Preventing Drug Usage by Utilising Environmental Arguments

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Institute for Security and Development Policy
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GCP Benny Van Camp
Central Drug Department
Federal Judicial Police Belgium
Central Drug Department Fed. Police Belgium
Illegal cannabis production in Europe…
Illegal cannabis production in Belgium…
Cannabis cultivation methods…
Environmental problems caused by illegal cannabis production ?
Scientific study “HILCAN”
Legal hemp growing
National and international conceptualization of the drug problems such as trafficking & production and the follow-up of new trends and phenomena (development of expertise),
Offering practical support on the field to all police services during interventions in labs or plantations – e.g.: Lab Intervention Team),
Developing specific training & creation of a “didactical drug site” situated in “Campus Vesta” Antwerp,
Carrying out missions ordered by the federal public prosecution,
Coordinating cross-border judicial drug investigations (international or national – judicial district level),
Strategic support (analyses) and action planning
Central contact point at Europol (The Hague – NL)
“Focal Point Cannabis”
“Focal Point Synergy”
“Focal Point Cola” &
“Focal Point Heroin”
Lab Intervention Team (LIT)

Composition
- Central Drug Department (Synthetic Drugs or Cannabis Desk)
- Fire fighting service (off. dangerous substances)
- NICC/INCC (Forensic Science and Criminology Institute)

Missions & support
- Synthetic labs (protection & stopping of the production process)
- Illegal dumpings
- Findings warehouses production equipment, glass, chemical precursors and substances (drafting of reports)
- Large-scale cannabis plantations (registration)
- Findings new phenomena & techniques or protection measures
- Offering expertise for preliminary investigations or calculation of benefits
Illegal cannabis production in Europe...
Cannabis cultivation is often trivialised. However,... soft drugs, hard crime!

- is indisputably the most profitable type of drug production. It involves a one-shot investment, limited risks and the specific development of high-tech growing equipment by the legal industry...
- is almost always motivated by financial gain, except for those people who grow cannabis at home (for their personal use),
- is mostly in the hands of criminals and is part of a real criminal chain...,
- often goes hand in hand with violence, intimidation and oppression (trafficking in human beings),
- is probably sometimes used to finance terrorist organisations,
- generates huge profits,
- often leads to the production of bad-quality, dangerous marijuana (dirty),
- leads to social and economic losses (electricity theft),
- is definitely dangerous (fire, flooding, damage to goods, chemical contamination, mould and insecticides),
- involves risks for the police when they discover and dismantle plantations...
Illegal cannabis production in Belgium...
“Involved in the manufacturing & international export of illegal psychoactive substances?”
MDMA-powder

Amphetamines

Weed or marihuana

"Legal Highs"
The evolution of illegal indoor-cannabis grow since 2003...
The evolution of illegal indoor-cannabis grow since 2003...
In 2012, 1111 cannabis plantations with a total cultivation capacity of 330,675 plants were dismantled.

These 1111 plantations have already after 1 harvest (10 weeks) a minimum production capacity of 15,872 kg ready-to-use marijuana with an average wholesale value of 63,489,600 €.

These 1111 plantations have on a yearly basis a minimum production capacity (5 harvests / year) of 79,362 kg of ready-to-use marijuana with an average wholesale value of 317,448,000 €.

Calculated at:
- 4000 €/kg ready-to-use marijuana (current wholesale value)
- Minimum yield of 48 grams per plant
European initiatives...

Focal Point “Cannabis”

23 European Member States
2 “Third Parties” (Norway–Iceland)
Eurojust

Cannabis Cultivation & Production

Sub-Project 1

European Monitoring Centre for Drugs and Drug Addiction
Tightening of the policy in the Netherlands,
Competition – usually violent – among growers in the Netherlands,
Expansion of criminal organisations from the Netherlands,
Increasing demand of the consumer market (coffeeshops Netherlands),
Increasing expertise of the Belgian police,
Improvement of the registration methods,
Huge profit margins and demand...

Total production capacity dismantled in Belgium:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cannabis Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>309285</td>
</tr>
<tr>
<td>2011</td>
<td>337955</td>
</tr>
<tr>
<td>2012</td>
<td>330675</td>
</tr>
<tr>
<td>2013</td>
<td>396758</td>
</tr>
</tbody>
</table>
## Cannabis cultivation methods

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - 5 pl.</td>
<td>(micro-plantation)</td>
</tr>
<tr>
<td>6 - 49 pl.</td>
<td>(mini-plantation)</td>
</tr>
<tr>
<td>50 - 250 pl.</td>
<td>(small plantation)</td>
</tr>
<tr>
<td>251 - 499 pl.</td>
<td>(medium-sized plantation)</td>
</tr>
<tr>
<td>500 - 999 pl.</td>
<td>(large plantation)</td>
</tr>
<tr>
<td>1000+ pl.</td>
<td>(industrial plantation)</td>
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</tbody>
</table>

Cultivation or production of cuttings
Production of cuttings...
Indoor Cannabis cultivation sites...
Hydroponic Cannabis cultivation sites...
Indoor Cannabis cultivation sites...
Indoor Cannabis cultivation sites...
Outdoor Cannabis cultivation sites...
Outdoor Cannabis cultivation sites...
Environmental problems caused by illegal cannabis grow…?
Obstacles, dangers & difficulties...

- Criminal Organisations
- Boobytraps
- Hidden entrances
- Violence, murder & intimidations
- Rips or theft
- Data-collection problems
- Crossborder Problems
- Indication Problems
- Dismantling Problems

- Damage to patrimonium or houses
- Risk of fire
- Quality of the cannabis product
- Use of pesticides & chemicals
- Theft of electricity
- Theft of electricity

Environmental problems?
Illegal dumpings of used materials...
Illegal dumpings of used materials...
Same modus operandi as used in synthetic drug production...
Dismantling problems... (contaminated soil)
Dismantling problems... (contaminated soil)

Source: KLPD, LFO The Netherlands
Use of water... (e.g. 33 liters water for one indoor-cannabis plant)
Uncontrolled use of fertilizers, pesticides, strong acids & bases...
Uncontrolled use of fertilizers, pesticides, strong acids & bases...

Source: Internet
Extraction of “polluted” air ...
Uncontrolled use of CO²-generators...
Uncontrolled use of CO₂-generators... (cylinders)
Uncontrolled use of Ozone-generators...
Use of Sulphur evaporators...

Source: Internet
Mould, bacteria or harmful substances (pesticides) ...
Mould, bacteria or harmful substances...
Theft of electricity...
As an alternative, the use of diesel generators...
Fire Hazards...the probability of a fire is 24 times greater in an MGO!
Discovered cultivation sites due to fire incidents (2008-2013)…
Dismantling problems...
Upcoming scientific study…
“HILCAN” 2014-2015
Hazards of illicit cannabis cultivation for public, users & intervention staff

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Study YILCAN : Yield of Illicit Indoor Cannabis Plantations 2011

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Number of health and safety issues...
These are of particular concern to:

Intervention staff and dismantling companies...

- **Booby traps** (explosives, tripwires,…)
- **Theft of electricity** & electrical wiring (fire in grow rooms, electrical shocks,…)
- **Toxic atmosphere** (use of ozone generators or from recently performed pesticide sprays,…)
- **Use of toxic & allergenic substances:**
  - Cannabis plants: allergic reactions to cannabis (Stockli & Bircher, 2007; Hernando-Larramendi, 2007; recently a lipid transfer protein (Can s 3) was identified as an allergen of C. Sativa – Gamboa et al., 2007;…)
  - **Use of Pesticides** (such as acaricides & fungicides – inappropriate doses and in most cases by unqualified persons…)
  - **Use of Fertilizers** (often substances which the chemical composition is not always clear – rooting stimulators, plant hormones, enzymes to enhance mineralization of organic matter, photosynthesis enhancers…. The toxicity & allergenic potential of these substances is insufficiently understood…)
  - **Use of strong acids and bases** (to adjust pH of irrigation water and nutrient solutions – particularly in hydroponic growing – can irritate skin and eyes and cause burning wounds,…)
  - **Grow lamps** (high power lamps will radiate high UV levels that may damage eyes (acute risk) and/or cause skin cancer (chronic exposure))

Source: Dr. Wouter Vanhove
Advice to always use protective clothing

( PPE: Personal Protection Equipment)...

- Security shoes
- Respirator or oral mask
- Eye protection
- Head protection
- Disposable clothes

Source: Internet

Prof. Daryl Plecas
Prof. David Miller
Cultivation sites direct environment...

- Indoor cannabis cultivation is often performed in residential areas. This might therefore also pose a threat to plantation neighbours, particularly in densely populated (urban) areas.
- Pesticides and fertilizers can pollute local groundwater resources or pollute more distant water basins in case toxic substances are spread through the sewage system.
- Furthermore, atmospheric substances such as ozone or pesticide particles potentially pollute residents' local air quality.
Cannabis users:

The cannabis value chain has no official and/or standardized quality control measures. The latter exposes cannabis users to two particular hazards when using cannabis products:

- Pesticide and/or other plant additive residues on dried cannabis buds,
- Cannabinoid concentrations

*Discovery of small glass balls (between 0.02 and 0.3 mm) in cannabis:*
  *Press release of 9 March 2007 (Direction Générale de la Santé in France)*
  *Press release of 16 March 2007 (SPF Santé publique in Belgium)*
Legal hemp growing...
The cultivation of hemp plants is authorised under strict conditions and with the permission of the Ministère of Agriculture for the purpose of fibre production or scientific research,

- Hemp cultivation is subject to EU regulations,
- These plants are grown outdoor; their THC concentration cannot exceed 0.2%,
- Strong hemp fibres are used for making clothes and rope,
- Furthermore, the cultivation of hemp is financed by the European Union under specific conditions,

- A few people cultivate hemp legally in Belgium!
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