Pesticide Discussion Forum Summary Digest

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# Pesticide exposure in countries of Eastern Europe, Caucasus, and Central Asia

The global community is increasingly aware of the risks of highly hazardous pesticides (HHPs) to human health and the environment. The use of HHPs can permanently undermine human health and affect future generations. The consequences of HHP poisoning range from seemingly mild symptoms to much more serious disorders that can lead to chronic disability or even death.

In 2015, the International Conference on Chemicals Management, at its fourth session (ICCM4), adopted Resolution IV/3, defining highly hazardous pesticides as a global issue of concern in the Strategic Approach to International Chemicals Management (SAICM). The delegates acknowledged that "highly hazardous pesticides have negative impacts on human health and the environment in many countries, especially in low- and middle-income countries" and agreed to take joint action to implement the strategy developed by FAO, UNEP, and WHO. The delegates also indicated that this should be done "with a focus on promoting agroecology-based initiatives." Following the ICCM decision, FAO (the United Nations Food and Agriculture Organisation) and WHO (the World Health Organisation) have developed technical criteria for defining HHPs. The Pesticide Action Network (PAN) has published a substance list based on these criteria, with additional criteria for identifying carcinogenic, endocrine-disrupting chemicals and environmentally hazardous substances. Prior to ICCM4, nongovernmental organizations (NGOs) from Eastern Europe, the Caucasus, and Central Asia (EECCA) region implemented a first-ever study comparing the lists of authorized pesticides in EECCA countries to the list of HHPs developed by PAN. HHPs were found in the registries of approved pesticides in all countries that participated in the research. Moreover, numbers of such HHPs varied - from 32 in Ukraine, 29 in Russia, 15 in Moldova, and 10 in Belarus. A deeper analysis of this issue 4 years later revealed a much larger number of HHPs officially approved for use in EECCA countries.

This document is a summary of the University of Cape Town's Division of Environmental Health's Pesticide Community of Practice held on the 21st of October 2021 entitled: "Pesticide exposure in countries of Eastern Europe, Caucasus and Central Asia". This digest presents the issues, points raised, and information shared by participants in response to the three questions prepared by the presenter, Olga Speranskaya, HEJ Support International, Susan Haffman, PAN Germany, Gohar Khojayan, AWHHE Armenia, Denys Pavlovskyi and Olga Tsyguleva, CSA Ukraine and Oleg Pecheniuk, Independent Ecological Expertise, Kyrgyz Republic. A total of 49 participants joined the live discussion and 4 people blogged their responses. From the members who attended, 47% were from Africa, 35% were from Europe, 2% were from Eastern Mediterranean, 4% from South America, 6% were from Latin America and Caribbean and 6% were from Central Asia.

## About the Presenters

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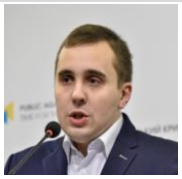

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**DISCLAIMER**: The information below represents the opinions of members participating from different countries expressed during the discussion and shall not necessarily be taken to reflect the official opinion of the DEH, UCT, FAO, SIDA or KemI.

**PRESENTED BELOW ARE THE THREE QUESTIONS AND RESULTING DISCUSSION INPUTS FROM PARTICIPANTS:**

**Question 1: Please comment if you have used the PAN HHP List and PAN Consolidated list of banned HHPs and how was it used? What HHPs are banned in your country? What assistance is needed in your country to identify HHPs?**

| COUNTRY | How the PAN HHP List and PAN Consolidated list of banned HHP were used: |
|---|---|
| Armenia | ➢ The PAN list was used to study the situation in the country. |
| Kenya | ➢ The Centre for Environment Justice and Development (NGO) used the list to study the situation of HHPs in Kenya during 2018.<br>➢ The PAN List of HHPs offers Kenya the opportunity to identify HHPs at the national level and compare the results to the JMPM criteria.<br>➢ The two approaches to identify HHPs (PAN and JMPM) were used to help identify some HHPs that are hazardous to biodiversity e. g. to aquatic organisms, to bees among others. |
| Iran | ➢ The PAN list is an excellent tool. |
| Tanzania | ➢ The PAN list was used to compare to Tanzania's proposed HHP list. Stakeholders meet regularly to discuss how to use alternatives to HHPs. |
| Senegal | ➢ The PAN lists were used in the UCT Diploma in Pesticide Risk Management (DPRM) Course and as a part of writing and exchanges in the field of pesticides. |

| COUNTRY | Which HHPs are banned in your country. |
|---|---|
| Kenya | ➢ Kenya has banned several HHPs (e.g., aldrin, heptachlor, dieldrin, dicofol). |
| Iran | ➢ Many are banned (e.g., Persistent Organic Pollutants (POPs) pesticides, some Organophosphate (Ops), some Neonics, etc.).<br>➢ However, the country has a "Permitted list of pesticides" which is renewed annually and many of the HHPs are still in use. |
| Rwanda | ➢ The pesticides referenced in annex III from the Rotterdam Convention are banned in the country. |
| Tanzania | ➢ Most HHPs are banned (e.g., Cypermethrin, Flumethrin,paraquat, Flumethrin, Magnesium and Phosphide).<br>➢ Currently, some HHPs are under restricted use in the country. |
| Colombia | ➢ HHPs such as carbofuran are cancelled in the register, but not yet prohibited. |
| Nigeria | ➢ DDT, Endosulfan and Methamidophos are banned.<br>➢ For the past few years, the regulatory agency has been phasing out Paraquat and Dichlorvos, with the target date for the ban to be at the end of 2021. The list of the approved pesticides can be found in Nigeria's green book. |
| Zimbabwe | ➢ Paraquat, Aldicarb, Alachlor, Aldrin, Chlordane, DDT, Carbofuran, Deldrin are among the banned HHPs in the country. |

| COUNTRY | What assistance is needed to identify HHPs. |
|---|---|
| Armenia | ➢ Capacity to monitor, lab analysis, awareness about alternatives. |
| Iran | ➢ There is a lot of expertise in Iran, research is being conducted and lists are being produced. However, enforcement of the policies remains a challenge and therefore, help from international related agencies is needed. |
| Rwanda | ➢ Rwanda has systems in place. |

**Question 2: Does data on the use of Highly Hazardous Pesticides in your country contribute to the development and implementation of national legislation aimed at reducing the use of HHPs? Does your country require GHS labeling and Safety Data Sheets (SDS) to be applied to imported pesticides, including HHPs?**

**PARTICIPANT'S RESPONSES:**

**ASIA**

**ARMENIA**

- Including discussions on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in Armenia is important as the system is not yet implemented in the country.

**AFRICA:**

**ESWATINI**

- Eswatini engaged in an exercise of collecting data on obsolete and highly hazardous pesticides in 1998. The data collected helped in coming up with the pesticide act of 2017. Data on clinical cases and pesticides' usage has not helped the country to improve legislation.
- The country requires GHS labelling on imported pesticides from other countries.

**KENYA**

- Currently, a draft law to use the GHS is required in the country. Kenya has developed a GHS guideline for pesticides.
- Kenyan law has no definition of HHPs.
- As most countries are not net producers of pesticides, they lack exposure to the GHS. However, countries still trade with each other and therefore we need to have a regional approach to using the e the GHS and its enforcement.

**RWANDA**

- The GHS contributes towards HHP assessments in the country and is used to update the list of HHPs to be put into legislation.
- Rwanda Environmental Management Authority as the Designated National Authority for the Rotterdam convention follows GHS labelling and data sheets.

**SENEGAL**

- Data on the use of HHPs contributed to the development and implementation of legislation under CILSS to reduce the use of HHPs. This is the main argument for banning paraquat in the area. However, at the national level there are still gaps regarding certain aspects of the legislation.

**SOUTH AFRICA**

- The country does not use HHP data for regulating but hired a consultant to identify HHPs in the country and potential alternatives.
- The country is in the process of implementing GHS, but the labels will only change in 18 months. Consumer products may not be GHS labelled yet.

**TANZANIA**

- GHS and SDS are mandatory for all pesticides.
- Tanzania uses data on HHPs to make decisions when eliminating and banning pesticides.
- Data on HHPs is not yet used in the enforcement of regulations.

**ZIMBABWE**

- A challenge is aligning legislation on banned pesticides with the Multilateral Environmental Agreements.
- GHS labelling and SDS are required when importing pesticides to Zimbabwe. However, the challenge is that the companies do not carry out risk assessments for their imported pesticides and rely on imported data.
- Currently, HHPs are in the process of registering and reviewing legislation.

**ZAMBIA**

- The HHPs in use are currently being reviewed. Therefore, the information will be key in determining further steps in reducing its use. GHS has been adopted and is a requirement for the licensing of imported pesticides (especially HHPs).
- GHS implementation in Zambia is still voluntary.

**EASTERN MEDITERRANEAN:**

**IRAN**

- Scientific papers, data, and national legislation have been difficult to bridge. Despite some success, most data are not used to ban or restrict the use of HHPs.

**Presenter's note**

- The PAN International HHP does not only consist of the table alone but contains a lot of background information on all the criterion used and on the history of the list.

**Question 3: Are there legal mechanisms for the development of organic agriculture in your country? How are they implemented in practice? What is hindering the development of organic agriculture in your country?**

| Region | |
|---|---|
| AFRICA | **Eswatini**<br>➢ There is no legal mechanism for the development of organic agriculture. The country relies on information dissemination and community education to put emphasis on organic agriculture.<br>**Kenya**<br>➢ The lack of political good will be a factor that contributes towards the low uptake of organic agriculture.<br>➢ The government's focus is on promoting agrochemicals (e.g., through subsidies) to achieve food security.<br>**Nigeria**<br>➢ There are no legal mechanisms for the implementation of organic agriculture in the country. A large percentage of farmers are afraid to dive into the business because it is expensive to manage, and the marketing aspect is in low demand when compared to conventional farming practices.<br>**Rwanda**<br>➢ The high density of population in Rwanda may be considered as a hindering factor to the development of organic agriculture as the country is always devoted to achieving food security for its population.<br>**Senegal**<br>➢ There is no label for organic products in the country.<br>➢ Although research on agroecological practices is currently being conducted, ownership by farmers will take time. The same observation with the alternatives (i.e., farmers will need to be made aware of the dangers of pesticides).<br>**South Africa**<br>➢ Organic production is hard to regulate.<br>➢ Aerial spraying is heavily relied on for commercial farming which drifts. There is limited checking of how long a farm has been pesticide-free before becoming "organic".<br>**Tanzania**<br>➢ The implementation of organic agriculture is limited because of the lack of knowledge and resources.<br>**Uganda**<br>➢ Although the national Organic Agricultural Policy of 2019 is in place, implementation, awareness, and confidence in it are low.<br>**Zambia**<br>➢ There are legal provisions that support organic agriculture that is mostly practised in specific farming blocks.<br>➢ Information on organic farming is not easy to access compared to information on chemical use.<br>➢ Organic agriculture is being hindered by the promotion of pesticide use. |

| | |
|---|---|
| | ➢ Agriculture extension officers need to do more to create awareness on the organic farming options available for small-scale farmers in rural Zambia.<br><br>**Zimbabwe**<br>➢ There are legal mechanisms for the development of organic agriculture, but implementation is a challenge.<br>➢ Integrated pest management (IPM) strategies are implemented in the country.<br>➢ As an ecological oriented country, organic farming is a priority to achieve food security.<br>➢ IPM measures are applied, and some agrochemicals (non/less hazardous pesticides) are used as an option.<br>➢ Crop intensification was put in place to help achieve food security. The promotion of the farming system and the desire to use pesticides by farmers in Zimbabwe is a hindrance to the expansion of organic farming. |
| **ASIA** | **Armenia**<br>➢ At an individual level and through two decades of initiatives by international organizations, IPM strategies are implemented. |
| **EUROPE** | **Germany**<br>➢ Organic products struggle to compete with conventional products because of external costs (e.g., health and environmental costs are not included in the product prices).<br>➢ A risk-based pesticide levy/tax is used in Germany. As a result, the price for toxic pesticides is increased and used less. The money gained should then be used to support farmers in the transition towards organic farming. |
| **EASTERN MEDITERRANEAN** | **Iran**<br>➢ Organic crop activities are in the early stages of legal process and labelling.<br>➢ There is a high protentional for organic food to be favourable in the country as every year there is big demonstrations, sales and shows for organic crops (e.g., olive, pistachios, saffron etc.). However, despite the desire for organic food, the wide and diverse types of crops, land, cultures, languages, lack of testing control in rural areas is a challenge for organic food in Iran. |
| **Presenters note** | ➢ It is important to clean up POPs' contaminated sites and stockpiles to avoid illegal trade and contamination. |

## Resources and Further Reading


1. UNEP (2015) IV/3 Highly hazardous Pesticides, Report of the International Conference on Chemicals Management on the work of its fourth session, SAICM/ICCM.4/15
2. PAN International list of HHPs, December 2016 http://pan-international.org/resources/
3. PAN International Consolidated List of Banned Pesticides PAN International Consolidated List of Banned Pesticides | PAN International (pan-international.org
4. PAN List of HHPs, 2021: https://pan-international.org/wp-content/uploads/pan_hhp_list.pdf
5. The WHO Recommended Classification of Pesticides by Hazard and guidelines to classification, 2019 edition: The WHO Recommended Classification of Pesticides by Hazard and guidelines to classification, 2019 edition
6. Future Policy Award 2021 crowns five best policies protecting from hazardous chemicals:2021 Future Policy Award Winners announced - 5 policies from (worldfuturecouncil.org
7. GHS and Pesticides 2019: GHS and Pesticides 2019 (chemsafetypro.com)
8. The Illegal Trade in Chemicals: The Illegal Trade in Chemicals | GRID-Arendal (grida.no)
9. Chemical and non-chemical alternatives to endosulfan http://chm.pops.int/Implementation/Alternatives/AlternativestoPOPs/ChemicalslistedinAnnexA/TechnicalEndosulfan/tabid/5867/Default.aspx
10. Where is Glyphosate Banned? https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate-banned-/
11. De Schutter O. 2011. Agroecology and the Right to Food. United Nations Special Rapporteur on the Right to Food. A/HRC/16/49. http://www.srfood.org/index.php/en/component/content/article/1174-report-agroecologyand-the-right-to-food.
12. De Schutter O. 2014. Report of the Special Rapporteur on the right to food. Final report: the transformative potential of the right to food. Human Rights Council, Twenty-fifth session. United Nations General Assembly. A/HRC/25/57


**If you are not a member, we invite you to join UCT's Pesticide Discussion Forum: https://forms.gle/NzYH5REfUruL3jdm6**

The **Division of Environmental Health** (DEH) Pesticide Discussion Forum is a bi-monthly online seminar for pesticide regulators and resource persons, as well as students in the postgraduate Diploma in Pesticide Risk Management (DPRM). Our aim is to provide support for managing pesticide risks and implementing risk reduction strategies.
DEH is based in the School of Public Health and Family Medicine at the University of Cape Town (UCT). environmentalhealth@uct.ac.za

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