

Concept note on assessment

“Illegal and illicit trade of chemicals”

June 2017.

By GRID-Arendal, Norway

Background

Chemicals¹ surround us in our daily life. - From food and clothing to transport and technology, chemicals are the building blocks of the things we use and consume. According to UNEP’s Global Chemical Outlook, the global output of chemicals (produced and shipped) was valued at US\$ 171 billion in 1970, which by comparison in 2010 had grown to US\$ 4,12 trillion. With this increase in the production, trade and use of chemicals, it is evident that chemicals play a vital role in the global economy. While chemicals can provide key benefits to society and people, they also provide risks for human welfare and the environment. Therefore, with the growth in global chemical output and as we are seeing new levels of complexity in the chemical supply chain, sound use and management of chemicals throughout their life-cycle is more important than ever. This is expressed in the Sustainable Development goal (SDG) 12: Ensure sustainable consumption and production patterns² – and specifically through target 12.4:

“By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment”³.

As chemical outputs are growing, so does the regulations of chemicals, which in turns lead to a growth in illegal and illicit activities. The illegal trade of chemicals and waste is also boosted by growing gap between economically and politically strong and weak countries opening up new markets for marginal products. Weak governance and/or limited possibilities to secure overview of transboundary movements allow, particularly low risk illicit activities such as chemical and waste trade, to be carried out.

Moreover, what is waste or by-product for someone is a treasure for others. This opens up possibilities for trade of “adjustable products” to different markets. Among these concerns, emerging issues of chemicals are linked to the concept of global circular economy, opening up for marginal new consumer products coming back to a new value chain.

Furthermore, the increasing usage of chemicals in products and processes also challenges international policy frameworks, and international/ national regulation and law implementation. International and national policy gaps, weak or non-existing regulations provides so-called “grey” areas which can lead to environmental and human security risk.

¹ Definition of chemicals: chemical substances and compounds that can exist naturally and are produced industrially.

² United Nations, Report of the Secretary-General, "Progress towards the Sustainable Development Goals", E/2016/75.

³ Available at the United Nations Sustainable Development Knowledge Platform, sustainabledevelopment.un.org/sdg12

This is especially relevant in developing countries and countries with economies in transition, whereby, weak chemical regulations and (or) poor and fragmented implementation and enforcement of laws and regulations have been identified as areas that needs attention⁴.

Considering these concerns, a key obstacle in reaching the SDG target 12.4, is the illegal trade and illicit markets of chemicals. According to the Strategic Approach for International Chemical Management (SAICM)⁵, progress has been achieved in areas such as risk reduction, governance, capacity-building and technical cooperation. However, extremely little information is available about dynamics, scales and trends related to illegal international traffic of chemicals. This major knowledge gap needs to be addressed.

Therefore, GRID-Arendal, together with partner organizations, suggests to prepare a comprehensive assessment of the current available information of illegal transboundary traffic in chemicals. The objective of the assessment is to provide an overview of an important knowledge gap on illegal trade of toxic, hazardous and severely restricted chemicals, and areas with non-existing or low areas of chemical regulations. Moreover, the objective is to propose recommendation to combat illegal and illicit chemical trade.

The report will contain information about the official global chemical trade and international policies and frameworks. It would provide the current state of information on illegal chemical trade, and its scale, illicit markets and emerging “grey” areas where more enforcement, regulations and juridical attention is needed. It would also include a thorough overview of the human rights and environmental risks associated with the illegal trade of chemicals. The report would have a global scope and scale, but provide specific case studies and examples.

The proposed assessment on the illegal trade of chemicals would be relevant decision-makers at all levels and highly relevant to SAICM process.

To develop this study, GRID-Arendal proposes to form a group of relevant organizations such as Center for International Environmental Law (CIEL), IPEN, Pesticide Action Network (PAN), Basel Action Network (BAN), Global Financial Integrity and similar organizations providing applied research support to decision making processes. The work will build up on existing regional gap analyses such as initiated by the Nordic Council calling for incremental improvement in chemical management⁶. Consultations and overarching advisory support should be maintained with leading international institutions such as United Nations Office on Drugs and Crime (UNODC), United Nations Interregional Crime and Justice Research Institute (UNICRI) and Interpol.

⁴ <http://www.saicm.org/>

⁵ SAICM is a policy framework to promote chemical safety around the world, which was adopted by the First International Conference on Chemicals Management (ICCM1) 2006 to support the achievement of the 2020 goal agreed at the 2002 Johannesburg World Summit on Sustainable Development.

⁶ Honkonen, T., Khan, S.A., (2017). Chemicals and Waste Governance Beyond 2020. Exploring Pathways for a Coherent Global Regime. Nordic Council of Ministers

Timeline: *The next Working Group meeting of the Strategic Approach to International Chemical Management (SAICM) will be held in the autumn of 2018. The report should be launched for this meeting.*

Table of content Illegal trade of chemicals

Content. (NB: suggestions for a table of content).

Foreword

Executive Summary & Recommendations

- Assessment objectives highlighted
 - Scale and scope of illegal or illicit trade of chemicals linked to damaging environmental and human health consequences;
 - Identifying emerging new “grey” areas that requires attention.
- Methodology explained (examination of data bases, available information, prosecuted case studies, involvement of experts etc.)
- Key findings summarized
- Key recommendations

Part 1: Chemicals – all around us and vital to the world economy (the context)

- Definition
- Chemicals are the building blocks of many of the things we use and consume, and provides solutions and benefits for our modern lifestyle. Vital for the world economy.
- Life-cycle span of chemicals – from production –to usage in products – to afterlife (waste).
- Scope: particularly focusing on emerging issues and/or with high-level impact on the environment and human welfare.
 - Pesticides
 - Industrial by-products (e.g., petroleum, chlor-alkali industry, textile industry other waste vs product discussion)
 - Electrical and electronic products chemicals in products (e-waste)
 - Consumer products (e.g., toys)
 - Etc.
- Most important global legal instruments around chemicals to achieve SDGs. (e.g., Basel, Rotterdam, Stockholm Conventions and the Strategic Approach to International Chemicals Management).
- Different products for different markets

Part 2: International policy and governance of chemicals

- International framework – the three key international Conventions
 - the Basel Convention on Control of Transboundary Movements of Hazardous Wastes
 - the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
 - the Stockholm Convention on Persistent Organic Pollutants
- Other relevant framework
 - OECD guidelines on Pesticide compliance and enforcement
 - EU mechanisms

- Bamako and Waigani Conventions
- National law and implementation – an area often weak, fragmented and ineffective.
- Policy analyses on legal and illegal trades. What is legal in one country is illegal in another country.
- Mapping out “grey areas” in legislation frameworks. Challenges with certain product, waste, by-product, nanomaterials etc.

3.2 Case study: area of weak or no regulation

Potential example – to showcase “grey” areas

- Potential grey areas (no international regulations for chemicals in products nanomaterials)
- Emerging issues such as pesticides e.g., land leasing by foreigner investors and trade of obsolete pesticides
- Case study: illegal trade of petroleum. Gasoline is produced through a process of mixing together intermediate products from the oil refineries, a process also called blending. This is often seen as a technical process which has to fulfil the standards and regulations set by society (and the market), however there are examples of fuels being produced of bad quality (with high levels of hazardous components – for example sulphur) and sold to the African markets. This industry, consisting of abuses the legislation gaps in global trade of petrol or petrol by-products to produce bad quality fuels, labelled “African Quality”, at the risk of human life and the environment⁷.

Part 3: Official global chemical output, trade patterns and illegal chemical trade (in hazardous substances and dangerous products)

- Official global chemical output
- What are the global trends and trade routes of illegal chemicals?
- “Different market” strategies.
- What is monetary accountability of illegal trade of hazardous substances? Analyses of selected illegal streams such as illegal petroleum and pesticides (based on case studies).

3.1 Illegal trade of pesticides – economic output

According to the Global Chemical Outlook, agricultural chemicals, such as fertilizers and pesticides, have some of the largest volume uses of chemicals worldwide. The global pesticide trade is being estimated to increase by 2,7 per cent between 2014 and 2019. Consequently, pesticide trade with banned, severely restricted or never registered pesticides is following the global trend. New trends in pesticide trade is linked to land grabbing.

Potential examples

- The annual growth rate of agricultural pesticide in Southeast Asia (especially countries such as Vietnam, Laos and Cambodia) is growing fast, however, there is

⁷ Case study taken from the report ‘A Public Eye Investigation, September 2016’.

also a major black market of highly hazardous pesticides (HHPs) which flows into the countries through porous borders⁸.

- Laos – China trade of pesticide linked to Chinese owned banana plantations in Laos. Some pesticides are imported from China or other countries⁹.
- Kazakhstan – China trade of pesticides linked to Chinese leasing in Kazakhstan (IPEN investigation).
- “Grey areas” such as industrialised countries producing pesticides for internationally vulnerable countries (e.g., Swiss company producing pesticides for Asian market; Denmark producing pesticides from Latin American countries etc.)

3.2. Industrial by-products

Industrial by-products from e.g., petroleum industry, chlor-alkali industry, textile industry etc. The by-products from these industries at times become consumer product to be sold particularly in countries with low economies. Trade patterns. Analyses of existing examples such as Probo Koala, Traffigura, Vest Tank (Norway), or “grey areas” like Swiss company selling weak fuel standards petrol to Africa.

Mercury (also known as quicksilver), albeit highly toxic¹⁰ for humans and animals, are used in a number of industries such as chlor-alkali industry. Because of its toxicity there is a need for safe waste management processes in the end-cycle of the usage. However, mercury is very demanded commodity, therefore it may drift back to value chain instead of safe disposal. There are recorded examples of mercury waste trade such as international shipment of hazardous waste to Cato-Ridge, South Africa, and German company DELA GmbH which indicates illegal flow of illegal trade.

Potential example – clear breach of international framework (illegal)

- The German company DELA GmbH in Dorsten, Germany, was for many years seen as a leading firm in sound management of mercury. However, in 2014, the company’s facilities underwent a police radar which led to the discovery of illegal trade of mercury. In the 2016, the company was convicted by a German court of illegally exporting over 1000 tons of excel metallic mercury to the global market¹¹.

3.3. Electrical and electronic products chemicals in products (e-waste)

New routes, new trends in e-waste trade, emerging destinations (e.g., Hong Kong)

⁸ See Chela Vázquez, Dr. Koa Tasaka, Keam Makarady, Chhoun Monorum and Yim Sopha (2013), with two studies: “illegal pesticides in Cambodia (2011) and “Illegal pesticide trade in Mekong countries: Case of Lao PDR (2011 to 2013).

⁹ See news story from Reuters.com <http://www.reuters.com/article/us-china-silkroad-laos-idUSKBN187334>

¹⁰ Mercury is considered by World Health Organization (WHO) as one of the top ten chemicals or groups of chemicals of major public health concern (WHO Fact Sheet, 2017).
<http://www.who.int/mediacentre/factsheets/fs361/en/>

¹¹ See DorstenerZeitung.de, available news stories: <http://www.dorstenerzeitung.de/staedte/dorsten/Prozess-am-Landgericht-Essen-Giftmuell-Skandal-Ex-Dela-Geschaefsfuehrer-legt-Gestaendnis-ab;art914,2992507>
<http://www.dorstenerzeitung.de/staedte/dorsten/Recyclingfirma-im-Indupark-Dela-stillgelegt-Insolvenzverfahren-eroeffnet;art914,2349952>

3.4. Consumer products

<to be added>

Part 4: Chemicals, environmental consequences and human rights

The environmental impact is often directly linked to the human welfare component, this human welfare and security of vulnerable groups is especially a concern. In 2017, the World Health Organization launched a new report (2017) that draws attention to the linkages between environmental risks (such as air pollution, unsafe water, sanitation, inadequate hygiene or chemicals) and childhood deaths and diseases. The implications of hazardous substances and toxins, was also raised as an issue by the United Nations Special Rapporteur on Human Rights in 2016.

4.1 Case study: pesticides - impacts on environment and human welfare

According to the Global Chemical Outlook, agricultural chemicals, such as fertilizers and pesticides, have some of the largest volume uses of chemicals worldwide.

Potential examples

- <to be added>

Part 5: Solutions & action

- Capacity development on the national level – better equipped to meet the challenges

Concluding remarks

References and further reading

Chela Vázquez, Dr. Koa Tasaka, Keam Makarady, Chhoun Monorum and Yim Sopha (2013). "Illegal Pesticide Trade in the Mekong Countries: Case studies from Cambodia and Lao PDR"

A Public Eye Investigation, September (2016). *Dirty Diesel. How Swiss Traders Flood Africa with Toxic Fuels.*

Geeraerts, K., Illes A. and J-P Schweizer (2015). "Illegal shipment of e-waste from the EU: A case study on illegal e-waste export from EU to China. A study compiled as a part of the EFFACE project". London: IEEP

United Nations, UN (2015), Report of the Secretary-General, "Progress towards the Sustainable Development Goals", E/2016/75. Available from: http://www.un.org/ga/search/view_doc.asp?symbol=E/2016/75&Lang=E

United Nations, UN, Human Rights Council Report (2016), Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes. Available from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/169/26/PDF/G1616926.pdf?OpenElement>

United Nations Sustainable Development Knowledge Platform, sustainabledevelopment.un.org/sdg12

United Nations Environment Programme, UNEP (2012). *Global Chemicals Outlook. Towards Sound management of Chemicals. Trends and changes.*

United Nations Environment Programme, UNEP (2013). *Mercury – time to act.*

World Health Organization, WHO, Fact Sheet, 2017. Available from: <http://www.who.int/mediacentre/factsheets/fs361/en/>

World Health Organization, WHO (2017). *Don't pollute my future! The impact of the environment on children's health.* Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.