Countering global oil theft: impact and solutions

Etienne Romsom
April 2023
UNU-WIDER VIDEO ON OIL THEFT
https://www.youtube.com/watch?v=gWhy-DsvK_M

UNU-WIDER Report 1:
Global oil theft: impact and policy responses
https://doi.org/10.35188/UNU-WIDER/2022/147-1

UNU-WIDER Report 2:
Countering global oil theft: responses and solutions
https://doi.org/10.35188/UNU-WIDER/2022/166-2
A sample of the discovered / reported oil thefts

- **Nigeria**: Theft 400,000 bopd (US$12 bln per year), +1 mln bopd shut-in with US$20 bln/yr tax deferred.
- **Benin**: 80% of fuel demand is smuggled from Nigeria, cost US$863 mln/yr (2010).
- **Algeria**: Fuel smuggling costs US$1.3 bln per year (2013).
- **Syria**: (2015) ISIS illegal oil refineries sold to brokers at US$40 mln/month into Turkey and to Assad regime.
- **Iraq**: UN oil-for-food program (1996–2003) corrupted by 2,200 companies from 66 countries, kick-backs to Sad’m Hussein regime US$1.8 bln.
- **Europe**: Fuel fraud causes US$4 bln / yr in lost taxes.
- **Turkey**: Fuel smuggling at 2.7 mtpa costs US$2.5 bln / yr.
- **China**: (2021) Illicit trade and sales of light cycle oil (LCO) avoids taxes US$3.9 bln / yr.
- **SEA**: (2011-15) 42 tanker hijacks for siphoning of oil/fuel; SEA illegal maritime fuel trade US$10 bln / yr.
- **Turkey**: Fuel smuggling at 2.7 mtpa costs US$2.5 bln / yr.
- **Europe**: Fuel fraud causes US$4 bln / yr in lost taxes.
- **Malaysia to Thailand**: Fuel smuggling over land (only) US$1.2+0.54 bln / yr TH+MY.
- **Mexico**: Fuel theft, 12,500 illegal taps (2018) US$3 bln/yr.
- **Mexico**: Fuel theft, 12,500 illegal taps (2018) US$3 bln/yr.
- **China**: (2021) Illicit trade and sales of light cycle oil (LCO) avoids taxes US$3.9 bln / yr.
- **SEA**: (2011-15) 42 tanker hijacks for siphoning of oil/fuel; SEA illegal maritime fuel trade US$10 bln / yr.
- **Turkey**: Fuel smuggling at 2.7 mtpa costs US$2.5 bln / yr.
- **Europe**: Fuel fraud causes US$4 bln / yr in lost taxes.
- **Malaysia to Thailand**: Fuel smuggling over land (only) US$1.2+0.54 bln / yr TH+MY.
Oil theft observations

• Oil theft is a global phenomenon, not just a developing country problem

• The scale of oil theft is immense: $133 billion / yr, but indirect loss is much greater

• Modalities vary greatly: piracy, theft and extortion under violence, ‘accounting’ theft, artisanal refineries, smuggling, fuel adulteration, meter tampering, tax fraud schemes, bribery and corruption, digital hijacking and ransomware, ...

• Oil theft occurs across the supply chain

• Oil theft follows distinct patterns, e.g. from opportunity crime to organized crime
The various modalities of oil theft

Oil theft syndicates are formed in various ways:

• by aligning theft activities by companies or their employees

• existing crime organizations diversify their criminal activities to include oil theft

• to finance war efforts or political independence struggles

• as a means re-appropriation of wealth and as a form of protest (‘moral economy’)
Oil piracy cripples Benin economy

- Oil theft causes regional insecurity
- In 2011, 22 pirate attacks were conducted off the coast of Benin, mainly targeting oil product tankers
- Maritime insurance companies reclassified Benin as high risk and insurance premiums for ships rose drastically
- Consequently, Port of Cotonou traffic declined by 70%, causing government revenues to fall by at least 28% in 2012
- Benin does not produce any oil and has very little official fuel imports

Note: the graph above shows piracy and armed robbery incidents against all types of vessels, including tankers.
Source: author’s elaboration based on various IMO piracy reports.
Oil theft causes great harm to health and the environment

- Adulterated fuels impair engines and cause increased emissions
- Oil pipeline taps cause significant leakages and soil contamination
- Oil pipeline taps regularly cause fatal explosions
- Artisanal (bush) refineries cause enormous harm

Source: images by Stakeholder Democracy, taken on 21 and 27 November 2012, reproduced from Flickr.com under CC BY-NC-ND 2.0

Source: courtesy of Shell Nigeria
Interlinkages between oil theft and organized crime groups

• Oil theft is lower risk and more financially lucrative than other ‘hard’ crimes; this facilitates natural progression towards more professional approach and larger scale oil theft.

• To control larger portion of the supply chain (increase profits), oil thieves evolve into crime syndicate organizations.

• Oil theft can be conducted to finance other criminal or destabilizing activity.

• The skill sets required for oil theft and for other crimes overlap.

• Oil smuggling routes/methods are often used to smuggle weapons, drugs, and for human trafficking.

• Oil is often stolen / smuggled under arrangements with state organizations, eroding public trust.

• Crime syndicates prefer to diversify their operations to manage their risks.

• Hardening of competition between crime syndicates stimulates violence and crime-on-crime activities.

• Illicit money flows from oil theft intersect with those used to fund other transnational crimes and terrorist undertakings.

*“Downstream Oil Theft: Global Modalities, Trends, and Remedies” ATLANTIC COUNCIL
Oil theft undermines the fabric of society

ISIS used oil theft to finance its terrorist wars

Nigerian criminal groups involved often described their own activities as economically rational, politically necessary, morally defensible, and socially productive*

Crime-on-crime activities and turning local populations into sympathetic audiences for their cause are what make the activities of oil theft syndicates, criminal cartels, freedom fighters, and terrorist groups remarkably similar

Table 6: Mexico oil theft by market share (in 2016)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Organization</th>
<th>Market share (%)</th>
<th>Annual value of oil stolen (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Los Zetas</td>
<td>38.9</td>
<td>372</td>
</tr>
<tr>
<td>2</td>
<td>Jalisco New Generation Cartel</td>
<td>21.4</td>
<td>212</td>
</tr>
<tr>
<td>3</td>
<td>Gulf Cartel</td>
<td>16.3</td>
<td>187</td>
</tr>
<tr>
<td>4</td>
<td>Beltrán-Leyva</td>
<td>7.6</td>
<td>89</td>
</tr>
<tr>
<td>5</td>
<td>Sinaloa Cartel</td>
<td>6.3</td>
<td>74</td>
</tr>
<tr>
<td>6</td>
<td>La Familia Michoacana</td>
<td>2.5</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>Knights Templar</td>
<td>1.3</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>Juárez Cartel</td>
<td>0.7</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: author’s compilation of Atlantic Council report (Ralby 2017).

*Chatham House study published in 2013
Four key reasons for the low priority that the international community seems to give to actions against oil theft

1) It is seen as a domestic problem (mistakenly, as oil theft compromises the integrity of foreign markets and international financial systems)

2) The secretive and violent characteristics of this illegal trade render very difficult any intelligence-based action

3) The transnational organized crime networks involved are too flexible, mobile, creative, and diffuse to easily cut the illegal oil trade

4) Government officials are unenthusiastic about doing anything substantial to disrupt the illegal trade
Why countering oil theft is difficult, but necessary

- Oil theft is most common, yet it is also most covert
- There is a lack of basic data, including:
  - how much oil is stolen,
  - what the stolen oil movements are, and
  - how illicit oil transactions are conducted.
- Oil theft crime syndicates continuously show great flexibility to adjust their oil theft execution strategies and business models
- They know how to exploit gaps in transnational jurisdictions as well as the limited capacity in law enforcement to move to new targets and methods

A particular key concern is the mix of legal commercial operations with illegal oil theft activities.

Crime syndicates work under the cover of and with the support of legal businesses, insiders, and government organizations to provide them with technical/operational support, information, and business stability.

This not only facilitates oil theft and thwarts detection/clampdown but it also contaminates oil markets and financial markets with illicit oil and money.
International solutions to counter oil theft

**Stolen oil volumes**
- Designer tracers or markers for crude oil and fuels
- Protection of pipeline systems exposed to potential illegal taps
- Improved fuel and cargo management systems (including metering technology, measures to avoid meter tampering)
- Standards, regulations and enforcement practices across fuel bunkering value chain
- Discovering oil theft patterns through: data analytics, drone inspections, satellite imaging, remote radar detection
- Transparency on oil theft crimes (SPDC on oil spills, ReCAAP on oil tanker attacks).

**Stolen oil transport & trade**
- Inhibit incentives for fuel smuggling (fuel pricing policies, stop fuel subsidies)
- Targeted checks at strategic oil theft transportation choke points
- Maritime co-operation between domestic and international navies
- Data analytics on ship transponder signals, satellite detection of radar signals and emissions from ships.
- Steep penalties for manipulation of ship transponder signals (bar ships from ports)
- Digital technology to limit manipulation of data (Singapore bunkering operations)
- Tamperproof business processes for third-party surveyor and certification

**Stolen oil money**
- Stringent regulation of cryptocurrency services to break the criminal links with off-the-book payments
- Anti-money-laundering activities: commercial banks as whistle-blowers
- Precise oil theft sanctions: ‘do-not-trade’ lists, bar vessel insurance, etc.
- Financial due diligence by banks that fund oil trading and bunkering co’s liquidity
- Block chain technologies and non-fungible tokens (NFTs) can provide proof of authenticity of the origin
- A more active role of international courts
- Prosecution for bribery (FCPA)
Discussion on opportunities for action and collaboration

Potential collaborating parties:

1. Oil companies (Bunker companies: e.g. Trafigura and Mercuria)
2. Banks and other financial institutions
3. International legal associations
4. Business associations (international bunker industry association)
5. Government institutions (EITI, IMO, ReCAAP, UNODC, UNCTAD, MPA, RTF)
6. NGOs (TRACIT, One Earth Future Foundation, Basel Institute on Governance, Stable Seas)

Source: image by Adam Cohn, taken on 5 March 2008, reproduced from Flickr.com under CC BY-NC-ND 2.0.
A call to action

Perhaps the most worrying impact of oil theft

• beyond the loss of stolen resources and the destruction of the environment from oil spills and artisanal refineries
• is the impairment of governments’ ability to take care of their people and stimulate local development
• In several countries, oil theft syndicates are winning the hearts and minds of local communities
• by offering employment and cheap or free fuel and providing gifts and community services, such as paying for healthcare
• In such countries, oil theft is portrayed as a legitimate (if not legal) part of a moral economy.