



# THE ILLEGAL TRADE IN CHEMICALS



INTERPOL



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**ISBN:** 978-92-807-3783-7

**Job No:** DEL/2281/NA

#### **Recommended citation**

UNEP and GRID-Arendal (2020). *The Illegal Trade in Chemicals*

#### **Credits**

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# **THE ILLEGAL TRADE IN CHEMICALS**

# Acknowledgements

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## Abbreviations

ASGM	Artisanal and Small-scale Gold Mining
CEC	Commission for Environmental Cooperation
Comtrade	United Nations International Trade Statistics Database
CPPP	Chemical plant protection product
DNA	Designated National Authority
EIA	Environmental Investigation Agency
EIU	The Economist Intelligence Unit
EPA	Environmental Protection Agency
ESDO	Environment and Social Development Organization
EU	European Union
Europol	European Union Agency for Law Enforcement Cooperation
FAO	Food and Agriculture Organization of the United Nations
FICCI	Federation of Indian Chambers of Commerce and Industry
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
HHP	Highly hazardous pesticide
HS	Harmonized System
INECE	International Network for Environmental Compliance and Enforcement
INTERPOL	International Criminal Police Organization
IPEN	International POPs (Persistent Organic Pollutant) Elimination Network
iPIC	informal Prior Informed Consent
MEA	Multilateral environmental agreement
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
ONIP	OECD Network on Illegal Trade of Pesticides
PAN	Pesticide Action Network
PANAP	Pesticide Action Network Asia and the Pacific
PIC	Prior Informed Consent
POP	Persistent Organic Pollutant
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
SAICM	Strategic Approach to International Chemicals Management
SESN	Seaport Environmental Security Network
SHPF	Severely Hazardous Pesticide Formulations
SINDIVEG	Sindicato Nacional da Indústria de Produtos para Defesa Vegetal
TRACIT	Transnational Alliance to Combat Illicit Trade
UNEP	United Nations Environment Programme
UNICRI	United Nations Interregional Crime and Justice Research Institute
UNODC	United Nations Office on Drugs and Crime
VCM	Vinyl Chloride Monomer
WHO	World Health Organization

# Executive summary

**Chemicals provide important benefits to society and play a vital role in the global economy, but they also carry risks for the environment and human health, with greater risks to vulnerable social groups. Chemicals can contaminate soil, air and water and can damage biodiversity, and human exposure to chemicals is implicated in a range of acute and chronic health effects. As industries have grown in recent decades, so too have environmental and health concerns, and now a range of multilateral environmental agreements together with initiatives, non-binding legal instruments, national legislation and policy frameworks regulate the trade in chemicals.**

The international community has progressively addressed the challenges in regulating the international trade in chemicals as knowledge in the field has evolved. The multilateral environmental agreements currently in place regulate only a fraction of the tens of thousands of chemicals that are traded today, and target selected toxic substances dangerous to human health and the environment. In these regulatory frameworks, enforcement and implementation challenges abound – gaps in international regulations concerning trade of chemicals and waste, exemptions under multilateral agreements, and inconsistencies among domestic regulations. Many chemicals remain unregulated by international law.

The growth in chemical production has coincided with a growth in illegal international trade – a particular concern for developing countries and for those with economies in transition. This report focuses on the illegal trade of pesticides and mercury, both of which are subject to strong international regulations. Pesticides are commonly used in agriculture and by household consumers, and their effects on health, food safety, and the environment touch virtually everyone. Mercury occurs in many consumer products, and is used extensively in Artisanal and Small-scale Gold Mining (ASGM). The evidence shows that the ultimate users of illegal pesticides or mercury are not aware of the health risks of exposure to these chemicals. In addition, chemical exposure is also a gender issue due to the positioning of men and women in feminized and masculinized sectors.

The value of the global chemical output produced and shipped topped US \$4.1 trillion in 2010. The total scale of the illegal trade in chemicals remains unknown, but some insights are available:

- Annual revenue losses of €1.3 billion in the legitimate pesticides industry in the European Union attributable to counterfeit pesticides
- Estimates that 30 per cent of the pesticides sold in developing countries are substandard
- Reports that the illegal pesticide trade in India represents about 25 per cent of the value of pesticides used in the country
- Estimates that half of all mercury used in ASGM is traded illegally
- An estimated value of illegally traded mercury in the range of US \$100–215 million annually

Many toxic products are too easily accessible in the marketplace or on the Internet. The potential and real economic, social and environmental costs of the illegal trade in chemicals are far from trivial, and legitimate businesses, national economies, and human health and the environment are suffering the effects.

The dearth of reporting mechanisms along the supply chain means that information on illegal trade in chemicals remains scarce, and the development of such mechanisms in enforcement regimes could markedly improve the ability of authorities to target their efforts. Constructive steps in the right direction might include building the expertise and capacity to identify illegal shipments, understanding the obligations inherent in full compliance with multilateral agreements and regulating the trade in chemicals within the prior informed consent procedure of the Rotterdam Convention. Establishing national reporting mechanisms similar to the requirements for annual reporting under the Basel Convention on the generation of hazardous waste could help develop the baseline data that analysts need to assess the gravity of illegal trade within national jurisdictions.

National policies and programmes can promote mercury-free alternatives and reward miners with tax incentives and other commercial benefits for using reduced mercury or mercury-free processes. Similarly, national policy can encourage the development of toxic-free alternatives with special projects through agricultural or environmental ministries or agencies in collaboration with NGOs and civil society partners. This same type of partnership may also help raise awareness among vendors, local farmers, rural communities and private landowners about the health and environmental risks associated with pesticides.

Seized hazardous chemicals or obsolete pesticides not uncommonly appear back on the market. National legislation can provide measures to ensure that used pesticide containers do not return to the market in a new supply chain. This approach may also encourage the development of a norm that seized illicit pesticides be treated as waste to be disposed of in an environmentally sound manner.

In addition, strategies to reduce environmental and human health risks need to account for the hazardous chemicals in such consumer products as cosmetics, toys, paint and food, and should promote the production and distribution of safe products.

Countries can support stewardship programmes on organic and ecosystem-based approaches to agriculture with the participation of industry, NGOs and others. Agricultural extension services can assist in this work, and developing or strengthening extension capacities to assist micro-, small- and medium-scale farmers is a logical complementary strategy.

Enhancing the knowledge of ASGM operators regarding the risks of handling and using mercury may help the operators understand the risks, but for many people the absence of economically viable alternatives means that artisanal gold mining is likely to continue. The combination of education and information on the health and environmental risks and the further dissemination of alternatives to mercury use will gradually encourage operators to change their practices. Meanwhile the legalization and regulation of ASGM can support such efforts, and provide a framework for the delivery of training and education services.

Countries dealing with mercury use in ASGM may benefit from better control of the production and marketing of gold and the harmonization of gold-export regimes to the extent possible to reduce the drivers of illicit cross-border trade. Other

governance strategies may include standardized regional mercury-specific trade frameworks and anti-corruption campaigns at the local and national levels.

One way to compensate for gaps and inconsistencies in regulations is for the relevant authorities to cooperate with each other to the extent possible. Policymakers at the global and regional levels can strengthen coordination among the agencies involved in preventing the illegal trade in chemicals, and can work to ensure that the human resources and the technical means necessary to combat illegal trade are available on the front lines. Additional cooperation strategies may include the development of intelligence systems for sharing information among agencies and the coordination of transnational enforcement operations.

Law enforcement officers are not adequately trained and equipped to detect and recognize illicit chemicals and counterfeit containers. Shipping documents may not report mercury concealed among other materials, or mercury may be delivered clandestinely to a small port by fishing boat. The monitoring and reporting of mercury movements from source to end use and disposal need to be further improved so that the organizations charged with enforcing trade regulations are better informed. Maintaining adequate staffing levels and training frontline law enforcement officers to identify and interdict illicit movements of hazardous chemicals will require adequate resources.

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