



Food and Agriculture
Organization of the
United Nations

TOWARDS ZERO POLLUTION

4 June 2021

Launch of the
Global Assessment
of Soil Pollution Report



INTERGOVERNMENTAL
TECHNICAL PANEL ON SOILS

UN
environment
programme





Food and Agriculture
Organization of the
United Nations

Status of soil pollution, a regional perspective: Eastern Europe, Caucasus and Central Asia

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424 polluted sites in 8 countries of Eurasia region



Military activity 5.0%



Nuclear activity 9.2%



Oil industry 9.6%



Urban transport & municipal waste treatments 9.6%



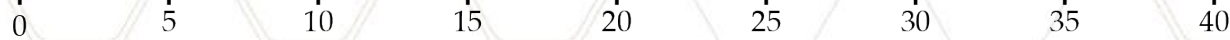
Mining 9.8%



Industry activities 19.2%



Agriculture 37.5%



Region covers 2 mln ha, population is 239.8 million people

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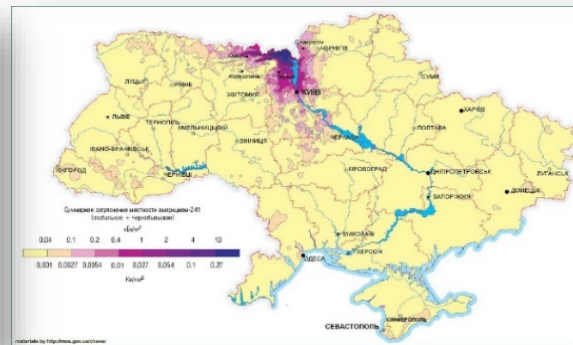


Eastern Europe



Flooding of the mining in Donbas, 2.5 mln t/year of salt and TEs are deposited to soil/water

2019



Prognosis pollution by ²⁴¹Am in 2050. Source: Vidavnistvo, 2000.

Chernobyl Nuclear Power Plant & New Safe Confinement

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Caucasus republics

Incidence of different diseases reported in the Apsheron region and at the national level.

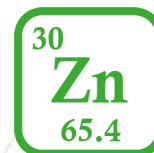
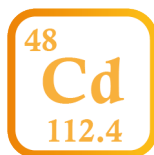
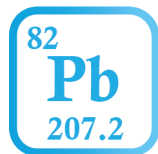
Disease	Cases reported in the Apsheron region (cases per 100 000 people)	Cases reported at national level in Azerbaijan (cases per 100 000 people)
Endocrine system diseases	3 687	115
Circulatory diseases	7 753	634
Digestive diseases	8 674	60



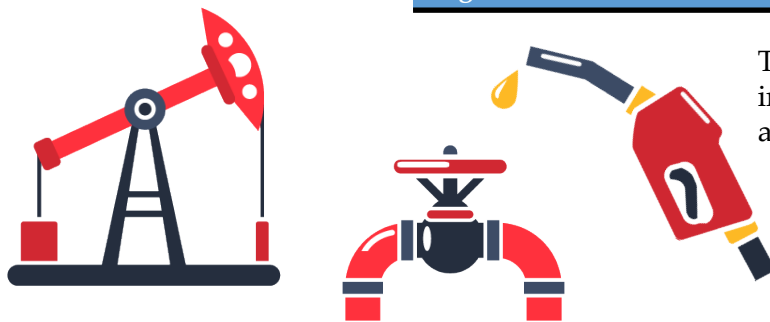
Agriculture



Chemical industry



Trace elements



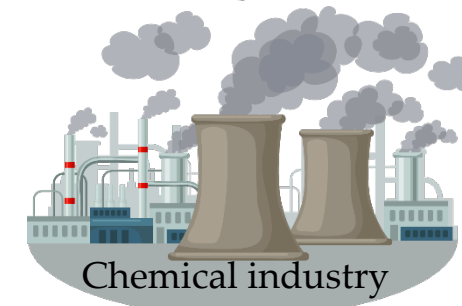
Oil & Gas industry



The World Bank supported the ecological rehabilitation of Apsheron, including the clean-up of two of the most polluted sites: Sabunchu and Surakhani using “dig-and-dump” technology.



Mining



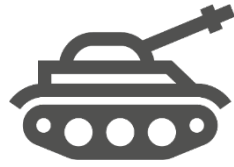
Chemical industry

Central Asia

Limited access to information!



Kazakhstan



Military activity



Oil & Gas industry



Mining



Uranium mining



Uranium mining



Agriculture



Uzbekistan



Oil & Gas industry



Turkmenistan

Long time Uranium mining in Syr Darya River and Fergana valley, contamination by Uranium and hazardous waste, huge negative impact to health and environment, UN Resolution called for assistance.



Agriculture



Mining



Kyrgyzstan



Uranium mining



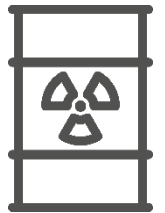
Uranium mining



Chemical industry



Chemical industry



Radioactive waste



Tajikistan



Mining

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POPs and OPs

Common problems for the region: POPs and OPs contamination, improper using of agrochemical, illegally supplied agrochemical, not certified

POPs waste: Middle Asian countries (242.600 t), Eastern European (44.950 t), Caucasus (2.800 t)

OPs waste: Middle Asian countries (76.100 t), Eastern European (34.000 t), Caucasus (17.750 t)

Kazakhstan accounts with 240.400 tones of other POP waste; the RF and Kazakhstan rank highest number of PCB contaminated sites

The RF has large organochlorine production sites (Chapaevsk, Ufa) which created POPs contamination included dioxins

Gaps: inconsistently in inventories data, access to info is problematic, particular in the Middle Asian countries, lack of willing to implement the initiatives in elimination.



08/07/2016

The first convoys carrying 400 tones of **OBSOLETE PESTICIDES** from Moldova headed for disposal in Poland.

<http://www.fao.org/food-chain-crisis/resources/news/detail/en/c/423744/>

Good deal with OP in Moldova: due to international projects in 2006-2007 years 1 150 tones of POPs and 1 060 tones of PCB and PCB-polluted soils were packaged, transported and destroyed abroad.

Good deal with Kazakhstan: 80 tones of electrical transformers and 196 tones of capacitors were incinerated in France after 2015.



IHPA report

<http://www.ihpa.info/docs/library/other/improving/Kazakhstan-CR-ENG-1.4.pdf>

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Gaps & Expectation

- **Gaps:** access to information, knowledge gaps, infrastructure and capacity gaps, lack of awareness and political wills.
- **Looking forward:**
 - ✓ Improvement monitoring and reporting
 - ✓ Exchange the positive experience in between region
 - ✓ Coordination between projects, networking with local authorities & public, involvement of regional experts
 - ✓ Technology and knowledge transfer.