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HEN634 Environmental NGOs and Society

Homework

Toxic chemicals

1. Introduction

At the very general level we can talk about toxic chemicals as about poisons. Whereas it depends on the point of our view because there are many ways to define poisons.

In **biology** which is probably the most important field for environmental studies it's defined as chemical substance causing biological functions failure in organisms by chemical way. We can divide toxic chemicals into two basic groups in biology – toxins and other poisons. The difference is that toxins are produced by biological functions such as defense function of snakes, spiders or chilli peppers¹ (Jelínek, 2006). Whereas other poisons or toxic chemicals are produced in different natural ways or in factories.

In **law** we differentiate toxic chemicals according to different jurisdictions to classes. In European Union we have 8 classes (very toxic, toxic, harmful, corrosive, irritant, sensitizing, carcinogenic, mutagenic). In the Czech Republic we have 6 labels or classes – T+ (high toxicity), T (toxic), Xn (deleterious), Xi (irritable), C (corrosive) and without label (Nebezpečné vlastnosti chemikálií, 2014). Among the most dangerous toxic chemicals we can classify dioxins, POPs (Persistent Organic Pollutants), pesticides, mercury or nuclear waste (Toxické látky, 2014).

Dioxins are very powerful herbicides. They were used as weapons in Vietnam War (under the name Agent Orange). They are carcinogenic and they are dangerous in any amount. (Dioxiny, 2014) It was produced by Spolana Neratovice (we already know about Greenpeace interventions) or by chemical company Givaudan in Italy which caused accident whereas they lost 2 kg of dioxins. It damaged 2 000 hectares of soil (Dioxiny, 2015).

POPs (Persistent Organic Pollutants) are dioxins, Aldrin insecticide or DDT. They stay in environment for a very long time. They are very dangerous because they simulate hormonal functions. They can cause cancer and many others diseases like hormonal or reproduction diseases. Production and usage of POPs are regulated by Stockholm Convention on POP (Perzistentní organické látky, 2014).

Pesticides are very large group of chemicals but laboratory studies suggest that many of them cause dysfunctions of neural system. These influences can be permanent. Some pesticides like DDT were prohibited (Pesticidy, 2014).

Mercury is very toxic metal element. It is liquid at standard conditions. We use mercury in alloys with other metals in dentistry as amalgam. It's used also in physical instruments, in polarography or in lighting valves. It is cumulative poison and it causes organism failure (kidneys, liver, spleen...). Usage is regulated in European Union and USA (Mercury (element), 2015).

Nuclear waste has two main sources – nuclear power plants and scrap from medical diagnostic machinery. In Czech Republic we have two nuclear power plants (JE Dukovany and JE Temelín). They have more nuclear power plants in Japan but the most known is TEPCO company for Fukushima Daiichi disaster (Greenpeace k jaderné havárii v Japonsku, 2011). There are plentiful discussions in the Czech Republic because we have just buffer stocks for nuclear waste and we are not able to adjust place for permanent stock. People are concerned about health and also environmental influences (Radioaktivní odpad, 2015).

¹ vide 8-methyl-N-vanillyl-6-nonenamide/Capsaicin

2.1 Czech environmental NGO

In the Czech Republic there are a few NGO's which have toxic chemicals and toxic pollution as the main campaign issue (Arnika, Ecological institute Veronica, Greenpeace Czech). More NGO's are solving only a bunch of cases, preferably that which are close to them (water pollution, air pollution etc.). The main Czech NGO's campaigning on their web pages about the toxic pollution issue are:

Arnika

An environmental NGO established in 2001. Arnika is very productive at the platform of the environmental protection. The main issues are – Public support, Protection of the nature and Toxic chemicals and waste. Toxic chemical campaign is as old as Arnika, and is build on older campaign made by Děti Země (Children of the Earth). Campaign is divided into several issues like dioxines, DDT etc. Arnika cooperate with other enviro NGO, for example in the issue of implementing of REACH legislation. Arnika is financed by multiple source – grants, contributions, foundations, EU, Czech Ministry of Environment and regional sources (Arnika, 2015). Its tactic is communication with the public, petitions, lobbying, environmental information and media work.

Calla – Association for the Preservation of the Environment

Ecological civic association founded in 1991. They are focusing on providing expertise, consultations, seminars and conferences on the topic about energy security, greenhouse effect and ecology. They are focusing on legal proceedings and legal advice to public (Calla, 2000).

Children of the Earth

An environmental NGO established in 1989. They are campaigning about 3 programs – traffic, nature and public matter. Toxic chemicals are not in the center of the interest, but they have it sometimes as an argument in their debates (Děti Země, 2009;2012). Children of the Earth are focusing on public, environmental education and direct action through influencing the government.

Ecological Institute Veronica

Is an environmental NGO of the Czech Union for Nature Conservation Veronica. Veronica is providing expertise, environmental consultancy and educational services (Veronica 2015). It was founded in 1986. Veronica has very wide range of environmental topics. Veronica campaigning in nature protection, sustainable consumption, climate protection, public participations, sustainable development (Veronica, 2015a). Debate about Toxic chemicals is inked in many Veronica campaigns. It is very active in public area. It is financed by multiple sources, whole list of donors can be found on their websites (Veronica, 2015b).

Greenpeace Czech

Greenpeace is another NGO who is involved in the toxic chemical issue. Greenpeace focus on chemicals that are toxic for nature and humankind – BPA, water pollution, electronic waste (Greenpeace, 2015). It were involved in punching REACH legislation. They have a campaign called Detox. *„Greenpeace is campaigning to stop industry poisoning waterways around the world with hazardous, persistent and hormone-disrupting chemicals. Launched in July 2011, the **Detox campaign** has exposed links between textile manufacturing facilities causing toxic water pollution in China, and many of the world's top clothing brands.“* (Greenpeace, 2015)

Hnutí Duha – Friends of the Earth Czech Republic

This NGO is a division of the big NGO FoE (Friends of the Earth). It was founded in early 90s. „Hnutí DUHA advocates for better environmental policies, works with the public, policy makers, experts and journalists.“ (Hnutí Duha, 2015) Hnutí Duha focus on the topics – climate protection, energy, nature protection. For example, one topic about toxic chemicals Hnutí Duha is dealing with now is harmful herbicide called Roundup (Hnutí Duha, 2015c). Hnutí Duha is specializing in public mobilization. Hnutí Duha is member of networks Friends of the Earth Europe and CEE Bankwatch Network. They are funded through grants, public donations, eshop (Hnutí Duha, 2015b).

2.2 Japan main environmental NGO's

Greenpeace Japan

Greenpeace Japan has started from 1989, which is approaching against toxic substances, nuclear power and so on by, for instance, direct protest movement at the spot, investigation and analysis of how serious environmental destruction is, and letting media know information, having been cooperating with foreign Greenpeace under the policies such not violent but direct action and independent on finances (Greenpeace, 2013, para.2). They collect money by, for instance, “crowd funding” (Greenpeace, 2015, para.2) which collect money from many people who agree with announced projects to be done (Greenpeace, 2015, para.2). One of the example of this NGO campaign is that, in front of the parliament of Japan, demonstration was carried out by Greenpeace Japan activists before one year passed since Fukushima Daiichi power plant accident (Hayashi, 2013, para.1).

Friends of the Earth Japan (FoE Japan)

FoE Japan is approaching for environmental problems from establishment of 1980 globally (FoE Japan, n.d., para.1). FoE Japan's policies are investigation, suggestion of how environmental problems should be improved not only to the government but also in international negotiations, sending messages by using media, and call to make citizen involve in improvement of such problem and so on (FoE Japan, n.d., para5). This NGO is approaching the problems by, for instance, grant toward campaigns and support by other groups (CANPAN, 2015, para 6). One of the FoE Japan campaigns is to try to prevent re-operation of nuclear power plants in Japan (CANPAN, 2015, para.5).

3.1 Case 1 Czech Republic

An example of the NGO strategy in the field of toxic chemicals is well known Czech case of the chemical company Spolana, which produces toxic chemicals like chlorine or PVC up to the present day (Arnika, 2014). Spolana produced also DDT or lindane earlier (Greenpeace, 2011). Arnika is trying to stop the old way chlorine production and liquidate old environmental burdens as soon as possible. Last information says that Spolana had to stop it in 2014 (Arnika, 2014). Arnika is also successful in removing old environmental burdens in the area. Environmental problems and burdens also highlights Greenpeace. They made and published a lot of tests of soil from the area of Spolana. We know about cooperation between Arnika and Greenpeace. For example in 2002 these NGOs tried to intervene through the Czech government to safeguard against flooding (Greenpeace, 2002).

3.2 Case 2 Japan

This part focuses on Japan environmental NGO which are approaching on the issue made by power plants. Leak of toxic chemicals which is from nuclear power plant, Fukushima one, was found after the Tohoku big earthquake (Vaesa, 2013, para.4). In addition, coal thermal power plant left toxins which are harmful to human body but also to the environment (Sharma, 2008, para.1).

Cooperation and each Operation: At specific problems and goals for improving them, Japan environmental NGOs cooperate. The followings are examples. At campaigning for Fukushima power plant accident, many environmental NGOs has been cooperating with each other. FoE Japan and Greenpeace Japan with other NGOs are participating in the following group, “e shift” (e shift, 2011-2015). This group focuses on, for example letting citizen know important information, minimizing the scale of bad effect of the nuclear power plant accident and not to use nuclear power plant by using own groups’ and NGOs’ strong fields (e shift, 2011-2015). In such trend, now, in Japan, the number of establishment coal thermal power plan is increasing after the nuclear power plant accident happened (CAN Japan, 2015, para.3).

In addition, overseas, establishment of thermal power plant in Indonesia is supported by Japanese non-government (CANPAN, 2015, para.5). Japan environmental NGOs have to campaign under such condition today. FoE Japan is approaching the problems of the establishment of power plant in Indonesia, cooperating with Greenpeace Indonesia and the community (FoE Japan, 2015, para.2). Likewise, NGOs can cooperate with other NGO and citizens on the issue. On the other hand, individually, such NGOs campaign depending on their own style for campaign. For example, demonstration was carried out by Greenpeace Japan activists as mentioned above after the Fukushima power plant accident (Hayashi, 2013, para.1). FoE Japan campaigned by statement against re-operation of other nuclear power plant in Japan with other groups (FoE Japan, Fukushima ryokyu genpatsuwo kangaerukai, & Genshiryokukiseiwo kanshisurushiminnokai, 2015, para. 1). Even if they operate individually or cooperate, each campaign can lead to the chance to change Japan’s situation on the issue.

Under such condition of Japan against those power plants, if the campaigns could have been improved more, it would be necessary to make non-governmental sectors understand the toxic issue of Japan and involve more non-governmental sectors and citizens in NGOs campaigns against stakeholders which are not willing to improve the issue. It is important to change Japan’s situation toward the toxic problems.

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