

# COMMUNITY OF PRACTICE ON HIGHLY HAZARDOUS PESTICIDES

Organized by the SAICM Secretariat and the University of Cape Town

Issue: 4 of 2022  
Discussion date: 12 December 2022

## DISCUSSION 4 DIGEST

### The importance of farmer and farmer organisations' perspectives on Highly Hazardous Pesticides

#### INTRODUCTION

Highly hazardous pesticides (HHPs) are acknowledged as pesticides that "present particularly high levels of acute or chronic hazards to health or the environment according to internationally accepted classification systems such as WHO or Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or their listing in relevant binding international agreements or conventions" (FAO and WHO, 2016). Important to note is that HHPs are a small select group of pesticides and are not all pesticides. However, access to HHPs is still prevalent in many countries, particularly in the Global South. As farmers work with pesticides daily, there is a heightened risk of exposure to HHPs. Additionally, not only are HHPs hazardous to human health and the environment, but they are also damaging to crops. As farmers who use HHPs are at risk and may have queries about alternatives, it is critical to hear the perspective of farmers and farmer organisations on this issue.

#### ABOUT THE PRESENTERS



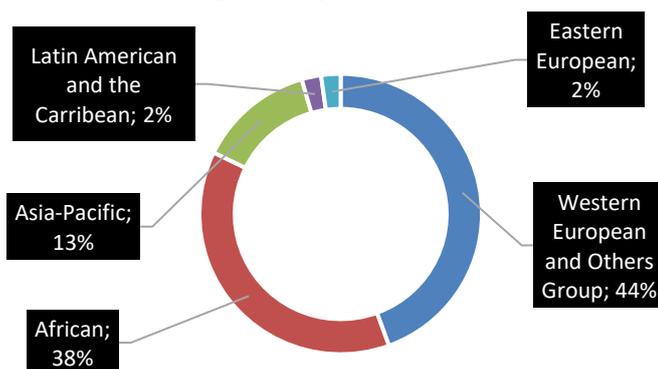
**Prof. Hanna-Andrea Rother** is Professor and Head of the Environmental Health Division in the University of Cape Town's School of Public Health and Family Medicine. Andrea is also an Honorary Professor in the Department of Public Health, Environments and Society, Faculty of Public Health and Policy (PHP), London School of Hygiene & Tropical Medicine. She has worked in the field of chemicals and pesticide risk management for over 30 years researching, teaching, and conducting capacity-building work (e.g., academic programmes, communities of practices, diverse training) in the areas of exposures, risk management, risk communication, policy development and analysis, and risk perceptions. Andrea has published extensively in peer-reviewed journals and led the development of over 40 risk communication tools particularly aimed at low-literate populations and policymakers.



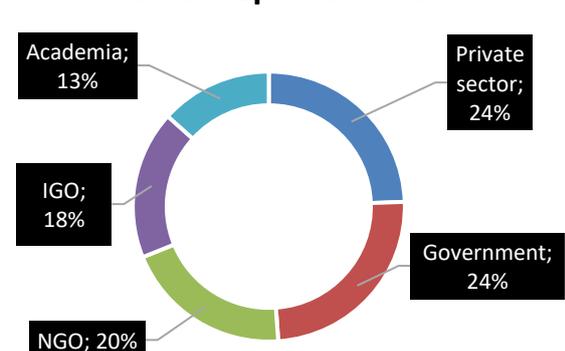
**Andrew Ardington** is the founder of RegenAg SA, The Regenerative Agricultural Association of South Africa. He grew up on a sugar cane and cattle farm in KwaZulu Natal and graduated with a degree in Agricultural Economics from the University of KwaZulu-Natal. In 2016 Andrew got involved in cattle farming which rekindled his interest in agriculture. Since then, he became immersed in regenerative agriculture and the possibilities it presented regarding the healing of agricultural soils, planetary health, and human health.

#### 2022 DISCUSSION 4 ATTENDANCE BREAKDOWN

##### Region representation



##### Sector representation



DISCUSSION4  
2022 TOTAL  
ATTENDEES: 45  
Female: 26  
Male: 19

KEY:  
IGOs -  
Intergovernmental  
organisations  
NGOs - Non-  
governmental  
organisations

## Discussion 4 Summary Points and Looking Ahead

1. Participants discussed that not all farmers are aware of highly hazardous pesticides (HHPs). The barriers identified towards farmers' awareness of HHPs are **difficulty with reading pesticide labels (e.g., unable to read or language barriers)** and **denial of the health risks** associated with HHPs because of the perceived economic trade-offs of not using them. Lastly, participants felt that there is a **lack of alternatives available for farmers to consider and that many are not aware that some current alternatives will not reduce agricultural productivity**.

For a **just transition from HHPs**, informing farmers **must be financed**. Participants felt that **pesticide manufacturers, media outlets** (e.g., television channels and radio stations), **non-governmental agencies and relevant government agencies** have a role in **informing farmers** and farmer organisations **about the risks of HHPs and the alternatives available**. Looking ahead, participants discussed that **farmers should be engaged with during phasing out HHPs** through face-to-face activities such as **farmer field days, training, and awareness programmes**. There was an acknowledgement that current extension agricultural services are not playing this role.

2. Participants discussed that farmers use HHPs as they believe these are the most **effective method to yield immediate results and increase productivity**. A challenge identified with phasing out HHPs was that farmers have **limited knowledge and experience with alternatives**. Participants shared that farmers are concerned that while phasing out HHPs, their livelihoods would be affected. Looking ahead, **policymakers should have public consultation** with farmers before phasing out an HHP. In addition, a suggestion was that **alternatives to HHPs should be subsidised by the government**.
3. A clear message from this discussion is that HHPs are too dangerous for farmers to continue to use. Also, that changing farmers behaviours through training, explaining the risks or applying a human-rights approach will not work to reduce HHP exposure risks for farmers. Rather, the solution must be getting farmers to use alternatives.
4. Another important message from the discussion is that farmers **do not know the active ingredient names of pesticides**. Therefore, informing efforts should refer to product names.
5. Participants were asked whether they have examples of farmers transitioning from HHPs to alternatives or alternative crop protection products. Several examples were given based on country experiences. For example:
  - **Armenia** has an ongoing project on women's capacity for rural entrepreneurship in 10 target communities of Armenia's Kotayk and Vayots Dzor provinces, focusing on safe alternatives in agriculture and agroecology.
  - **Sierra Leone** has been moving towards organic farming.
  - **Tanzanian** farmers are shifting from using HHPs for natural crop protection (e.g., use of ecologically and environmentally sustainable coffee insect-pests control measures such as biopesticides, traps, parasites, attractants, and biological agents).
  - **Indian** farmers are shifting from HHPs to organic methods.
  - **Malaysia** is transitioning away from HHPs. However, there are some exceptions for restrictive use.

Participants from countries like South Africa and Jamaica shared that there is **not a sufficient range of crop protection products available** for HHPs to be replaced in their countries. There is an assumption in agricultural communities that **pesticides are cheap and alternatives are expensive**. Another challenge faced in countries is a **lack of funding for alternatives**. In addition, where there are viable alternatives, there is a **gap between the availability thereof and implementation**. Looking ahead, while farmers transition away from HHPs, participants discussed that **farmers should be supported to implement alternatives**. To assist farmers with a just transition away from HHPs, participants made the following suggestions:

- **Farmers should be involved** in the policy decision-making process.
- **Policies should be developed** to help farmers have a smooth transition.
- **Alternatives** should be easily accessible.
- **Misinformation** from the industry should be addressed.
- **Farmers** should be supported by receiving relevant financed **training** not from industry.

For a more detailed summary of the discussion, see the Annex below.

## ANNEX

### DETAILED SUMMARY OF DISCUSSION 4 2022:

**Disclaimer:** The information in this digest represents the opinions expressed during the discussion of members participating from different stakeholder groups. The views expressed in this document do not necessarily represent the opinion or the stated policy of the United Nations Environment Programme, the SAICM Secretariat, the GEF or UCT, nor does citing of trade names or commercial processes constitute endorsement.

**THE DISCUSSION WAS STRUCTURED AROUND THREE QUESTIONS AND THE KEY DISCUSSION POINTS ARE PRESENTED UNDER EACH QUESTION.**

**Question 1: In your opinion, what do you think farmers or farmer organisations understand about Highly Hazardous Pesticides (HHPs)? Please provide evidence for your statement.**

#### SECTOR

##### Private

- Farmers are aware that Class 1 pesticides are hazardous. Where Class 1 pesticides are used, training and certification are required to purchase and use them.
- The Pesticide Control Authority in Jamaica has a programme to register sellers of restricted pesticides and certify pest control operators. However, farmers are not expected to use restricted pesticides and the licencing of users of agricultural pesticides (e.g., farmers) has not been necessary. Those who are licensed are mainly commercial pest control operators operating in buildings including food areas.
- CropLife produced training material (available on the global website) that includes the risk that pesticides pose and the management thereof. The materials are mainly used by industry organisations, non-governmental organisations, or governments in their training programmes. However, the training is more holistic and not solely focused on HHPs.

##### Government

- Farmer organizations are aware, but most farmers are not.
- There is a need for education among farmers.

##### NGO

- There are high incidences of cancers and various diseases linked to chemicals in farming areas. Though these are experienced by farmers and farm workers, there remains a sense of denial due to the economic risks and no alternatives available.
- Like other global experiences, CropLife and BigAgri dominate the agricultural sector in South Africa.
- The Agriculture Research Council should research alternatives given their commitment to support agroecology.
- It should be mandatory for pesticide companies to indicate on labels and safety data sheets if a pesticide is an HHP.
- SAOSO should play a role with African networks to identify research on alternatives.
- Government is responsible for monitoring safe use. CropLife reinforces risks and safety measures, but if it is inspected, compliance can't be guaranteed. Many farmers have literacy barriers. In addition, instructions for pesticide use are not accessible.

##### Academia

- Pesticide manufacturers should provide information on the components of their products.
- Distributors should have the minimum educational qualifications and should be aware of HHPs.

**Poll 1: How should farmers and farmer organizations be engaged in relation to highly hazardous pesticides? (open-ended) (N=9)**

- Traditionally, **farmer field days** take place on farms. Distributors, extension officers and farmer organisations are invited to attend.
- In the **organic sector, many farmers are aware of HHPs**. There is a need for awareness to spread to conventional farmers. In the Participatory Guarantee Systems South Africa (PGS) network, farmers are encouraged to advocate for the environment.
- **Training, awareness-raising, and enforcement** of bans are needed.
- In South Africa, **retailers for commercial and small-scale farmers** are the most realistic. However, the question is who will provide retailers with the information on hazards and alternatives.
- The **classification and associated label prescriptions** are essential to understand whether prescriptions can be implemented at national/regional levels by local farmers.
- Farmer organisations should be made **aware of the potential long-term risks** associated with the use of HHPs over time.
- **Training and awareness programmes** on pesticides and handling.
- **Education to farmers** is important as there may not be a clear engagement process with small-scale farmers who form a large proportion of the farming community but do not have formal associations/groupings on which they can be reached.
- Farmers and farmer organisations should be engaged at all stages and **made aware of HHPs, labelling, laws, and regulations both local and international ones**.
- Farmer field day sponsorship in Jamaica is usually to **provide meals**.

**Poll 2: Whose role is it to inform farmers and farmer organisations about the risks of HHPs and alternatives to HHPs? Are they the same person/organisation? (N=9)**

- It is the role of **regulators, manufacturers, suppliers**, and all in the HHPs supply chain.
- It is the **industry's role to inform farmers and farmer organisations**. Farmer unions need to work with industry to raise awareness and train farmers on pesticide use.
- In Kenya, it is the **responsibility of regulators/government agencies**.
- The **use of pesticides and their dangers** should be made known. The Pesticide Control Authority would address the **need for protective clothing** and **a plan to prohibit pesticides**.
- If farmers are not aware of the dangers, there is a **high chance that they will develop health issues**. The **Cancer Association of South Africa (CANSAs)** attempted to raise awareness of Glyphosate. However, CropLife rejected the report produced.
- Production manufacturers should **provide information on the product components** and **distributors should be aware of those before providing it to farmers**. The basics should start from the root of the cause. Mainly in low- and middle-income countries (LMICs).
- The **organic sector is making farmers aware of the dangers of** pesticides to their soils, their animals, and their families.
- In Kenya, besides regulators, **civil societies, traders, manufacturers, and distributors** can play a major role in creating awareness.
- Pesticides Authority in Jamaica engages with consumers by way of **radio and television advertisements and other public awareness programmes**.
- **Extension and crop protection authorities**, in collaboration with industry and NGOs.
- The **government** that collects fees from industry are obligated to do a good job to help steward products.
- In the case of an island, the borders can be controlled by working with **customs officers**.
- In addition to the leading role of the SAICM Focal points, **NGOs have a strong role**. For example, in Armenia, Armenian Women for Health and Healthy Environment is conducting training and developing information materials in the national language.

**Question 2: From your perspective, why do farmers use Highly Hazardous Pesticides (HHPs) in your country? List your country in your response.**

**JAMAICA**

- Farmers use HHPs because they believe they are the most effective method.
- The Ministry of Health regulates pesticides in the country.
- There could be less conflict of interest if the interest of farmers is taken into consideration over the general population's health.

## INDIA

- In LMICs, farmers are less aware of the components of pesticides. They are looking for immediate yield-producing stimulators and HHPs for sudden response and longevity of the effectiveness.
- There should be an alternative during the phase-out period. Should this not be done, farmers and their survival will be affected.

## ARMENIA

- In June 2022 the Armenian Women for Health and Healthy Environment prepared “The Situation with Chlorpyrifos in Armenia”, with guidance and support from the International Pollutants Elimination Network (IPEN), according to which the reasons for continued use of chlorpyrifos, for example, was lack of knowledge and limited experience of farmers on alternatives.

## SOUTH AFRICA

- The government should subsidise the registration of organic inputs. There is a need for the government to undergo safety testing, however, it could be expensive.

### Poll 3: Should policy makers have public consultation with farmers before phasing out an HHP (N=16)

- Yes (n=14)
- No (n=1)
- Not sure (n=1)

### Poll 4: Should government's subsidize alternatives to HHPs during the phaseout period of an HHP? (N=14)

- Yes (n=9)
- No (n=2)
- Don't know (n=3)

### Question 3: Do you have experiences of farmers transitioning from HHPs to alternatives (e.g., agronomic practices) or alternative crop protection products? Can you describe these?

#### COUNTRY

#### ARMENIA

- Several projects encourage communities to use alternatives to HHPs (e.g., <https://awhhe.am/local-small-size-red-lentil-production-in-solak-we-have-started-with-a-minimum-but-will-achieve-the-maximum-results/> and <https://awhhe.am/2020-2021-ggf-maintaining-the-health-and-proper-working-conditions-of-greenhouse-workers/>).
- There is an ongoing project on women's capacity for rural entrepreneurship in 10 target communities of Armenia's Kotayk and Vayots Dzor provinces, focusing on safe alternatives in agriculture and agroecology (e.g., training, and information materials in the Armenian language).

#### BENIN

- In Benin, over 80% of small-scale cotton farmers reported acute occupational poisoning from HHPs last year.

#### ETHIOPIA

- In Ethiopia, it varies as there are high amounts of HHPs in some areas (e.g., Ziway).

#### BENIN,

#### INDIA, and

#### TANZANIA

- An [article](#) by PAN UK shows the results of recent smallholder surveys in India, Tanzania, and Benin. The surveys show that smallholders are using (and being poisoned) by HHPs.

#### SIERRA

#### LEONE

- There has been a transition to organic farming in the country.

#### UNITED

#### KINGDOM

- For many years farmers have been supported to move away from HHPs (e.g., <https://www.pan-uk.org/phasing-out-hhps/>).
- Farmers need support by being given viable existing alternatives to control pests.
- Some programmes support thousands of farmers across East and West Africa. However, programmes are oversubscribed and turn farmers away. There is an appetite to transition away from HHPs, but the support for it is a challenge.
- A holistic approach that includes practices and behaviours to manage pests is needed.
- There are a range of measures to address a specific HHP, like, endosulfan (e.g., <https://www.pan-uk.org/coffee-without-endosulfan/>)

	<ul style="list-style-type: none"> <li>➤ There are many examples of farmers switching away from HHPs successfully with different alternatives (e.g., <a href="https://www.pan-uk.org/alternatives-to-pesticides/">https://www.pan-uk.org/alternatives-to-pesticides/</a>)</li> <li>➤ Small-scale farmers use HHPs but gathering data on their use is a challenge.</li> </ul>
<b>TANZANIA</b>	<ul style="list-style-type: none"> <li>➤ In Tanzania, some farmers are shifting to HHPs for natural crop protection.</li> <li>➤ Many farmers are not aware of artificial intelligence and there is a need to raise more awareness of it in a way local farmers understand.</li> <li>➤ The gap between the natural system should be closed.</li> </ul>
<b>JAMAICA</b>	<ul style="list-style-type: none"> <li>➤ Pesticides in the prior informed consent and POPs have a no import notification and class 1 pesticides are prohibited from registration.</li> <li>➤ Alternatives should be identified, registered, and promoted for use.</li> </ul>
<b>INDIA</b>	<ul style="list-style-type: none"> <li>➤ In LMICs like India, some farmers are shifting from HHPs to organic methods. However, farmers are facing problems with it. Small-scale farmers use HHPs less than large-scale farmers. A study in Andhra Pradesh revealed a similar result.</li> <li>➤ In India, small-scale farmers follow traditional practices.</li> <li>➤ Production and consumption of pesticides in large-scale farms increased for long-term effectivity on pests.</li> <li>➤ For more yield production, large-scale farmers started to use HHPs.</li> <li>➤ The proportion is less when comparing short-scale farmers with large-scale farmers.</li> </ul>
<b>MALAYSIA</b>	<ul style="list-style-type: none"> <li>➤ There is a transition from HHPs with some exceptions for restrictive use in Malaysia.</li> <li>➤ Large-scale users may include those sued for trunk injection in oil palm and coconut for restricted use.</li> </ul>

**Poll 5: Is there a sufficient range of crop protection products available for Highly Hazardous Pesticides (HHPs) to be replaced in your country? List country (N=8)**

**No:**

- **South Africa:** There is also the assumption that pesticides are cheap, and alternatives are expensive.
- **Caribbean countries.** Currently trying to identify and document information on alternatives together with NGOs, agricultural research, and academia. However, it is a slow process.

**Not sure:**

- **Zambia:** not sure
- **Kenya:** not sure. This indicates the need for government agencies/ regulators to collaborate. Food safety is entrusted to the Ministry of Health while food security is with the Ministry of Agriculture.

**Yes:**

- **South Africa:** Yes, however, they are all poisonous. Registration of organic inputs is hindered by CropLife. Grow the soil and your plant will be healthy. This requires practical skills transfer.
- **Tanzania:** Yes, in Tanzania there is a sufficient range of crop protection products available, however, most of them are not highly used and we still don't have a database of those crop production products.
- **Armenia:** In Armenia (according to HHP Report by AWHHE, supported by IPEN, 2020) problems include: products not labelled as IPM; The policy framework for IPM not being developed; lack of knowledge & interest from farmers; lack of consumer awareness & demand
- Farmer Field Schools should be subsidised by government programs.

**Poll 6: What other issues are key to address to support farmers and farmer organisations in your country to stop reliance on HHPs? List country (N=6)**

- **The involvement of farmers and farmer organisations** in all decisions is important for implementation.
- The Farmer Input Support Programme (FISP) only offers a package of **support for farmers** that consists of genetically modified organism seed, fertilizer, and pesticides. No alternatives are available.
- There should be **policies that help farmers and provide proper evaluation** after the implementation of policies.
- There is a need for a **readily available and easy-to-implement alternative**.
- **Industry misinformation should be addressed** as it is often the only source of information on pesticides that farmers have. However, it is a conflict of interest.
- The necessary steps should be taken:
  - **Identify** HHPs in use.
  - Find out **which HHPs are causing the most harm**.
  - **Prioritise HHPs** for removal.
  - **Identify alternatives** (focus on IPM and agroecology) that work.
  - **Support farmers** to adopt them through training.
- Viable cost-effective alternatives are needed. In cases where HHPs are used on minor crops due to a lack of alternatives; it should be addressed with information on MRLs.

**HHPs COP:** The Secretariat of the Strategic Approach to International Chemicals Management (SAICM) and the Environmental Health Division at the University of Cape Town (UCT) created this Community of Practice (CoP) to foster online discussions and address key issues related to Highly Hazardous Pesticides (HHPs) among stakeholders from governments, international organizations, industry, academia, and civil society. This CoP is contributing to the SAICM/GEF project on Emerging Chemicals Policy Issues Knowledge Management Component.

This activity is supported by the Global Environment Facility (GEF) project ID: 9771 on *Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals Management (SAICM)*.

**Join the SAICM/UCT HHP CoP at:** <https://saicmknowledge.org/community>

If you have any questions or require clarification on this initiative, please contact the SAICM Secretariat at [saicm.chemicals@un.org](mailto:saicm.chemicals@un.org) or UCT at [uctcops@outlook.com](mailto:uctcops@outlook.com).