fuel Tax Incidence in Developing Countries: The Case of Costa Rica* [Discussion Paper]. Washington, DC: Resources for the Future. Retrieved from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.177.6216&rep=rep1&type=pdf>
- ³⁶ Duhalt, A. (2017). *Looting Fuel Pipelines in Mexico* [Issue Brief]. Houston: Rice University's Baker Institute for Public Policy. Retrieved from: https://www.bakerinstitute.org/media/files/files/96f1e489/BI-Brief-062317-MEX_FuelTheft.pdf; Argus. (2017, May 8). Mexico battles rising fuel theft. *Argus*. Retrieved from: <http://www.argusmedia.com/pages/NewsBody.aspx?id=1456502&menu=yes>
- ³⁷ Bacon, R., Bhattacharya, S., and Kojima, M. (2010). *Expenditure of Low-Income Households on Energy: Evidence from Africa and Asia* [Extractive Industries for Development Series # 16]. Washington, DC: World Bank. Retrieved from: http://siteresources.worldbank.org/EXTOGMC/Resources/336929-1266963339030/eifd16_expenditure.pdf; Winter, C. (2013, April 2). Innovator: Martin Riddiford's Gravity-Powered Lamp: Clean, Cheap Light, Powered by Gravity. *Bloomberg*. Available at: <https://www.bloomberg.com/news/articles/2013-03-14/innovator-martin-riddifords-gravity-powered-lamp>; Lighting Africa. (2010). *Lighting Africa's Consumer Education Campaign is in Full Swing* [News]. n.p.: Lighting Africa. Available at: <https://www.lightingafrica.org/lighting-africas-consumer-education-campaign-is-in-full-swing/>
- ³⁸ Shell Nigeria. (2018). *Security, Theft, Sabotage and Spills* [Briefing Notes]. n.p.: Shell Nigeria. Retrieved from: https://www.shell.com.ng/media/nigeria-reports-and-publications-briefing-notes/security-theft-and-sabotage/_jcr_content/par/toptasks_426262614.stream/1523110623151/ef706ea5c49131592f318d7174670e0bcab876f06315ed6075f8d1c7e95aea47/security-theft.pdf
- ³⁹ The Guardian. (2016, September 21). Pollution and fishing in the Niger Delta. *The Guardian*. Available at: <https://guardian.ng/opinion/pollution-and-fishing-in-the-niger-delta/>
- ⁴⁰ BBC News. (2006, February 6). Customs Raid Illegal Fuel Plants. BBC News. Available at: http://news.bbc.co.uk/2/hi/uk_news/northern_ireland/4683680.stm
- ⁴¹ Barak, B. (2011). *Effects of Gasoline Adulteration*. n.p.: Interdisciplinary Thoughts of KU Academics. Available at: <https://kufit.wordpress.com/2011/05/21/effects-of-gasoline-adulteration/>
- ⁴² ADB. (2015). Fuel-Marking Programs: Helping Governments Raise Revenue, Combat Smuggling, and Improve the Environment. *The Governance Briefs*, 24. Retrieved from: <https://www.adb.org/sites/default/files/publication/174773/governance-brief-24-fuel-marking-programs.pdf>
- ⁴³ Cegniz, M. (2017). *How Organized Crime and Terror are linked to Oil Smuggling along Turkey's borders*. Geneva: The Global Initiative Against Transnational Organized Crime. Retrieved from: <https://globalinitiative.net/how-organized-crime-and-terror-are-linked-to-oil-smuggling-along-turkeys-borders/>
- ⁴⁴ Desjardins, J. (2017, May 7). Fuel theft is a big problem. *Business Insider*. Available at: <https://www.businessinsider.com/fuel-theft-is-a-big-problem-2017-5>
- ⁴⁵ Hallmark, T. (2017, February 13). Oil and Violence In The Niger Delta Isn't Talked About Much, But It Has A Global Impact. *Forbes*. Retrieved from: <https://www.forbes.com/sites/uhenergy/2017/02/13/oil-and-violence-in-the-niger-delta-isnt-talked-about-much-but-it-has-a-global-impact/#260bb01b4dc6>
- ⁴⁶ Villegas, P. & Semple, K. (2019, January 19). Death Toll in Mexico Blast Rises to 79; Leader Vows to Intensify Crackdown on Fuel Theft. *The New York Times*. Retrieved. Available at: <https://www.nytimes.com/2019/01/19/world/americas/hidalgo-explosion-mexico-pipeline.html>

CHAPTER 8: SDGs AND ILLICIT TRADE IN PHARMACEUTICALS



CHAPTER 8 SDGS AND ILLICIT TRADE IN PHARMACEUTICALS

The global trade in illicit pharmaceuticals extends beyond the generally well-known problem of “fakes” to include substandard, falsified, unregistered and unlicensed drugs as well as their theft, fraud, illicit diversion, smuggling and trafficking.

The problem of illicit pharmaceuticals applies not only to highly-publicized *lifestyle* medicines, such as for treating erectile dysfunction and weight loss, but also to *lifesaving* medicines – including those used to treat malaria, cancer, heart disease and other serious illnesses. The issue also covers generic versions of prescription drugs and increasingly to over-the-counter (OTC) medicines, and this category of illicit trade also includes fake medical devices such as contact lenses, condoms, syringes, surgical instruments, wheelchairs and radiotherapy machines – where fake or faulty versions can all present considerable health and safety risks.

Illicit trade in medicines is a major threat to public health, diverts resources from already limited healthcare budgets, creates mistrust in government and presents economic and social challenges to pharmaceutical companies operating in the sector. The World Health Organization (WHO) has thus far generated the most widely-cited statistics, reporting that the share of counterfeit medicines on the market ranges from over 10 percent of total sales in developing countries to as little as 1 percent in developed countries.¹

In terms of value, illicit trade in pharmaceuticals has been estimated at US\$75 – 200 billion annually.² INTERPOL reports that falsified medical products could account for as much as 30 percent of the market in some countries in Asia, Africa and Latin America.³ In the transitional economies of former Soviet Republics, there are estimates of above 20 percent of market value.⁴

Definition of illicit trade in pharmaceuticals

It is important to understand that the problem of illicit trade in pharmaceuticals extends beyond the protection of intellectual property rights (IPR). The WHO has, at the Seventieth World Health Assembly on 29 May 2017, provided the following categories to help elucidate the problem:

- **Substandard:** Also called “out of specification,” these are authorized medical products that fail to meet either their quality standards or specifications, or both.
- **Unregistered/unlicensed:** Medical products that have not undergone evaluation and/or approval by the National or Regional Regulatory Authority (NRRRA) for the market in which they are marketed/distributed or used, subject to permitted conditions under national or regional regulation and legislation.
- **Falsified:** Medical products that deliberately/fraudulently misrepresent their identity, composition or source.

As such, when the term “counterfeit” is used broadly, this refers to medicines that are (a) deliberately produced with substandard quality; (b) fraudulently labeled with respect to their identity/origin; or (c) otherwise tainted, adulterated, or made ineffective or harmful. Fundamentally, counterfeit medicines are neither regulated or quality controlled and therefore should be expected to be inferior as they move outside the safety of established, regulated supply chains.

Impact of the trade in illicit pharmaceuticals on achieving the UN Sustainable Development Goals

The global trade in illicit pharmaceuticals undermines achievement of several of the SDGs, but none more so than depriving individuals of good health and well-being (SDG 3). As highlighted by the WHO, “the rise in substandard and falsified products on all markets, are hampering efforts to ensure health products’ quality, efficacy and safety.”⁵ Moreover, an expenditure on an ineffective medicine is a wasted allocation of household income, which hinders progress away from poverty for families where medicines and healthcare can account for a significant share of household spending or when medicines are paid for out-of-pocket.⁶ As highlighted by UNCTAD Secretary-General Mukhisa Kituyi, “Counterfeit medicines are just one example of how we simply will not achieve the SDGs without looking after our consumers”.⁷

The illicit trade in pharmaceuticals impacts achievement of seven SDGs:

- SDG 1 (no poverty);
- SDG 3 (good health and well-being);
- SDG 5 (gender equality);
- SDG 8 (decent work and economic growth);
- SDG 9 (industry, innovation and infrastructure);
- SDG 12 (responsible consumption and production); and
- SDG 16 (Peace, justice and strong institutions).

Promote health and well-being



The fact that good health underpins every development issue is clearly embodied in SDG Target 3.8: “Achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.”

However, the proliferation of falsified and substandard pharmaceuticals present formidable obstacles to good health when consumers and patients ingest spurious medicines that have little to no medicinal value and frequently result in therapeutic failure. The severity of the associated health risk can vary greatly, ranging from inconvenience to fatality.

Substandard, unregistered and falsified medicines present significant health risks because they may:

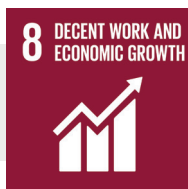
- contain the wrong level of active ingredient—too little, none at all or even too much;
- contain an active but harmful ingredient intended for a different purpose;
- fail to meet quality standards or regulatory specifications;
- have not undergone evaluation or approval by regulatory authorities.

In all these scenarios, the person taking the medicine is putting their health at risk—and this is perhaps most troubling in cases when fake or substandard anti-malarial medicines fail to save lives. Estimates show that between 72,000 and 169,000 children may be dying from pneumonia every year after receiving bad drugs, and that fake anti-malaria medication might be responsible for an additional 116,000 deaths.⁸ As noted by the OECD, “A significant body of work confirms that counterfeit pharmaceuticals are increasingly prevalent and pose a serious and growing threat to public health, especially in developing countries. While counterfeit drugs are a less visible barrier to affordable access to medicines, they are perhaps a more insidious threat to public health than high drug prices will ever be.”⁹

It is often the poorest and most vulnerable in society who are tempted by the prospect of cheaper, albeit substandard and falsified medical products. Yet, the increased health care costs of being forced to buy effective treatment a second or third time—when a substandard or falsified product fails to work, or when faced with extra costs of coping with the potentially adverse reactions and drug-resistant infections triggered by substandard and falsified medicines and vaccines—can create a vicious cycle of poverty and poor health.

Falsified, low-quality medicines also have a worrisome impact on antimicrobial resistance (AMR), which is an issue of growing global concern. Many substandard medicines contain a lower amount of the correct active ingredient, which can fail to properly kill bacteria, viruses or parasites. This is happening with some of the world’s biggest diseases, such as tuberculosis and malaria, where multi-resistant strains are becoming a serious global public health threat: it is estimated that by 2050, 10 million lives a year and a cumulative US\$100 trillion of economic output are at risk due to the rise of drug-resistant infections.¹⁰ The largest proportion of this burden will be borne by low-income countries who are more resource-constrained and slowing down progress towards SDG1 (end poverty).

Economic growth and development



Substandard and falsified medical products undercut efforts to reduce the burden of disease, thereby undermining investments in public health systems and causing a significant negative impact on economic growth, sustainable development and productive employment (SDG 8). For the individual, consequences include prolonged illness, time away from work, increased health care costs, potentially longer-term health complications and even premature death. For governments damages include lost worker productivity, increases in overall health care expenditures, and lost confidence in the health care system.

A 2016 study by the EU Intellectual Property office (EUIPO) estimated that fake medicines cost the EU pharmaceutical sector €10.2 billion each year, resulting in 90,000 jobs lost as well as €1.7 billion in lost government revenues (taxes and social contributions).¹¹ The problem of illicit pharmaceuticals also impairs the marketplace for genuine products and endangers existing drug supplies by luring consumers and health providers to purchase cheap fakes instead of genuine medicine. The wasted resources are significant, especially in poor countries where medicines can rank second only to food as the largest household expense and where the burden of additional treatment is either unaffordable or can impose significant financial hardship on families.¹²

End poverty and support women's health



The SDGs recognize the significant link between good health and poverty reduction. In particular, investment in women's health can generate broader economic benefits. It is reported that societies that prioritize women's health are likely to have better population health overall and will remain more productive for generations to come.¹³

Of all the different initiatives available to support women's health, few are as impactful as the access to safe and affordable contraception. As noted by Ellen Starbird, Director of Population and Reproductive Health at USAID, family planning is the "critical link" to meeting each of the 17 SDGs.¹⁴ Access to birth control promotes economic security and productivity by freeing up women to work. It also leads to smaller families, which reduces financial burdens on families and enables parents to devote more resources to their children's health and education. Put another way by philanthropist Melinda Gates, contraceptives are "one of the greatest anti-poverty innovations the world has ever known."¹⁵

Progress on SDG 1 (End poverty in all its forms everywhere) and SDG Target 5.6 (Ensure universal access to sexual and reproductive health and reproductive rights) are thus intrinsically linked with achieving SDG 3 (Good health and well-being). However, the presence of substandard or falsified contraceptives are a growing concern for women's health.

- Falsified emergency contraceptives have been reported in a number of countries, including Nigeria, Ghana, Kenya, Angola, South America and the United States.¹⁶
- In August 2015, the Uganda National Drug Authority notified the WHO of the seizure of falsified Postinor-2 discovered in Kampala, Uganda.¹⁷ A 2014 survey of emergency contraceptive pills in Peru found that 28 percent of the batches studied were either of substandard quality or falsified. Many pills released the active ingredient too slowly, while others had the wrong active ingredient or no active ingredient at all.¹⁸

Incidents of fake contraceptives in the legitimate supply chain, even in small numbers, can lead to a loss of confidence in government programs and private health care systems. Even mere rumors of it can destroy the credibility and success of health and family planning programs, with lasting damage to the reputation of a country's health system. For example, a lapse in the quality of oral contraceptives in Brazil in 1998 – resulting in unplanned pregnancies – has contributed to poor public confidence in the Brazilian health care system. Even with the creation of the Brazilian drugs regulatory authority, Anvisa, to mollify the crisis and address other medicine quality problems, rumors about contraceptive quality linger in Brazil.¹⁹

End the AIDS epidemic



SDG Target 3.3 calls for ending the AIDS epidemic, as well as several other communicable diseases, by 2030. As noted by the WHO, "HIV remains one of the world's most significant public health threats and a challenge to the achievement of the SDGs."²⁰ Unfortunately, the existence of substandard and falsified medicines and medical devices have a negative impact on both the treatment and prevention of HIV.

Falsified or substandard antiretroviral therapy presents a real and present threat to the fight against HIV/AIDS. Not only do these medications have no therapeutic value, the proliferation of fakes also may devastate international aid efforts to create public trust in modern medicine.²¹

Access to condoms is critical to reducing exposure to HIV and meeting the UN target of fewer than 500,000 new HIV infections by 2020 – an important milestone in efforts to end the AIDS epidemic by 2030.²² The use of condoms in at-risk sexual relationships could prevent as many as 1.5 million HIV infections each year in sub-Saharan Africa alone.²³

Yet, a tsunami of low quality counterfeit condoms undermines global efforts to promote condoms as an effective measure to protect against sexually transmitted infections, including HIV, and unwanted pregnancies.

- In March 2017, more than 40,000 counterfeit condoms imported into Puerto Rico from China were seized by U.S. Customs and Border Protection (CBP), U.S. Immigration and Customs Enforcement's (ICE) Homeland Security Investigations (HSI) and the Food and Drug Administration (FDA).²⁴
- In April 2013, Ghana faced a “major public health issue” after more than one million ‘Be Safe’ condoms supplied to the country's health service were found to contain holes and burst easily.²⁵ “*This is a huge, huge problem,*” said Faustina Fynn-Nyame, director of Marie Stopes International in Ghana, in response. “*There will be a lot of unintended pregnancies as a result of this, and that means maternal mortality and unsafe abortion. Commercial sex workers also use these products [so] the consequences could be enormous.*”²⁶

Support innovation and the development of new medicines



Virtually all of the important medical discoveries of the last century-and-a-half—including vaccines, antibiotics, HIV and HCV treatments, cancer and cardiovascular medicines—can be attributed to the R&D activities of the pharmaceutical industry.²⁷

The SDGs recognize the critical role of fostering innovations in medicine, including SDG 3.b, which outlines the need to “*support the research and development (R&D) of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries.*” Similarly, SDG Target 9.5 aims to “*enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, particularly developing countries.*”

However, illicit trade in pharmaceuticals undermines investment in R&D of new drugs and the pervasiveness of spurious drugs has a negative impact on pharmaceutical innovation and access to affordable medicine.

- Intellectual Property (IP) and the protection and enforcement of Intellectual Property Rights (IPR) play an important role as an incentive for innovation and long-term access to medicines. In the face of IP theft, incentives to invest and innovate are reduced.
- Marketshare and sales losses from competing with cheap counterfeits means that fewer funds are available for investments in R&D, or can force pharmaceutical companies to increase prices to offset market losses from fake medicines.
- In some cases, entire markets can be flooded with falsified and substandard medicines. This further reduces the incentive for the private sector to make investments in the development of new drugs.²⁸

As underscored by the OECD, the impact of counterfeiting on pharmaceutical innovation, particularly for developing countries, can be significant: *“Diseases endemic to regions with high levels of counterfeiting are less attractive research targets. Counterfeiting reduces the profitability of developing country markets, curbing the incentives to target research and developing funds to diseases endemic to poor countries and making it very difficult to attract foreign investment. Sadly, less than 10 percent of global health research expenditures are dedicated to conditions that account for more than 90 percent of preventable mortality, conditions that are most prevalent in developing economies.”*²⁹

Combatting the spread of falsified and substandard medicines is thus a prerequisite for the development of new drugs and improving access to affordable, quality-assured medicines. This complex challenge cannot be addressed by the public sector alone and requires sustained cooperation with the private sector.

Sustainable waste management



SDG Targets 12.4, (achieve environmentally sound management of chemicals and all wastes throughout their life cycle) and 12.5 (substantially reduce waste generation) recognize the importance of ensuring sustainable consumption and production patterns, as well as safe waste management, to minimize adverse impacts on human health and the environment. While the legitimate, heavily-regulated pharmaceutical industry is required to meet environmental protection standards and reduce chemical waste and other hazardous materials in their production processes, the same does not hold true for illicit manufacturers of fake drugs who “reap the financial benefits of dirty production, taking every environmental shortcut imaginable.”³⁰ Producers of illicit pharmaceuticals “disregard the impact that chemical compounds may have on the environment: disposing of toxic dyes and chemicals without regulatory oversight, as well as ignoring the treatment of wastewater streams.”³¹

The environmental costs of falsified medicines also extend beyond the manufacturing phase. For example, in 2011, European Union Customs authorities destroyed 75 percent of the 115 million counterfeit items seized.³² The destruction process for chemicals and pharmaceuticals is costly and generates waste that is particularly difficult to dispose of in an environmentally friendly manner.³³ Managing such enormous volumes of seizures in an environmentally safe manner requires significant resources that put financial strains on government and enforcement agencies. For low and middle-income countries, the costs as well as necessary technology to properly dispose of the seized goods can be prohibitive, with improper storage and destruction of illicit drugs resulting in inadvertent contamination of air, water and soil.

Peace, justice and strong institutions



Driven by financial gain, criminal elements have become involved in all facets of the chain of supply of illicit medicines, from manufacturing to distribution. As reported by INTERPOL, organized criminal networks across the globe are also involved in pharmaceutical crime throughout the supply chain and have also been found to use the profits from falsified medicine operations to subsidize other clandestine activities. Criminals involved in pharmaceutical crime have been tied to a number of other crimes, including money laundering, human trafficking for sexual exploitation and weapons smuggling.³⁴ The involvement of organized crime in illicit trade in pharmaceuticals is a direct threat to SDG Target 16.4, which calls on countries to “combat all forms of organized crime.”

In particular, the rapid growth in online sales and illicit online pharmacies has provided criminals with new entry points into even the best regulated markets. In 2018, 116 countries were involved in INTERPOL’s annual operation Pangea XI, leading to 859 arrests worldwide and the seizure of USD 14 million worth of potentially dangerous pharmaceuticals. Focusing on delivery services manipulated by organized criminal networks, the operation saw 3,671 web links closed down, including websites, social media pages, and online marketplaces.³⁵

While much attention has been focused on the falsification of high-priced medicines, even low-priced medicines can make money for criminals as long as the sales volume is high enough. For example, antibiotics, which are relatively cheap, account for 17 percent of the falsified products reported to the WHO substandard and falsified medical products surveillance database.³⁶

CONCLUSIONS

Illicit trade in pharmaceuticals undermines the SDGs in many ways:

1 NO POVERTY



Undermines the ability to treat and prevent disease, particularly for the weakest and most vulnerable in society.

3 GOOD HEALTH AND WELL-BEING



Precludes wider access to affordable, quality-assured medicines, including those used to treat malaria, cancer and heart disease.

5 GENDER EQUALITY



Undermines women's health by limiting access to safe and reliable contraception and degrades the integrity of health and family planning programs.

8 DECENT WORK AND ECONOMIC GROWTH



Impairs the marketplace for genuine products, strains public health budgets and endangers jobs and economic activity.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Disincentivizes pharmaceutical innovation and investment in research and development (R&D) of new drugs.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Generates dirty production, environmental shortcuts, disposing of toxic dyes and chemicals without regulatory oversight, ignoring the treatment of wastewater streams.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Illegal profits from illicit pharmaceuticals finance organized criminal activity and threaten lives, social stability and peaceful communities.

NOTES

- ¹ IMPACT. (2006). *Counterfeit Medicines: An update on estimates 15 November 2016*. n.p.: WHO. Retrieved from: <http://www.who.int/medicines/services/counterfeit/impact/TheNewEstimatesCounterfeit.pdf>; See also WHO. (2017). 1 in 10 medical products in developing countries is substandard or falsified. n.p.: WHO. Available at: <https://www.who.int/news-room/detail/28-11-2017-1-in-10-medical-products-in-developing-countries-is-substandard-or-falsified>
- ² WHO. (2010). Growing threat from counterfeit medicines. *Bulletin of the World Health Organization*, 88(4), 241-320. Available at: <http://www.who.int/bulletin/volumes/88/4/10-020410/en/>; Irish, J. (2010, June 10). Customs group to fight \$200 bln bogus drug industry. *Reuters*. Available at: <http://www.reuters.com/article/us-customs-drugs/customs-group-to-fight-200-bln-bogus-drug-industry-idUSTRE65961U20100610>
- ³ INTERPOL. (n.d.). *Pharmaceutical crime: A major threat to public health*. Lyon: INTERPOL. Available at: <https://www.interpol.int/Crime-areas/Pharmaceutical-crime/Pharmaceutical-crime>
- ⁴ IMPACT. (2006). *Counterfeit Medicines: An update on estimates 15 November 2016*. n.p.: WHO. Retrieved from: <http://www.who.int/medicines/services/counterfeit/impact/TheNewEstimatesCounterfeit.pdf>
- ⁵ WHO. (2017). *Towards Access 2030: WHO Medicines and Health Products Programme Strategic Framework 2016 – 2030*. Geneva: WHO. Retrieved from: http://www.who.int/medicines/publications/Towards_Access_2030_Final.pdf?ua=1
- ⁶ WHO. (2017). *Towards Access 2030: WHO Medicines and Health Products Programme Strategic Framework 2016 – 2030*. Geneva: WHO. Retrieved from: http://www.who.int/medicines/publications/Towards_Access_2030_Final.pdf?ua=1
- ⁷ UNCTAD. (2016). *Achieving the Sustainable Development Goals will need healthy competition and consumer protection too*. Geneva: UNCTAD. Available at: <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1353>
- ⁸ AP. (2017, November 28). 10% of drugs in poor countries are fake, says WHO. *The Guardian*. Available at: <https://www.theguardian.com/global-development/2017/nov/28/10-of-drugs-in-poor-countries-are-fake-says-who>
- ⁹ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Available at: <http://www.oecd.org/publications/charting-illicit-trade-9789264251847-en.htm>
- ¹⁰ Review on Antimicrobial Resistance. (2016). *Tackling Drug-Resistant Infections Globally: final report and recommendations*. London: Review on Antimicrobial Resistance. Retrieved from: https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf
- ¹¹ EUIPO. (2016). *The economic cost of IPR infringement in the pharmaceutical industry: Quantification of infringement in Manufacture of pharmaceutical preparations (NACE 21.20)*. Alicante: EUIPO. Retrieved from: https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/resources/research-and-studies/ip_infringement/study9/pharmaceutical_sector_en.pdf
- ¹² Cameron, A. et al. (2009). Medicine prices, availability and affordability in 36 developing and middle-income countries: a secondary analysis. *The Lancet*, 373 (9659), 240-249. Available at: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(08\)61762-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)61762-6/fulltext)
- ¹³ Husøy Onarheim, K., Iversen, J. H., & Bloom, D. E. (2016). Economic Benefits of Investing in Women's Health: A Systematic Review. *PLoS One*, 11 (3), 1-23. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4814064/>
- ¹⁴ Ebrahim, Z. & Ford, L. (2016, January 26). Family planning is 'critical link' in eradicating poverty. *The Guardian*. Available at: <https://www.theguardian.com/global-development/2016/jan/26/family-planning-critical-link-eradicating-poverty-modern-contraceptives-population-bulge>
- ¹⁵ Batha, E. (2017, July 11). Contraceptives are "one of the greatest anti-poverty innovations": Melinda Gates. *Reuters*. Available at: <https://www.reuters.com/article/us-global-contraception-summit/contraceptives-are-one-of-the-greatest-anti-poverty-innovations-melinda-gates-idUSKBN19W0PC>
- ¹⁶ Israel, B. (2014, April 18). Counterfeit Contraceptives Found in South America. *Georgia Tech*. Available at: <http://www.news.gatech.edu/2014/04/18/counterfeit-contraceptives-found-south-america>
- ¹⁷ WHO. (2015). *Medical Product Alert N° 5/2015: Falsified Emergency Contraceptive circulating in East Africa, Ref. RHT/SAV/Alert 5.2015*. Geneva: WHO. Retrieved from: http://www.who.int/medicines/publications/drugalerts/Alert5_2015_FalsifiedPostinor_EN.pdf?ua=1
- ¹⁸ Israel, B. (2014, April 18). Counterfeit Contraceptives Found in South America. *Georgia Tech*. Available at: <http://www.news.gatech.edu/2014/04/18/counterfeit-contraceptives-found-south-america>; Ossola, A. (2014, July 28). The Fight Against Fake Birth Control. *Popular Science*. Available at: <https://www.popsoci.com/article/science/fight-against-fake-birth-control#page-2>
- ¹⁹ National Academy of Science. (2013). *The Effects of Falsified and Substandard Drugs*. Bethesda: NCBI. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK202526/>
- ²⁰ WHO Regional Office for Europe. (2017). *Fact sheets on sustainable development goals: health targets: HIV*. Copenhagen: The Regional Office for Europe of the World Health Organization. Retrieved from: http://www.euro.who.int/__data/assets/pdf_file/0006/348684/HIV-FINAL-11-Sept-2017.pdf?ua=1
- ²¹ McLaughlin, K. E. (2013, January 24). Fake drugs flood East African markets. *The Washington Post*. Available at: https://www.washingtonpost.com/world/africa/fake-drugs-flood-east-african-markets/2013/01/23/a430289c-5f6e-11e2-9940-6fc488f3fecdstory.html?utm_term=.927f28731159
- ²² UNAIDS. (2017). *UNAIDS calls for improved access to condoms for all who need them [Press Statement]*. Geneva: UNAIDS. Available at: http://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2017/february/20170213_condoms

- ²³ UNAIDS. (2018). *UPDATE: A condom crisis at the centre of the HIV prevention crisis*. Geneva: UNAIDS. Available at: http://www.unaids.org/en/resources/presscentre/featurestories/2018/july/20180723_condoms-AIDS2018
- ²⁴ U.S. Customs and Border Protection. (2017). CBP, ICE seize more than 40k Counterfeit Condoms. San Juan, Puerto Rico: U.S. Customs and Border Protection. Available at: <https://www.cbp.gov/newsroom/local-media-release/cbp-ice-seize-more-40k-counterfeit-condoms>
- ²⁵ Xiao, K. (2013, May 15). Counterfeit Condom Ring Busted and Millions of Contraceptives Confiscated. ABC News. Available at: <http://abcnews.go.com/International/counterfeit-condom-ring-busted-millions-contraceptives-confiscated/story?id=19183432>
- ²⁶ Hirsch, A. (2013, April 18). Ghana seizes 1m faulty condoms imported from China. *The Guardian*. Available at: <https://www.theguardian.com/global-development/2013/apr/18/ghana-seizes-faulty-condoms-imported-china>
- ²⁷ European Federation of Pharmaceutical Industries and Associations, International Federation of Pharmaceutical Manufacturers and Associations, Pharmaceutical Research & Manufacturers of America, and Japan Pharmaceutical Manufacturers Association. (2016). *The value of intellectual property for access to medicines: Contribution I from the European Federation of Pharmaceutical Industries and Associations, the International Federation of Pharmaceutical Manufacturers and Associations, the Pharmaceutical Research & Manufacturers of America, and the Japan Pharmaceutical Manufacturers Association*. Retrieved from: <https://static1.squarespace.com/static/562094dee4b0d00c1a3ef761/t/56d540419f72665658c5501c/1456816194156/IFPMA+EFPIA+PhRMA+JPMA+Submission+I+-+Intellectual+Property+%28002%29.pdf>
- ²⁸ Devex Editor. (2017, July 20). Falsified medicine – tackling a serious threat to public health. Devex. Available at: <https://www.devex.com/news/sponsored/falsified-medicine-tackling-a-serious-threat-to-public-health-90266>
- ²⁹ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264251847-en>
- ³⁰ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264251847-en>
- ³¹ Soentgen, J. (2012). Disposing of counterfeit goods: unseen challenges, *WIPO Magazine*, 6/2012, 25-28. Available at: www.wipo.int/wipo_magazine/en/2012/06/article_0007.html; OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264251847-en>
- ³² Soentgen, J. (2012). Disposing of counterfeit goods: unseen challenges, *WIPO Magazine*, 6/2012, 25-28. Available at: www.wipo.int/wipo_magazine/en/2012/06/article_0007.html
- ³³ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264251847-en>
- ³⁴ INTERPOL Pharmaceutical Crime Sub-Directorate. (2014). *Pharmaceutical Crime and Organized Criminal Groups: An analysis of the involvement of organized criminal groups in pharmaceutical crime since 2008*. Lyon: INTERPOL. Retrieved from: <https://www.interpol.int/Media/Files/Crime-areas/Pharmaceutical-crime/Pharmaceutical-Crime-and-Organized-Criminal-Groups>
- ³⁵ INTERPOL. (2018). *Illicit online pharmaceuticals: 500 tonnes seized in global operation [News]*. Singapore: INTERPOL. <https://www.interpol.int/News-and-media/News/2018/N2018-123>
- ³⁶ WHO. (2017). *WHO Global Surveillance and Monitoring System for substandard and falsified medical products*. Geneva: World Health Organization. Retrieved from: http://www.who.int/medicines/regulation/ssffc/publications/GSMsreport_EN.pdf?ua=1

CHAPTER 9: SDGs AND ILLICIT TRADE IN PRECIOUS METALS AND GEMSTONES



CHAPTER 9 SDGs AND ILLICIT TRADE IN PRECIOUS METALS AND GEMSTONES

Gemstones and precious metals are highly vulnerable to illicit trade and often underpin larger money laundering schemes, corruption and military conflict. Their low weight, high value, high durability, stable pricing and ability to be easily moved or smuggled make them especially attractive to launderers and criminal financiers.^{1,2} Gemstones most common to illicit trade include diamonds, emeralds, sapphires and rubies. Precious metals vulnerable to illicit trade include gold, silver, platinum and platinoid metals.

The fragmented and complex global supply chain of precious metals and gemstones make these goods particularly well suited as vehicles for illicit financial flows and have been linked to smuggling, drug trafficking, illicit arms trafficking, and the financing of terrorism.³ Precious minerals also may be used as cover for laundering illegal funds generated by other crimes, for example, through false invoices covering fictitious sales of gold or diamonds.⁴

Gold and diamonds especially are exposed to illicit trade and other forms of crime because of the great ease by which these commodities can be traded and the high value returns. The World Gold Council highlights that *“responsible gold mining also means addressing concerns that resources could fund unlawful activity, particularly when operating in areas affected by armed conflict, such as civil war or militia activity.”*⁵ Furthermore, illegally mined or traded diamonds and gold are being used as alternative currency by criminals who use them to trade in other illicit goods such as guns and drugs;⁶ and to fund rebel groups, militias and armed gangs.⁷ There are also several reported instances of illegal mining being associated with the trafficking of explosives that are then used to commit other crimes such as robberies, bombings of facilities and conflict operations.⁸

Case Study: Diamonds and the Kimberley Process

The Kimberley Process (KP), created in 2003, outlines the rules that govern the trade in rough diamonds, with the objective of preventing conflict diamonds from entering into legitimate international trade. Under the terms of the Kimberley Process Certification Scheme (KPCS), participating states must meet “minimum requirements” and must put in place national legislation and institutions; export, import and internal controls; and also commit to transparency and the exchange of statistical data. Participants can only legally trade with other participants who have also met the minimum requirements of the scheme. As of September 2018, the KP has 54 participants, representing 81 countries, and its members account for approximately 99.8 percent of the global production of rough diamonds. Few industries have gone so far to self-regulate as the diamond industry, and much of the KP’s success stems from strong commitment and collaboration between governments, industry and civil society.

While the KP has played an important role for improving transparency and integrity of the global trade in rough diamonds, critics note that its narrow definition of conflict diamonds as “*rough diamonds used by rebel movements to finance wars against legitimate governments*” exclude other inter-related issues from the scheme, including human rights, social, and environmental degradation. Moreover, the KP applies only to rough diamonds and once stones are cut and polished they are no longer bound by the protocol.

In short, the illicit trade in precious metals and gemstones upsets the progress made by national governments, industry and other stakeholders to ensure the sustainable management and development of the mining sector and protect the integrity of the mineral supply chain.

Impact of the illicit trade in precious metals and gemstones on achieving the UN Sustainable Development Goals

When properly managed, the extraction and trade of precious metals and gemstones can provide a dynamic process of transformation of societies, creating opportunities to build sustainable and innovative economies, and provide significant export and tax revenue opportunities, particularly for countries facing development needs.⁹

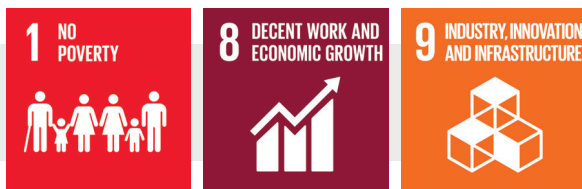
With its global scale and diverse operations, the mining industry has opportunities to mobilize significant human, physical, technological and financial resources to advance the SDGs, including creating decent jobs, enabling economic diversification, contributing taxes, and bringing vital investments and infrastructure to resource-rich but nonetheless remote and underserved areas.¹⁰ It also supports social development and inclusion for millions of people employed in a wide range of businesses, building the skills of employees and bringing financial security and other benefits to communities where it operates.

Conversely, poorly managed or illegal mining and the subsequent trade in illegally sourced resources can lead to environmental degradation, human rights abuse and conflict, while providing a significant source of revenue for organized crime and terrorist groups.¹¹ Moreover, the presence of criminal groups in the mining and minerals sector drives corruption and negatively impacts stability, governance, development and the rule of law.¹²

The illicit trade in precious metals and gemstones impacts achievement of as many as ten of the 17 SDGs:

- SDG 1 (no poverty);
- SDG 3 (good health and well-being);
- SDG 6 (clean water and sanitation);
- SDG 8 (decent work and economic growth);
- SDG 9 (industry, innovation and infrastructure);
- SDG 12 (responsible consumption and production);
- SDG 13 (climate action);
- SDG 14 (life below water);
- SDG 15 (life on land);
- SDG 16 (peace, justice and strong institutions); and

Economic growth and development



Illicit trafficking in precious minerals has been characterized as a “fleecing of national assets and resources,” which adversely affects sustainable economic growth and development for resource-rich source countries and the mining industries that work there legally. Furthermore, fiscal revenues derived from taxes and license fees are lost, along with employment opportunities and the development of supporting infrastructure serving the mines and local communities.

- South Africa's illegal trade in precious metals is estimated at US\$1.3 billion a year, which is a significant drain on the country's GDP, export and trade balances.¹⁴ Illegally extracted gold and platinum alone cost the legal industry 5 to 10 percent of its annual production, according to South Africa's Chamber of Mines. That excludes additional security expenses and costs incurred when mines need to be shut down to address illegal activities.¹⁵ It is estimated that about 10 percent of South Africa's gold production is stolen and smuggled out of the country each year.¹⁶
- Myanmar's production of Jade is estimated at US\$12 to \$31 billion per year (indicated by Chinese import figures), which is equal to about half of the country's GDP. However, because 50 to 80 percent of this wealth is smuggled out directly to the China border, bypassing the official sales and taxes completely, Myanmar's trade in Jade has been called the “*biggest natural resource heist' in modern history.*”¹⁷ According to a 2015 report by Global Witness, Myanmar lost US\$6.2 billion in mine site taxes in 2014.¹⁸

Many low-and-middle-income countries depend heavily on mining to develop their resource endowments as a motor for driving wider national economic growth (SDG 8).¹⁹ Studies carried out by the International Council on Mining and Minerals have found that the income from mining can contribute as much as 25 percent of total government revenue.²⁰ However, widespread theft of precious metals and gemstones robs governments of this ability to strengthen domestic resource mobilization.

Legitimate mining companies can play an important role in reducing poverty (SDG 1) through direct employment, sourcing goods and services locally and paying taxes to governments, which enable public investment in essential social and economic infrastructure. Where companies operate in remote, low-income areas, the legitimate mining industry can help alleviate poverty through job creation and skills development.

The legitimate sector also plays a significant role in investing in and operating essential infrastructure (SDG 9), such as roads that enable wider social and economic progress or infrastructure required to develop, operate and export products. This investment is particularly valuable in remote areas or in countries where there is a large infrastructure gap.²¹ In many post-conflict situations and fragile states, the mining sector has been essential in kick-starting economic and social progress. In countries such as Liberia and Mozambique, mining investment sustained peace-building efforts and encouraged respect for the rule of law.²² Moreover, mining investments in these two countries were deliberately integrated with development to support other local industries such as agriculture and forestry and employment opportunities.²³ In contrast, Pakistan's history of corruption and illegal mining continues to deter many foreign companies from there, precluding opportunities for the country to realize the full potential of its abundant natural resources.²⁴

Decent work, health, and well-being



According to the UN Special Rapporteur on Contemporary Forms of Slavery, the illegal mining sector is rife with indentured employment (i.e., modern slavery), utilizes child labor and forced labor of undocumented immigrants, perpetuates unfair work conditions, and disregards health and safety requirements for miners.²⁵ Reportedly, there are between 8,000 and 30,000 illegal miners in South Africa. While it's difficult to assess the number of people involved, most of South Africa's illegal miners are reported to be undocumented immigrants from neighboring countries such as Lesotho, Mozambique and Zimbabwe.²⁶ In some mines, men and adolescents are offered employment and receive cash advances during their initial months of work, and then find these sums deducted from salary, creating debt bondage.²⁷ In other cases, armed gangs are kidnapping rival miners and forcing them to work under slave-like conditions.²⁸

Child labor is unfortunately common in illegal mining.²⁹ While the legitimate private sector actors take measures to ensure that their supply chains are free from child labor, illegal operators continue to employ children to work under dangerous conditions above and below ground. They risk death from explosions, rock falls, and tunnel collapses and breathe air filled with dust and sometimes toxic gases. They also dig, crush, mill, and haul ore and stand for hours in water.³⁰ The International Labour Organization (ILO) has conducted many studies on children in hazardous work and estimates that approximately one million children aged 5 to 17 years old risk their lives by working in mines.³¹ The gold mining industry is particularly hazardous for child workers due to the prolonged exposure of toxic metals.

The pervasiveness of unfair work conditions, child labor and other violation of human rights threatens the viability of the global legitimate minerals industry and the achievement of SDG Target 8, in particular SDG Target 8.7 (eradicate forced labor and child labor) and SDG Target 8.8 (safe and secure working environments for all workers)

Artisanal and small-scale mining

Artisanal and small-scale mining (ASM) present governments with a particular challenge in the fight against illicit trade. Although ASM can take legal forms, it is most often operated outside the legal framework of a country and without government approval. The sector is commonly associated with the informal economy, negative environmental and health impacts; and negative social impacts including child labor, forced labor, gender-based violence, and other forms of crime. At the same time, ASM is a poverty-alleviating activity that plays an important economic role in many developing countries. An estimated 40.5 million people were directly engaged in ASM in 2017, up from 30 million in 2014, and 6 million in 1993, according to a recent study from the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development. The same study found that around 150 million people across 80 countries currently depend on ASM for their livelihoods. Government policies to address illicit trade in precious metals and gemstones must therefore be holistic and factor in broad social impact and local development issues. This includes steps to eradicate forced labor and other negative impacts associated with ASM, while at the same time ensuring that policies do not inadvertently exclude ASM from mineral supply chains, thereby creating instability in communities that currently rely on this sector for their livelihoods.

Sources:

UNICRI (2015), "Promoting an international strategy to combat illicit trafficking in precious metals – discussion draft".

Available at: http://www.unicri.it/special_topics/metals_gemstones/Preliminary_Desk_Review.pdf;

Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). (2017). Global Trends in Artisanal and Small-Scale Mining (ASM): A review of key numbers and issues. Winnipeg: IISD. Available at: <https://www.iisd.org/sites/default/files/publications/igf-asm-global-trends.pdf>

Illegal mining also disregards health and safety requirements for miners, thereby putting their lives at risks (SDG 3). In many cases, illegal mining businesses do not have adequate and suitable safety gear (e.g., masks, gloves and hearing protection) for their workers. The use of mercury in illegal gold mining represents a particular threat to good health and well-being. Artisanal and small-scale gold mining is the largest human source of mercury pollution, accounting for over one-third of global emissions and releasing about 800 tons of mercury into water bodies, affecting the soil and drinking water of communities close to rivers.³² Peru

declared a temporary state of emergency in 2016 over widespread mercury poisoning in Madre de Dios, a jungle province rife with illegal mining.³³ A study by Carnegie Institution for Science in Washington, D.C., found that nearly four in five adults in Lima tested positive for dangerous levels of mercury.³⁴

Environmental impact



Sustainable economic growth depends on creating the conditions that allow people to have decent jobs that stimulate the economy while not harming the environment. If not managed properly, the mining and processing operations of precious minerals can have a substantial negative impact on the surrounding environment. To ensure environmental stewardship, the legitimate mining industry is heavily regulated to ensure that natural resources are used effectively, and that chemicals and waste are reduced, recycled or otherwise managed responsibly.

Illegal operators do not adhere to environmental regulation and generally disregard the impacts of their activities on the environment and the sustainable, efficient use of natural resources (SDG 12). The illegal excavation of minerals often destroys large parcels of land, causes deforestation (SDG 13 and 15), soil erosion, pollution of soil, air and water (SDG 6 and 14).³⁵ Apart from creating health and safety hazards for people living in these areas, wildlife also is being impacted.

- The Amazon River Basin, home to the world's largest rainforest, is severely impacted by illegal mining. Informal and mostly illegal, gold mining in and around the rainforest involves forest removal, soil excavation and the use of liquid mercury, which together pose significant threats to biodiversity, water quality, forest carbon sinks and human health.³⁶ It is estimated that approximately 30-40 metric tons of mercury are dumped into the environment annually.
- 19,000 hectares of rainforest in Chocó, Colombia, have been destroyed as a result of the country's multibillion-dollar illegal trade in gold.³⁷ Colombia ranks second only to China in mercury pollution.³⁸
- Madagascar's protected rainforest has been impacted by the illegal trade in sapphire, bringing deforestation and destruction to areas renowned for biodiversity and threatening the natural habitat of the lemur species.³⁹
- Illegal gold mining in Ghana degrades forests, pollutes around 75 percent of the waterways, and erodes biodiversity.⁴⁰ The water contaminated with heavy metals has resulted in poisoning of those who use the water.⁴¹

Funding conflict



Illicit trade in precious metals and gemstones share a dark nexus with organized crime, terrorism and bloody conflict across the world, undermining global efforts to achieve SDG 16 (Peace, justice and strong institutions).

- Armed groups in Colombia extort local officials in an effort to dominate the US\$2.4 billion illegal gold trade.⁴²
- Drug cartels in South America use illegal drug profits to invest in gold mining and then sell gold to American and multinational companies, thereby laundering staggering amounts of illicit profits. Some estimates suggest that the trade in illicit gold has become more profitable than cocaine.⁴³
- The illegal trade of tantalum, tungsten, tin and gold (also referred to as 3TG) from the Democratic Republic of Congo and surrounding countries underpins conflict throughout Africa, finances armed groups and encourages forced labor, human rights abuses, corruption and money laundering.⁴⁴
- Illicit diamond trafficking has funded brutal wars in countries such as Angola, Central African Republic, the Democratic Republic of Congo, Liberia, and Sierra Leone, resulting in the death and displacement of millions of people.⁴⁵
- Afghan Taliban and other jihadi groups earn as much as US\$200 to US\$300 million annually from illegal mining, the second-largest revenue stream after narcotics.⁴⁶

CONCLUSIONS

Illicit trade in precious metals and gemstones undermines the SDGs in many ways:



Limits opportunities for skill development and direct employment in the legitimate mining industry.



Illegal mining practices disregard health and safety requirements for miners and represent a significant source of mercury pollution globally.



Runoff and improper production practices contaminate water basins with heavy metals and other poisons and renders drinking water unsafe for human consumption.

8 DECENT WORK AND ECONOMIC GROWTH



Prevents countries from developing mining resource endowments to drive wider national economic growth; and perpetuates child labor and other human rights violations.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Drains investment in essential infrastructure such as roads that enable wider social and economic progress.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Disregard for mining regulations leads to inefficient use of natural resources and exacerbates the challenge to effectively manage chemical and other wastes.

13 CLIMATE ACTION



Forest removal and soil excavation limit CO2 absorption capacities of forests.

14 LIFE BELOW WATER



Contamination of rivers and underground water basins jeopardizes biodiversity and underwater ecosystems.

15 LIFE ON LAND



Illegal mineral excavation accelerates deforestation and degrades natural animal habitats.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Funds organized crime, terrorism and military conflict that undermines peace, justice and good governance.

NOTES

- ¹UNICRI. (2016). *Strengthening the Security and Integrity of the Precious Metals Supply Chain – Technical Report*. Torino: UNICRI.
- ²Mathias, E., & Feys, B. (2016). *Implementing AML/CFT Measures in the Precious Minerals Sector: Preventing Crime While Increasing Revenue*. Washington, DC: IMF. Retrieved from: <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1401a.pdf>
- ³Mathias, E., & Feys, B. (2016). *Implementing AML/CFT Measures in the Precious Minerals Sector: Preventing Crime While Increasing Revenue*. Washington, DC: IMF. Retrieved from: <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1401a.pdf>
- ⁴Mathias, E., & Feys, B. (2016). *Implementing AML/CFT Measures in the Precious Minerals Sector: Preventing Crime While Increasing Revenue*. Washington, DC: IMF. Retrieved from: <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1401a.pdf>
- ⁵World Gold Council. (n.d.). *Responsible Gold*. London: WGC. Available at: <https://www.gold.org/who-we-are/our-members/responsible-gold> Accessed 29 October 2018.
- ⁶Financial Action Task Force. (2013). *Money laundering and terrorist financing through trade in diamonds*. Paris: FATF/OECD. Retrieved from: <http://www.fatf-gafi.org/media/fatf/documents/reports/ML-TF-through-trade-in-diamonds.pdf>
- ⁷See also Global Policy Forum. (2018). *Minerals in Conflict*. New York: Global Policy Forum. Available at: <https://www.globalpolicy.org/the-dark-side-of-natural-resources-st/minerals-in-conflict.html>; Global Witness. (2018). *Conflict Diamonds*. n.p.: Global Witness. Available at <https://www.globalwitness.org/en-gb/campaigns/conflict-diamonds/#more> Accessed 29 October 2018.
- ⁸UNICRI. (2016). *Strengthening the Security and Integrity of the Precious Metals Supply Chain – Technical Report*. Torino: UNICRI.
- ⁹Mathias, E., & Feys, B. (2016). *Implementing AML/CFT Measures in the Precious Minerals Sector: Preventing Crime While Increasing Revenue*. Washington, DC: IMF. Retrieved from: <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1401a.pdf>; see also Perez, R. (2017). *Artisanal and Small-Scale Mining and Sustainable Development Goals*. Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development. Retrieved from: <https://www.igfmining.org/wp-content/uploads/2018/09/Session-19-ASM-and-SDGs-by-Romain-Perez.pdf>
- ¹⁰UNDP, WEF, CCSI, & SDSN. (2016). *Mapping Mining to the Sustainable Development Goals: An Atlas*. Cologny/Geneva: World Economic Forum. Available at: <http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/mapping-mining-to-the-sdgs--an-atlas.html>
- ¹¹Mathias, E., & Feys, B. (2016). *Implementing AML/CFT Measures in the Precious Minerals Sector: Preventing Crime While Increasing Revenue*. Washington, DC: IMF. Retrieved from: <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1401a.pdf>
- ¹²Global Initiative Against Transnational Organized Crime. (2015). *Organized Crime: A Cross-Cutting Threat to Sustainable Development*. Geneva: Global Initiative against Transnational Organized Crime. Retrieved from: <http://globalinitiative.net/wp-content/uploads/2015/01/global-initiative-organized-crime-as-a-cross-cutting-threat-to-development-january-2015.pdf>
- ¹³Bishop, P. H. (2011). Illicit trafficking of precious metals and its destabilizing factors in systems of affected countries. *Freedom from Fear Magazine*, 9. Available at: <http://f3magazine.unicri.it/?p=598>
- ¹⁴Crowley, K. (2015, January 27). Gangs live underground for months to feed illegal gold trade. *Fin24*. Available at: <https://www.fin24.com/Companies/Mining/Gangs-live-underground-for-months-to-feed-illegal-gold-trade-20150126>
- ¹⁵Crowley, K. (2015, January 27). Gangs live underground for months to feed illegal gold trade. *Fin24*. Available at: <https://www.fin24.com/Companies/Mining/Gangs-live-underground-for-months-to-feed-illegal-gold-trade-20150126>
- ¹⁶Hosken, G., Jamal, S., Bornman, J., & Cowan, K. (2017, March 27). The truth about South Africa's illegal mining industry. *Rand Daily Mail*. Available at: <https://www.businesslive.co.za/rdm/business/2017-03-27-the-truth-about-south-africas-illegal-mining-industry/>
- ¹⁷Long, K. (2015, October 23). Myanmar's \$40 billion jade trade labeled "biggest natural resource heist" in modern history. *ABC*. Available at: <http://www.abc.net.au/news/2015-10-23/myanmar-jade-trade-biggest-heist-in-modern-history/6880144>
- ¹⁸Pye, D. (2016, September 26). The dark shadow of Myanmar's jade trade. *Financial Times*. Available at: <https://www.ft.com/content/cf46e086-6909-11e6-a0b1-d87a9fea034f>
- ¹⁹International Council on Mining and Metals. (2016). *Role of Mining in National Economies, third edition*. London: ICMM. Retrieved from: https://www.icmm.com/website/publications/pdfs/social-and-economic-development/161026_icmm_romine_3rd-edition.pdf
- ²⁰International Council on Mining and Metals. (2016). *Role of Mining in National Economies, third edition*. London: ICMM. Retrieved from: https://www.icmm.com/website/publications/pdfs/social-and-economic-development/161026_icmm_romine_3rd-edition.pdf
- ²¹International Council on Mining and Metals. (n.d.). *Metals & Minerals / Making a positive contribution to the SDGs / Build resilient infrastructure, promote sustainable industrialisation and foster innovation*. London: ICMM. Available at: <https://www.icmm.com/en-gb/metals-and-minerals/making-a-positive-contribution/industry-innovation-and-infrastructure>; UNDP, WEF, CCSI, & SDSN. (2016). *Mapping Mining to the Sustainable Development Goals: An Atlas*. Cologny/Geneva: World Economic Forum. Available at: <http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/mapping-mining-to-the-sdgs--an-atlas.html>
- ²²International Council on Mining and Metals. (2012). *Human rights, social development and the mining and metals industry*. London: ICMM. Retrieved from: [https://www.commddev.org/userfiles/MC-HumanRights-InBrief\[1\].pdf](https://www.commddev.org/userfiles/MC-HumanRights-InBrief[1].pdf)
- ²³Buxton, A. (2012). *MMSD+10: Reflecting on a decade of mining and sustainable development*. London: International Institute for Environment and Development. Retrieved from: <http://pubs.iied.org/pdfs/16041IIED.pdf>
- ²⁴Lempriere, M. (2017, February 6). Why is illegal mining flourishing in Pakistan? *Mining Technology*. Available at: <https://www.mining-technology.com/features/featurewhy-is-illegal-mining-flourishing-in-pakistan-5731542/>

CHAPTER 10: SDGs AND ILLICIT TRADE IN TOBACCO PRODUCTS



CHAPTER 10 SDGs AND ILLICIT TRADE IN TOBACCO PRODUCTS

Illicit trade in tobacco is rampant and is perhaps the most widespread and well-documented sector vulnerable to illicit trade.¹ It has been estimated that 1 in every 10 cigarettes and tobacco products consumed globally is illicit.² But while most of the policy attention has centered on illicit trade in cigarettes,³ estimated to be in the range of tens of billions of dollars annually,⁴ other tobacco products, such as smokeless and roll-your-own tobacco, are also smuggled.⁵ Examples include smuggling of smokeless tobacco products from India to Bangladesh, Sri Lanka, and Nepal, and the smuggling of hand-rolling tobacco in Europe, especially the United Kingdom, where smuggling costs HMRC (Her Majesty's Revenue and Customs) £2.2 billion in lost revenue per year.^{6, 7}

Illicit trade in tobacco generally includes "any practice or conduct prohibited by law which relates to production, shipment, receipt, possession, distribution, sale, or purchase of tobacco products including any practice or conduct intended to facilitate such activity."⁸

Criminals engage in many forms of illegal trade in tobacco including contraband cigarettes, counterfeits, illicit or cheap whites, grey market cigarettes and loose tobacco.⁹

Illicit trade in tobacco generally includes:

- Illicit manufacture: cigarettes produced in legal or covert facilities and not declared to tax authorities (e.g., counterfeits of established international brands, non-duty paid production for local consumption, duty and non-duty paid production for smuggling out¹⁰); and
- Illicit importation: tobacco products produced/brought in one jurisdiction and then illegally transported to another where prices or taxes are relatively higher, either for personal consumption or commercial exploitation (e.g., bootlegging and large-scale smuggling).¹¹

Corruption is a fundamental element and facilitator of the illicit trade in tobacco products.

INTERPOL. (2014). *Countering Illicit Trade in Tobacco Products: a Guide for Policy Makers*. Lyon: INTERPOL.

There are a number of factors contributing to the pervasiveness of illicit tobacco trade. While large price and tax differences between countries or jurisdictions create the financial incentives for tax evasion, other enabling factors include weak governance, high levels of corruption, poor government commitment to combatting illicit tobacco, ineffective customs and tax administration, abuse of free trade zones, lack of enforcement and out-of-date regulatory frameworks to address illicit trade, as well as the presence of informal distribution channels for tobacco products.^{12, 13, 14, 15} Moreover, tobacco products are easily transported and disguised, and the laws and penalties involved are relatively low, thereby making it a *high-profit, low-risk* opportunity.¹⁶

Illicit trade of tobacco products robs governments of much needed tax revenue, fuels corruption and terrorism, and expands the global illegal economy, which hampers competition and free trade and subsidizes other forms of illicit trade, including drugs, arms and human trafficking.¹⁷ Illicit trade also undermines the sustainability of legitimate actors by reducing their profitability, increasing costs of monitoring, compliance and insurance, and causing reputational damage.

Over the years, several efforts have been made to recognize and resolve the detrimental impacts of illicit trade in tobacco. The World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), for example, aims to tackle illicit trade in tobacco as a critical measure for promoting public health. Within the FCTC, a Protocol to Eliminate Illicit Trade in Tobacco Products (The Protocol) aims to improve tobacco supply chain security through a number of measures, including the establishment of a global tracking and tracing system and stricter penalties for offences. Moreover, it includes several measures aimed at promoting international cooperation and law enforcement.

The Protocol entered into force in September 2018,¹⁸ representing a significant commitment by the international governance community to rally against illicit trade in tobacco.

There have also been several positive developments in recent years by governments who are leading the way in combatting illicit tobacco trade. Notable examples include:

- The EU Parliament's Special Committee on Terrorism has recently expressed its concern “at the scale of illicit tobacco markets in the EU, the proceeds of which can be used to finance terrorism.”¹⁹
- The US has introduced tobacco product standards to reduce demand for contraband or nonconforming tobacco products.²⁰
- The UK's HMRC is developing regulatory frameworks to prevent fraud and increasing criminal prosecutions for tobacco offences.²¹
- Australia has taken proactive steps to increase penalties and allocate additional resources to counter illicit trade in tobacco.
- The Government of Costa Rica has opened the door for private companies to actively collaborate in the fight illicit trade in Costa Rica. The “Mixed Commission to Fight Against Illicit Trade” was created to plan, guide, coordinate, consolidate and communicate public policies, projects and interventions against illicit trade.²²

Impact of illicit trade in tobacco on achieving the UN Sustainable Development Goals

Illicit trade in tobacco has wide-ranging negative impacts on achieving a number of the SDGs. For example, illicit products can be more affordable and accessible, which can have adverse effects on public health and well-being—in particular of young people, the poor and other vulnerable groups. As noted by WHO, the economic and social impacts disproportionately affect developing countries and countries with economies in transition.²³ Illicit trade in tobacco products also represents a major source of illegal income for organized crime and terrorist organizations.²⁴

Illicit trade in tobacco threatens achievement of four of the SDGs:

- SDG 3 (good health and well-being);
- SDG 8 (decent work and economic growth);
- SDG 16 (peace, justice and strong institutions); and
- SDG 17 (partnerships for the goals).

Health



Reducing smoking consumption and mitigating the harmful effects of tobacco smoking is intrinsically linked to SDG 3 (ensure healthy lives and promote well-being for all at all ages). Notably, SDG Target 3A calls for strengthening the implementation of the WHO Framework Convention on Tobacco Control (FCTC) as one of the means to reach the overall health goal of SDG 3. The FCTC Protocol aims at eliminating all forms of illicit trade in tobacco so as to decrease the accessibility and affordability of tobacco products. This would firstly reduce consumption and secondly strengthen associated tobacco control policies. The Protocol aims to secure the supply chain, including by establishing an international tracking and tracing system, by countering illicit trade through dissuasive law enforcement measures and by encouraging a suite of measures to enable international cooperation.²⁵

The availability of low-priced illicit tobacco products undermines tobacco control policy efforts intended to reduce the uptake of tobacco by youth and adults from low-income groups.²⁶ Government health policy objectives are further undermined when lost sales tax revenues drain funding for anti-smoking campaigns and healthcare.²⁷ The larger the problem—such as large-scale cigarette smuggling—the greater the drain on public revenue, the higher the costs of controlling associated organized criminal networks and the greater the risk to public health.²⁸

Furthermore, illicit tobacco products fall outside government health regulations, such as requirements for marketing and labeling. Government tobacco control policies are also undercut when cigarette packs illegally arrive in markets without mandatory labeling requirements or where required health warnings are absent or printed in a foreign language.²⁹

Illicit tobacco products are arguably even more harmful than legal ones, since they do not meet the health regulations of the destination country and can often include spurious ingredients.³⁰

Stable and secure economic growth and development



As noted by the 2015 “Financing for Development Addis Ababa Action Agenda” (later endorsed by the United Nations as part of the SDGs), the effective use of domestic resources, underscored by the principle of national ownership, is central to achieving sustainable development.³¹ Domestic resources and job creation depend in large measure on economic growth. Growth, in turn, is supported by an enabling economic, social, and environment policy environment, sustained in part by domestic resource mobilization through tax and other revenue collection.³² SDG 8 (decent work and economic growth) and SDG Target 17.1 (strengthen domestic resource mobilization) are thus interlinked.

Clause 32 of the Action Agenda identifies price and tax measures on tobacco as an important revenue stream for financing development in many countries, as well as means to reduce tobacco consumption and health care costs. Therefore, increases in tobacco taxes can represent a win-win for developing countries in terms of expanding a country's tax base and improving public health. However, the effectiveness of such policies can be limited if they do not account for local market circumstances or are not combined with an interconnected policy response to illicit trade.

Illicit tobacco trade not only causes significant financial damage to government revenues, but also hurts the economic stability and competitiveness of traders that comply with regulations—creating a drag on economic growth (SDG 8). Every year, governments lose an estimated US\$40.5 billion in tax-based revenue from unreported illicit trade of tobacco products. In some countries, illicit trade can be as high as 40 to 50 percent of the overall tobacco market.³³ The lost tax revenues are a drain on public budgets and severely limit government ability to mobilize sufficient domestic tax revenue (SDG Target 17.1) to provide for public services, infrastructure and healthcare.³⁴ In addition, expenditures on law enforcement are substantial and further strain limited government funds.³⁵

Child labor in agriculture sectors remains a significant impediment to achieving SDG Target 8.7 (end child labor in all its forms by 2025). According to the International Labor Organization (ILO), 70 percent of the children involved in child labor (about 108 million children) are concentrated primarily in the agriculture sector.³⁶ Illicit actors benefit—either knowingly or with no regard to—the exploitation of child labor. Furthermore, they have no incentive to take responsibility for the production, sourcing and farming of tobacco. In response to these problems, the legitimate tobacco industry has invested significantly in eliminating child labor in all farms where they purchase tobacco, and they are developing systems to monitor that such programs and standards are maintained.

Peace, justice and strong institutions



Illicit tobacco can also erode the rule of law and upset peaceful existence by financing the operations of criminal networks. This is viewed as a major security threat by governments and consequently the attainment of SDG 16 (Peace, justice and strong institutions).³⁷ Large-scale illicit tobacco trade, which is generally conducted by organized criminal networks, thrives in environments characterized by weak governance, high levels of corruption, and lax law enforcement. Smuggling of other commodities is also common in these countries and regions.³⁸ This illegal activity generates large illicit financial flows (SDG Target 16.4), enables corruption (SDG Target 16.5) and facilitates other transnational organized crimes such as money laundering and/or human trafficking (SDG Target 16.2).³⁹ Numerous case studies show that the proceeds from illicit trade in tobacco products are being laundered by organized criminal networks and redirected to fund other criminal activities, including terrorism.⁴⁰

Second only to trafficking in drugs, trafficking in illicit cigarettes has been cited as one of the main sources of funding for terrorist activities in the sub-Saharan region of Africa where traffickers closely cooperate with regional terrorist groups.⁴¹ In Central and Eastern Africa, “rebels accused of serious human right violations have been shown to use the illegal tobacco trade to finance their activities.”⁴²

CONCLUSIONS

Illicit trade in tobacco products undermines the SDGs in many ways:

3 GOOD HEALTH AND WELL-BEING



Increases affordability and access to unregulated tobacco products, which may not meet the health regulations of the destination country and can often include spurious ingredients.

8 DECENT WORK AND ECONOMIC GROWTH



Strips governments of billions in tax revenues needed to promote inclusive economic growth and exploits child labor.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Funds organized crime and terrorist activities that threaten peaceful and inclusive societies; and burdens expenditures on law enforcement.

17 PARTNERSHIPS FOR THE GOALS



Has a debilitating effect on efforts to improve domestic resource mobilization by denying the government a significant source of tax income.

NOTES

- ¹ Melzer, S. and Martin, C. (2016). "A brief overview of illicit trade in tobacco products. In OECD, *Illicit Trade: Converging Criminal Networks* (123-178). Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264251847-8-en>
- ² WHO. (2018). *Tobacco*. Geneva: WHO. Available at: <http://www.who.int/news-room/fact-sheets/detail/tobacco>
- ³ Illicit cigarettes are essentially defined as cigarettes that evade either or both import duties and / or domestic taxes (includes both smuggled, counterfeit/fake products and products manufactured and sold locally without paying the relevant duties & taxes).
- ⁴ The Financial Action Task Force (FATF). (2012). *FATF Report: Illicit Tobacco Trade, June 2012*. Paris: FATF/OECD. Retrieved from: <http://www.fatf-gafi.org/media/fatf/documents/reports/Illicit%20Tobacco%20Trade.pdf>
- ⁵ NIH National Cancer Institute and the World Health Organization. (2016). *Monograph 21: The Economics of Tobacco and Tobacco Control, Section 5 Policy and Other Influences on the Supply of Tobacco Products, Chapter 14 Tobacco Tax Avoidance and Tax Evasion*. n.p.: U.S. Department of Health & Human Services. Retrieved from: https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_14.pdf
- ⁶ Kabir FHMH, Shukla DS, Iqbal N, Peiris M. (2010). *Tracing illicit tobacco trade in South Asia. Focus countries: Bangladesh, India, Pakistan, and Sri Lanka*. Ottawa: HealthBridge. Retrieved from: <https://healthbridge.ca/images/uploads/library/IllicitTobaccoTradeinSouthAsia.pdf>; Karki, Y.B., Pant, K.D., & Pande, B.R. (2003). *A study on the Economics of Tobacco in Nepal. HNP discussion papers: Economics of tobacco control paper no. 13*. Washington, DC: World Bank and World Health Organization. Retrieved from: http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Karki-ASStudy_whole.pdf
- ⁷ Her Majesty's Revenue and Customs. (2011). *Tackling tobacco smuggling—building on our success: a renewed strategy for HM Revenue and Customs and the UK Border Agency*. London: HM Revenue and Customs. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/398461/Tackling_tobacco_smuggling_-_building_on_our_success.pdf
- ⁸ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ⁹ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ¹⁰ The licit/illicit nature of exports depend on the local law of the country of manufacture. In some locations, such as manufacturing within free trade zones, the product only becomes 'illegal' once it crosses the border of the destination country, either through under-declaration or because the pack labelling is not compliant with local regulation.
- ¹¹ WHO. (n.d.). *Illicit Trade and Tobacco – a summary of evidence and country responses [Powerpoint]*. Geneva: WHO. Retrieved from: <http://www.who.int/tobacco/economics/illicittrade.pdf>
- ¹² FATF. (2010). *Money Laundering vulnerabilities of Free Trade Zones*. Paris: FATF/OECD. Retrieved from: <http://www.fatf-gafi.org/media/fatf/documents/reports/ML%20vulnerabilities%20of%20Free%20Trade%20Zones.pdf>
- ¹³ NIH National Cancer Institute and the World Health Organization. (2016). *Monograph 21: The Economics of Tobacco and Tobacco Control, Section 5 Policy and Other Influences on the Supply of Tobacco Products, Chapter 14 Tobacco Tax Avoidance and Tax Evasion*. n.p.: U.S. Department of Health & Human Services. Retrieved from: https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_14.pdf
- ¹⁴ INTERPOL Office of Legal Affairs. (2014). *Countering illicit trade in tobacco products: a guide for policy makers*. Lyon: INTERPOL. Retrieved from: <https://www.interpol.int/News-and-media/Publications2/Guides-manuals/Countering-Illicit-Trade-in-Tobacco-Products-A-guide-for-Policy-Makers-June-2014>
- ¹⁵ WHO. (n.d.). *Illicit Trade and Tobacco – a summary of evidence and country responses [Powerpoint]*. Geneva: WHO. Retrieved from: <http://www.who.int/tobacco/economics/illicittrade.pdf>
- ¹⁶ INTERPOL Office of Legal Affairs. (2014). *Countering illicit trade in tobacco products: a guide for policy makers*. Lyon: INTERPOL. Retrieved from: <https://www.interpol.int/News-and-media/Publications2/Guides-manuals/Countering-Illicit-Trade-in-Tobacco-Products-A-guide-for-Policy-Makers-June-2014>
- ¹⁷ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ¹⁸ WHO FCTC. (2018). *The Protocol to Eliminate Illicit Trade in Tobacco Products is live! [Press release]*. Geneva: WHO. Available at: <http://www.who.int/fctc/mediacentre/press-release/protocol-entering-into-force/en/>
- ¹⁹ European Parliament. (2018). *Draft report on findings and recommendations of the Special Committee on Terrorism (2018/2044(INI))*. Brussels: European Parliament. Retrieved from: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2F%2FEP%2F%2FNONGML%2BCOMPARL%2BPE-621.073%2B01%2BDOC%2BPDF%2BV0%2F%2FEN>
- ²⁰ U.S. Food and Drug Administration. (2018). *Illicit Trade in Tobacco Products after Implementation of an FDA Product Standard*. Silver Spring, MD: U.S. Food and Drug Administration. Retrieved from: <https://www.fda.gov/downloads/tobaccoproducts/newsevents/ucm601047.pdf>
- ²¹ HM Revenue & Customs & Border Force. (2015). *Tackling illicit tobacco: From leaf to light: The HMRC and Border Force strategy to tackle tobacco smuggling*. London: HM Revenue & Customs. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/418732/Tackling_illicit_tobacco_-_From_leaf_to_light__2015_.pdf

- ²² Reforma Decreto ejecutivo N° 38410 “Declaración de interés público y nacional la lucha contra el comercio ilícito y la creación de la comisión mixta contra comercio ilícito” N° 40014-MEIC-S-G-MSP-MAG-H, available at: http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=83049&nValor3=106494&strTipM=TC
- ²³ WHO FCTC. (n.d.). *Protocol to Eliminate Illicit Trade in Tobacco Products [Powerpoint presentation]*. Geneva: WHO. Available at: <http://docplayer.net/21662067-Protocol-to-eliminate-illicit-trade-in-tobacco-products.html>
- ²⁴ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ²⁵ WHO FCTC. (2018). *About the Protocol to Eliminate Illicit Trade in Tobacco Products*. Geneva: WHO. Available at: <http://www.who.int/ftct/protocol/about/en/>
- ²⁶ WHO Regional Office for South-East Asia. (2015). *Stop illicit trade of tobacco products [News]*. New Delhi: WHO Regional Office for South-East Asia. Available at: <http://www.searo.who.int/mediacentre/features/2015/stop-illicit-trade-of-tobacco-products/en/>
- ²⁷ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ²⁸ NIH National Cancer Institute and the World Health Organization. (2016). *Monograph 21: The Economics of Tobacco and Tobacco Control, Section 5 Policy and Other Influences on the Supply of Tobacco Products, Chapter 14 Tobacco Tax Avoidance and Tax Evasion*. n.p.: U.S. Department of Health & Human Services. Retrieved from: https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_14.pdf
- ²⁹ Some tobacco markets do not require tar and nicotine labelling and/or health warnings printed on packs. If these products illegally arrive in markets where such labelling, including plain packaging legislation, are required then the objectives of SDG 3 and government tobacco control policies are circumvented.
- ³⁰ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ³¹ The World Bank. (2016). *Advancing public health and financing goals under the Universal Health Coverage (UHC) Agenda: A Proposed Tobacco Tax and Illicit Trade Joint Learning Network (JLN) Module: Concept Note*. Washington, DC: The World Bank. Retrieved from: <http://pubdocs.worldbank.org/en/797851469022590179/Concept-Note-tobacco-tax-and-illicit-trade-JLN-module-july-2016.pdf>
- ³² The World Bank. (2016). *Advancing public health and financing goals under the Universal Health Coverage (UHC) Agenda: A Proposed Tobacco Tax and Illicit Trade Joint Learning Network (JLN) Module: Concept Note*. Washington, DC: The World Bank. Retrieved from: <http://pubdocs.worldbank.org/en/797851469022590179/Concept-Note-tobacco-tax-and-illicit-trade-JLN-module-july-2016.pdf>
- ³³ WHO Regional Office for the Eastern Mediterranean. (2018). *Non communicable diseases – Illicit trade increases tobacco use*. Cairo: WHO Regional Office for the Eastern Mediterranean. Available at: <http://www.emro.who.int/noncommunicable-diseases/highlights/illicit-trade-increases-tobacco-use.html>
- ³⁴ WHO FCTC. (2015). *Illegal Trade of Tobacco Products: What you should know to stop it*. Geneva: WHO. Retrieved from: http://apps.who.int/iris/bitstream/handle/10665/170994/WHO_NMH_PND_15.3_eng.pdf;jsessionid=8BCA1F557FFF0BFB68905F48ACA67B5A?sequence=1
- ³⁵ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ³⁶ ILO. (2018). *Child labour in agriculture*. Geneva: ILO. Available at: <http://www.ilo.org/ipecc/areas/Agriculture>
- ³⁷ The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ³⁸ NIH National Cancer Institute and the World Health Organization. (2016). *Monograph 21: The Economics of Tobacco and Tobacco Control*. n.p.: U.S. Department of Health & Human Services. Retrieved from: https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf
- ³⁹ The Global Initiative Against Transnational Organized Crime. (2018). *Human Trafficking and the Illicit Cigarette Trade: Global Consequences [RESPECT Webinar Series 2018]*. Geneva: The Global Initiative Against Transnational Organized Crime. Available at: <http://globalinitiative.net/human-trafficking-and-the-illicit-cigarette-trade-global-consequences/>
- ⁴⁰ Levitt, M. (2012). *Attacking Hezbollah's Financial Network: Policy Options [Testimony submitted to the Committee on Foreign Affairs, U.S. House of Representatives, June 8, 2017]*. Washington, DC: The Washington Institute for Near East Policy. Retrieved from: <http://docs.house.gov/meetings/FA/FA00/20170608/106094/HHRG-115-FA00-Wstate-LevittM-20170608.pdf>; World Customs Organisation. (2013) *Illicit Trade Report 2012*. Brussels: WCO. Retrieved from http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/illicit-trade-report/itr_2012_en.pdf?db=web; The United States Department of State / Department of Justice / Department of the Treasury / Department of Homeland Security / Department of Health and Human Services. (2015). *The Global Illicit Trade in Tobacco: A Threat to National Security*. n.p.: A/GIS/GPS. Retrieved from: <https://2009-2017.state.gov/documents/organization/250513.pdf>
- ⁴¹ World Customs Organisation. (2013) *Illicit Trade Report 2012*. Brussels: WCO. Retrieved from http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/illicit-trade-report/itr_2012_en.pdf?db=web
- ⁴² World Health Organisation. (2015). *World No Tobacco Day 2015: Time to act against illicit tobacco*. Geneva: World Health Organisation Available at: <http://www.who.int/mediacentre/commentaries/illicit-tobacco/en/>

CHAPTER 11: SDGs AND TRAFFICKING IN PERSONS



CHAPTER 11 SDGs AND TRAFFICKING IN PERSONS

Not unlike all other forms of illicit trade, trafficking in persons is a lucrative form of organized crime and a high-profit, low-risk activity. It is a human rights abuse that represents a failure of nation states and the global community to ensure the security and freedoms of their citizens. Trafficking in persons undermines the rule of law, fuels corruption, and funds conflict and terrorism.¹

Defining trafficking in persons

According to the *UN Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children*, trafficking in persons is defined as "the recruitment, transportation, transfer, harboring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude or the removal of organs."

The International Labour Organization (ILO) and the Walk Free Foundation (WFF) estimate that 24.9 million people are victims of forced labor globally.² According to the ILO, trafficked forced laborers produce a total illicit profit of US\$150 billion per year.³

Trafficking in persons is very much a global problem, prevalent throughout all regions and countries. Data from 2012 to 2014 shows that 57 percent of victims were trafficked transnationally, i.e., across at least one international border.⁴

ILO and the WFF estimate that 16 million people were in forced labor in the private economy in 2016, of which 58 percent were women and 42 percent men.⁵ In addition, 4.1 million people were in forced labor imposed by state authorities, and 4.8 million victims were in forced sexual exploitation.⁶ In terms of the type of coercion forced on victims, 24 percent had their wages withheld, 17 percent faced threats of violence, 16 percent were subject to acts of physical violence, and 12 percent received threats against family.⁷

Trafficking in persons is an issue in a wide range of sectors that are vulnerable to illicit trade, including but not limited to fisheries, agriculture, manufacturing and mining. In terms of forced labor in the private economy, 24 percent were domestic workers, 18 percent worked in construction, 15 percent in manufacturing, 11 percent in agriculture, forestry and fishing, 10 percent in accommodation and food services, 9 percent in wholesale and trade, 7 percent in personal services, 4 percent in mining and quarrying, and 1 percent in begging.⁸ The U.S.

Department of Labor has identified 139 goods from 75 countries produced by forced and child labor, including everything from diamonds and cotton to garments and electronics.⁹

Impact of trafficking in persons on achieving the UN Sustainable Development Goals

Sexual exploitation, forced labor, sham marriages, domestic servitude, and organ removal are all examples of how human trafficking degrades people to commodities that are traded for profit. Human trafficking represents a failure of the global community to protect the most vulnerable members of our communities, including those living in poverty and conflict.

As underscored by a former U.S. Secretary of State, “No nation can end modern slavery alone. Eliminating this global scourge requires a global solution. It also cannot be solved by governments alone. The private sector, academic institutions, civil society, the legal community, and consumers can all help to address the factors that allow human trafficking to flourish.”¹⁰

The 2030 Agenda for Sustainable Development contains three specific targets to end human trafficking, under SDGs 5, 8 and 16. However, the costs of these grave human rights violations extend across several other SDGs, prohibiting the achievement of a just, free and equitable society. As such, combatting trafficking in persons is key to achieving several of the SDGs.

Trafficking in persons negatively impacts achievement of five SDGs:

- SDG 3 (good health and well-being);
- SDG 5 (gender equality);
- SDG 8 (decent work and economic growth);
- SDG 10 (reduced inequalities); and
- SDG 16 (peace, justice and strong institutions).

Health



Combating trafficking in persons for the purpose of sexual exploitation has a direct impact on the ability to achieve SDG Target 3.7 which calls for ensuring “universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.” This type of trafficking exposes both the trafficked victim as well as the client to significant health risks, including high risks of HIV and AIDS, and “often bars women from accessing sexual, reproductive and health care services.”

End violence against women and children



Human trafficking has no place in society. It is a threat to gender equality and the right for all women and children to live in a safe environment, which protects their human rights.

Roughly half of trafficking victims (51 percent) are women. According to the UNODC, women are primarily trafficked for the purpose of sexual exploitation, but also for sham or forced marriages, begging, domestic servitude, organ removal, and forced labor in agriculture, catering, garment factories, and the cleaning industry.¹¹ Effectively combating the trafficking of women can help meet SDG 5 to achieve gender equality and empower all women and girls. Moreover, stopping human trafficking can help achieve SDG Target 5.1, which calls for elimination of “all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.”

Combating trafficking of children is specified under SDG 16 to promote just, peaceful and inclusive societies. SDG Target 16.2 calls for action to “end abuse, exploitation, trafficking and all forms of violence against and torture of children.” Although roughly half of the victims are women, the share of child victims has increased. In 2014, 28 percent of detected victims were children¹² and 71 percent of those child victims were girls.¹³

Decent work for all and protection for migrant workers



SDG 8 focuses on the promotion of inclusive and sustainable economic growth, employment and decent work for all. Trafficking in persons, however, is the very antithesis of decent work. SDG Target 8.7 specifically deals with this issue and calls for “immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms.” SDG Targets 8.5 and 8.8 also are of particular importance for addressing trafficking in persons.

- SDG Target 8.5 calls for action to “[b]y 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.”
- SDG Target 8.8 calls for action to “[p]rotect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.”

The protection of migrant workers from abuse also is linked to SDG 10 (reduce inequality within and among countries). SDG Target 10.7 calls for action to “[f]acilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.” If people are able to migrate safely and legally, and without using smugglers to cross borders, they are less vulnerable to abuse and exploitation, including human trafficking. Conversely, migrants that use a smuggler to help cross border incur significant costs, which in turn can subject them to a situation of debt bondage. Additionally, if the migrant is in the country illegally, their exploiter can coerce physical bondage by threatening to report them to the authorities if they try to escape.

The difference between trafficking in persons and smuggling of migrants

It is important to point out that the crimes of human trafficking and smuggling are substantively different. According to the *UN Protocol Against the Smuggling of Migrants by Land, Sea and Air*, smuggling of migrants refers to “the procurement, in order to obtain, directly or indirectly, a financial or other material benefit, of the illegal entry of a person into a State Party of which the person is not a national or a permanent resident.” In other words, smuggling of migrants is when someone facilitates the illegal border crossing or illegal residence of a person in another country with the aim of making a profit. It is by definition always transnational as it involves the crossing of international borders. Generally, the relationship between the smuggler and migrant ends once the border crossing has been completed. Finally, migrant smuggling involves consent.

Trafficking in persons, on the other hand, is not necessarily transnational, and centers around exploitation of persons who are either coerced or deceived into the situation of trafficking. Contrary to smuggling, the relationship between the victim and trafficker generally continues, or a new relationship between exploiter and victim is established, once the destination is reached. It is not uncommon that what starts off as smuggling of migrants can turn into a situation of trafficking. Migrant workers are of particular risk for abuse. Many migrants enter their destination country through networks of recruitment agents, thereby incurring high brokerage fees. This leads to a situation of debt bondage, which in turn makes them vulnerable to exploitation.

Forced labor and abuse of migrant workers is for example prevalent in the fishing industry. Investigative reports have demonstrated that low fish stock as a result of overfishing is forcing fishing boats to venture farther out to sea and to stay out longer. These circumstances create a situation where vessels are without regulatory oversight for longer periods of time, making workers more vulnerable to abuse.¹⁴ Furthermore, with the ships out for longer periods of time, these jobs are less and less appealing to local workers, which means that the sector becomes increasingly dependent on migrant workers that may arrive from poorer neighboring countries, sometimes with the help of smugglers. If these migrant workers have entered the country illegally or have paid significant amounts of money to smugglers to cross the international borders, they are more vulnerable to exploitation.¹⁵

CONCLUSIONS

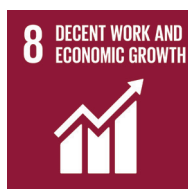
Trafficking in persons contributes to illicit trade and undermines the SDGs in many ways:



Exposes trafficking victims and sex clients to significant health risks, including HIV, AIDS and other STDs; and can preclude access to sexual, reproductive and health care services.



Exploits millions of women and girls that are coerced into prostitution, forced into marriage and held as slaves.



Denies decent and rewarding work opportunities for women, men and young people; and exposes them to labor rights violations and unsafe working environments.



Exposes vulnerable migrant workers to elevated risk of being forced into slave labor or other human rights violations.



Undermines peace and justice and perpetuates abuse, exploitation, violence and slavery; contributes revenues to criminal groups that destabilize communities and the rule of law.

NOTES

- ¹ Shelley, L. (2014). *Human Smuggling and Trafficking into Europe: A Comparative Perspective*. Washington, D.C.: Migration Policy Institute. Retrieved from: <http://www.migrationpolicy.org/sites/default/files/publications/BadActors-ShelleyFINALWEB.pdf>
- ² Alliance 87. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: ILO / Walk Free Foundation.
- ³ ILO. (2014). *Profits and Poverty: The Economics of Forced Labour*. Geneva: International Labour Organization. Available at: http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_243391/lang--en/index.htm
- ⁴ UNODC. (2016). *Global Report on Trafficking in Persons 2016*. Vienna: United Nations Office on Drugs and Crime.
- ⁵ Alliance 87. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: ILO / Walk Free Foundation.
- ⁶ Alliance 87. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: ILO / Walk Free Foundation.
- ⁷ Alliance 87. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: ILO / Walk Free Foundation.
- ⁸ Alliance 87. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: ILO / Walk Free Foundation.
- ⁹ Bureau of International Labor Affairs (n.d.). *List of Goods Produced by Child Labor or Forced Labor* [Database]. Washington, DC: Department of Labor. Available at: <https://www.dol.gov/ilab/reports/child-labor/list-of-goods/>
- ¹⁰ US Department of State. (2015). *Trafficking in Persons Report 2015 Report*. Washington, DC: US Department of State Publication. Retrieved from: <https://www.state.gov/documents/organization/245365.pdf>
- ¹¹ UNODC. (2016). *Global Report on Trafficking in Persons 2016*. Vienna: United Nations Office on Drugs and Crime.
- ¹² UNODC. (2016). *Global Report on Trafficking in Persons 2016*. Vienna: United Nations Office on Drugs and Crime.
- ¹³ UNODC. (2016). *Global Report on Trafficking in Persons 2016*. Vienna: United Nations Office on Drugs and Crime.
- ¹⁴ Verité. (2016). *A Verité Assessment of Recruitment Practices and Migrant Labor Conditions in Nestlé's Thai Shrimp Supply Chain: An Examination of Forced Labor and other Human Rights Risks Endemic to the Thai Seafood Sector*. Amherst: Verité.
- ¹⁵ Verité. (2016). *A Verité Assessment of Recruitment Practices and Migrant Labor Conditions in Nestlé's Thai Shrimp Supply Chain: An Examination of Forced Labor and other Human Rights Risks Endemic to the Thai Seafood Sector*. Amherst: Verité.

CHAPTER 12: SDGs AND ILLICIT TRADE IN WILDLIFE



CHAPTER 12 SDGs AND ILLICIT TRADE IN WILDLIFE

Illicit trade in wildlife is a serious threat to local ecosystems and the survival of endangered and vulnerable species. The World Wildlife Fund (WWF) reports that during the past 40 years there has been a 58 percent decline in vertebrate population and an 81 percent decline in populations living in freshwater systems.¹ Unsustainable and illegal trade in wildlife is cited as the second biggest threat to species after environmental damage.²

Moreover, illicit trade in wildlife is a global criminal industry and one of the most lucrative forms of illicit international trade. Similar to other forms of illicit trade, the profits from wildlife trafficking are high,³ with the value of the byproducts increasing by multiples of 25 to 50 along the commodity chain.⁴ Illicit trade in wildlife is typically transcontinental,⁵ and, as highlighted by the United Nations Office on Drugs and Crime (UNODC), “[v]irtually every country in the world plays a role” as a source, transit, or destination of illicitly traded wildlife.⁶

Note: The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) defines wildlife as all fauna and flora. For the purpose of this report, however, illicit trade in wildlife will only cover fauna and exclude fish, as this is covered under the Illegal, Unreported and Unregulated Fishing chapter.

Impact of illicit trade in wildlife on achieving the UN Sustainable Development Goals

Illicit wildlife trade is almost entirely responsible for pushing some of the world’s most popular and unique species to the brink of extinction. It also robs countries of their natural heritage and damages the livelihoods of local communities who depend on tourism. Because of its criminal nature, illicit wildlife trade undermines good governance and the rule of law, fuels corruption and finances the very criminal networks that threaten peace and security. In the words of former UK Foreign Secretary William J. Hague, “[the illicit trade in wildlife] drives corruption and insecurity, and undermines efforts to cut poverty and promote sustainable development.”⁷

Since preserving wildlife is crucial for the well-being of people and the planet alike, stopping this trade is crucial to achieving a number of the SDGs. This is particularly true for SDG 15, which calls for urgent action to halt the loss of biodiversity, to protect and prevent the extinction of threatened species, and to end poaching and trafficking of protected species of flora and fauna.

The illicit trade in wildlife impacts achievement of six of the SDGs:

- SDG 1 (no poverty);
- SDG 2 (zero hunger);
- SDG 8 (decent work and economic growth);
- SDG 11 (sustainable cities and communities)
- SDG 15 (life on land); and
- SDG 16 (peace, justice and strong institutions).

Livelihoods



In addition to the serious and wide-ranging environmental impacts, illicit trade in wildlife has substantial negative impacts on livelihoods and the economies of local communities which depend upon wildlife and associated industries as a component to achieve sustainable development.^{8,9}

WWF reports that the knock-on effects of illegal wildlife trade can undermine local employment in legitimate sectors, fuel corruption, and rob governments of tax revenue that could be invested towards meeting the SDGs.¹⁰

For SDG 1 (no poverty), the illicit trade in wildlife impacts SDG Target 1.4 which calls for ensuring “equal rights to men and women, and in particular the poor and the vulnerable, to economic resources, as well as ownership and control over land and natural resources.” As stated by CITES Secretary-General John E. Scanlon, illicit trade in wildlife means that “local communities are being deprived of making their own development choices, including through the legitimate use of their wildlife resources.”¹¹

More than 90 percent of natural World Heritage sites support recreation and a growing wildlife-based tourism industry. But the economies associated with many of these sites are threatened by excessive poaching. This is linked to SDG Target 2.3 which refers to ensuring opportunities for value addition and non-farm employment, and SDG Target 8.9 to devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

Sustainable ecosystems are critical for supporting tourism, which according to UNEP contributes 5 to 10 percent of national economies.¹² According to the UNWTO, wildlife watching and wildlife tourism provide approximately 60 percent of the income of most African regions.¹³

The economic case for combatting illicit trade in wildlife is clear, and can be illustrated by the life on an elephant, which is estimated to be 76 times more valuable alive than dead. Wildlife based tourism is, in other words, big business. According to the David Sheldrick Wildlife Trust, one elephant's ivory might yield up to US\$21,000 on the black market, but that same elephant could generate up to US\$1.6 million in tourism over its lifetime.¹⁴

Protecting biodiversity, preserving natural heritage and ending poaching and trafficking



According to UNDP, of the 8,300 animal breeds known to man, 8 percent are now extinct and 22 percent are at risk of extinction.¹⁵ In 2014, 1,215 rhinos were killed for their horns by poachers in South Africa,¹⁶ and between 2010 and 2012, an estimated 100,000 elephants—or one fifth of the African elephant population—were killed by poachers for their ivory.¹⁷ Rhino poaching in Zimbabwe and South Africa, which have the largest remaining populations, has increased dramatically from less than 50 in 2007 to over 1,000 in 2013.¹⁸ In March 2016, UNODC reported that rhino poaching in South Africa had increased by as much as 8,000 percent between 2007 and 2014.¹⁹ According to OECD, rhino horns can earn traffickers up to US\$65,000 per kilogram.²⁰ UNEP estimates the Asian street value of poached African ivory to be in the range of US\$165–188 million, and the value of rhino horn poached in 2013 is in the range of US\$64–\$192 million.²¹ Developing countries are the biggest source of animals that are poached and trafficked, and they feel the economic and biodiversity losses the most.²²

Between 2000 and 2015, the parts of at least 1,755 tigers were seized in Asia.²³ There may now be as few as 3,200 wild tigers left in the world, with illicit trade being one of the biggest threats to their survival.

While elephant, rhino and tiger poaching have received wide media attention, the unfortunate award for the most trafficked mammal in the world goes to the lesser known pangolin. UNEP estimates that more than 1 million pangolins have been poached in the last decade.²⁴ Although not as valuable as ivory or rhino horn, the average retail value for raw pangolin scales can reach US\$2,500 per kilogram, with the illegal trade in pangolin scales worth an estimated US\$46 million annually.²⁵

SDG 15 (life on land) specifically focuses on one of the key effects of the illicit trade in wildlife, namely the need to “halt biodiversity loss.” Furthermore, specific targets under SDG 15 call for:

- Urgent and significant action to protect and prevent the extinction of threatened species (SDG Target 15.5).
- Ending poaching and trafficking of protected species of flora and fauna and addressing both demand and supply of illegal wildlife products (SDG Target 15.7).
- Enhancing global support for efforts to combat poaching and trafficking of protected species (SDG Target 15.C).

Poaching also threatens the integrity of some of the world's most iconic natural sites and therefore stands directly in the way of SDG Target 11.4 (strengthen efforts to protect and safeguard the world's cultural and natural heritage). Almost half of the world's 200 designated UNESCO natural heritage sites are impacted by wildlife criminals.²⁶

Security and the rule of law



Wildlife trafficking erodes state authority, undermines security and the rule of law, and helps finance organized criminal and insurgent groups.^{27, 28} Ivory has been called the new conflict resource,²⁹ and as highlighted by the WWF, “ongoing armed conflicts and illicit wildlife trafficking [in Africa] seem to be interlinked, and wildlife trafficking is often used to finance terrorist activities and launder money from other illegal trafficking activities.”³⁰ In a report to the world's highest international security body, former UN Secretary-General Ban Ki-moon wrote, “Poaching and its potential linkages to other criminal, even terrorist, activities constitute a grave menace to sustainable peace and security in Central Africa.”³¹ Because of the use of poaching to finance organized crime and terrorist activities, the UN placed sanctions on wildlife trafficking and groups who perpetrate wildlife crimes in the Democratic Republic of Congo and Central African Republic in 2014.³²

CONCLUSION

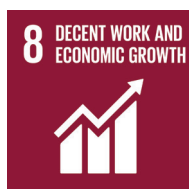
Illicit trade in wildlife undermines the SDGs in many ways:



Deprives communities of control over land and natural resources, especially those communities dependent on tourism.



Prevents opportunities for value addition and non-farm employment represented by the tourism sector.



Negatively impacts the economies of local communities which depend on wildlife for their livelihoods.



Threatens half of the world's 200 designated UNESCO natural heritage sites home to many of the world's most endangered species.



Responsible for pushing some of the world's most popular and unique species to the brink of extinction.



Undermines governments' capacity to enforce policy, promote the rule of law, eradicate corruption and combat other forms of criminal activity that threaten peace and security.

NOTES

- ¹ WWF. (2016). *Living Planet Report 2016: Risk and resilience in a new era*. Gland: WWF International. Retrieved from: http://awsassets.panda.org/downloads/lpr_living_planet_report_2016.pdf
- ² WWF. (2018). *Unsustainable and illegal wildlife trade*. Gland: WWF Global. Available at: http://wwf.panda.org/about_our_earth/species/problems/illegal_trade/
- ³ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Retrieved from: http://www.keepeek.com/Digital-Asset-Management/oecd/governance/charting-illicit-trade_9789264251847-en#.Wa2XY1JiRp8
- ⁴ WWF / Dahlberg. (2012). *Fighting illicit wildlife trafficking: A consultation with governments*. Gland: WWF International. Retrieved from: http://awsassets.panda.org/downloads/wwffightingillicitwildlifetrafficking_lr_1.pdf
- ⁵ UNODC. (2016). *World Wildlife Crime Report: Trafficking in protected species*. Vienna: United Nations Office on Drugs and Crime. Retrieved from: http://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf
- ⁶ UNODC. (2016). *World Wildlife Crime Report: Trafficking in protected species*. Vienna: United Nations Office on Drugs and Crime. Retrieved from: http://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf
- ⁷ Hague, W. (2014). *Foreign Secretary's opening remarks at Illegal Wildlife Trade Conference* [Speech]. Available at: <https://www.gov.uk/government/speeches/foreign-secretarys-opening-remarks-at-illegal-wildlife-trade-conference>
- ⁸ UN General Assembly. (2015). *Tackling illicit trafficking in wildlife*. A/RES/69/314. Retrieved from: https://cites.org/sites/default/files/eng/news/pr/2015/UNGA_res_illicit_trade_wildlife.pdf
- ⁹ UNEP. (2014). *The Environmental Crime Crisis: Threats To Sustainable Development From Illegal Exploitation And Trade In Wildlife And Forest Resources*. Nairobi/Arendal: United Nations Environment Programme and GRID-Arendal. Retrieved from: <http://wedocs.unep.org/bitstream/handle/20.500.11822/9120/-The%20environmental%20crime%20crisis%3a%20threats%20to%20sustainable%20development%20from%20illegal%20exploitation%20and%20trade%20in%20wildlife%20and%20forest%20resources-2014RRAcimecrisis.pdf?sequence=3&isAllowed=y>
- ¹⁰ WWF / Dalberg. 2012. *Fighting illicit wildlife trafficking: A consultation with governments*. Gland: WWF International.
- ¹¹ Scanlon, J. E. (2016). *CITES – galvanizing a global collective effort to save wildlife* [Keynote Address - Plenary Opening Session]. Save Wildlife: Act Now or Game Over Wildlife Conference, The Hague, 1-3 March 2016. Available at: <https://www.tralac.org/images/docs/9193/cites-galvanizing-a-global-collective-effort-to-save-wildlife-keynote-address-by-john-e-scanlon-save-wildlife-conference-march-2016.pdf>
- ¹² UNEP. (2014). *The Environmental Crime Crisis: Threats To Sustainable Development From Illegal Exploitation And Trade In Wildlife And Forest Resources*. Nairobi/Arendal: United Nations Environment Programme and GRID-Arendal. Retrieved from: <http://wedocs.unep.org/bitstream/handle/20.500.11822/9120/-The%20environmental%20crime%20crisis%3a%20threats%20to%20sustainable%20development%20from%20illegal%20exploitation%20and%20trade%20in%20wildlife%20and%20forest%20resources-2014RRAcimecrisis.pdf?sequence=3&isAllowed=y>
- ¹³ UNWTO. (2015). *Towards Measuring Economic Value of Wildlife Watching Tourism in Africa*. Madrid: World Tourism Organization. Retrieved from: <https://sustainabledevelopment.un.org/content/documents/1882unwtowildlifepaper.pdf>
- ¹⁴ David Sheldrick Wildlife Trust. (2013). *Dead or alive? Valuing an elephant*. Surrey: David Sheldrick Wildlife Trust. Retrieved from: <http://iworry.org/wp-content/uploads/2013/09/Dead-or-Alive-Final-LR.pdf>
- ¹⁵ UNDP. (2018). *Goal 15: Life on Land*. New York: UNDP. Available at: <http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-15-life-on-land.html>
- ¹⁶ Department of Environmental Affairs, Republic of South Africa. (2015). *Minister Edna Molewa highlights progress in the war against poaching and plans for 2015*. Pretoria: Department of Environmental Affairs. Available at: https://www.environment.gov.za/mediarelease/molewa_waragainstpoaching2015
- ¹⁷ Wittemyer, G., et al. (2014). *Illegal killing for ivory drives global decline in African elephants*. *Proceedings of the National Academy of Sciences of the United States of America*, 111 (36), 12117-13121. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4246956/>
- ¹⁸ UNEP. (2014). *The Environmental Crime Crisis: Threats To Sustainable Development From Illegal Exploitation And Trade In Wildlife And Forest Resources*. Nairobi/Arendal: United Nations Environment Programme and GRID-Arendal. Retrieved from: <http://wedocs.unep.org/handle/20.500.11822/9120>
- ¹⁹ UNDP, UNEP, UNODC, & CITES. (2016). *On World Wildlife Day UN Implores Urgent Action to End Poaching Crisis* [Press release]. New York: UNDP, UNEP, UNODC, & CITES. Retrieved from: <https://www.unodc.org/unodc/en/press/releases/2016/March/on-world-wildlife-day-un-implores-urgent-action-to-end-poaching-crisis.html>
- ²⁰ OECD. (2016). *Illicit Trade: Converging Criminal Networks*. Paris: OECD Publishing. Retrieved from: http://www.keepeek.com/Digital-Asset-Management/oecd/governance/charting-illicit-trade_9789264251847-en#.Wa2XY1JiRp8
- ²¹ UNEP. (2014). *The Environmental Crime Crisis: Threats To Sustainable Development From Illegal Exploitation And Trade In Wildlife And Forest Resources*. Nairobi/Arendal: United Nations Environment Programme and GRID-Arendal. Retrieved from: <http://wedocs.unep.org/handle/20.500.11822/9120>
- ²² Lawson, K. and Vines, A. (2014). *Global Impacts of the Illegal Wildlife Trade: The Costs of Crime, Insecurity and Institutional Erosion*. London: Chatham House. Retrieved from: <https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Africa/0214Wildlife.pdf>
- ²³ Krishnasamy, K. and Stoner, S. (2016). *Reduced to skin and bones re-examined: An analysis of Tiger seizures from 13 range countries from 2000-2015*. Briefing paper. Selangor: TRAFFIC Southeast Asia Regional Office. Retrieved from: <https://www.traffic.org/site/assets/files/3691/reduced-to-skin-and-bones-re-examined.pdf>

- ²⁴ CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). (2016). *Interpretation and implementation of the Convention, Compliance and Enforcement: Actions to Combat Wildlife Trafficking*. Seventeenth meeting of the Conference of the Parties, Johannesburg (South Africa), 24 September-5 October 2016. Retrieved from: https://www.fws.gov/international/cites/cop17/ussubmissions/combating_wildlife_trafficking.pdf
- ²⁵ May, C. (2017). *Transnational Crime and the Developing World*. Washington, DC: Global Financial Integrity. Retrieved from: http://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf
- ²⁶ WWF / Dahlberg. (2017). *Not For Sale*. Gland: WWF International. Retrieved from: <https://wwf.fi/mediabank/9712.pdf>
- ²⁷ CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). (2016). *Interpretation and implementation of the Convention, Compliance and Enforcement: Actions to Combat Wildlife Trafficking*. Seventeenth meeting of the Conference of the Parties, Johannesburg (South Africa), 24 September-5 October 2016. Retrieved from: https://www.fws.gov/international/cites/cop17/ussubmissions/combating_wildlife_trafficking.pdf
- ²⁸ May, C. (2017). *Transnational Crime and the Developing World*. Washington, DC: Global Financial Integrity. Retrieved from: http://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf
- ²⁹ May, C. (2017). *Transnational Crime and the Developing World*. Washington, DC: Global Financial Integrity. Retrieved from: http://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf
- ³⁰ WWF / Dahlberg. (2012). *Fighting illicit wildlife trafficking: A consultation with governments*. Gland: WWF International. Retrieved from: http://awsassets.panda.org/downloads/wwffightingillicitwildlifetrafficking_lr_1.pdf
- ³¹ WWF. (2013). *UN Chief Takes Poaching Concerns to Security Council* [Press release]. Washington, DC: WWF. Available at: <https://www.worldwildlife.org/press-releases/wwf-un-chief-takes-poaching-concerns-to-security-council>
- ³² Global Initiative against Transnational Organised Crime. (2014). *Wildlife Trafficking Sanctions: the first heavy rounds in a longer war?* Geneva: Global Initiative against Transnational Organised Crime. Available at: <http://globalinitiative.net/wildlifesanctionsfeb14/>



**TRANSNATIONAL ALLIANCE
TO COMBAT ILLICIT TRADE**

TRACIT.ORG

Transnational Alliance to Combat Illicit Trade
One Penn Plaza, New York, NY | +1.917.815.2824
email: info@TRACIT.org | TRACIT.org