

COMMUNITY OF PRACTICE ON HIGHLY HAZARDOUS PESTICIDES

Organized by the SAICM Secretariat and the University of Cape Town

Issue: 4 of 2021

Discussion date: 20 October 2021

DISCUSSION 4 DIGEST

Topic of discussion: Alternatives to HHPs – What are elements of success?

INTRODUCTION

This discussion aimed to promote engagement with and an understanding of alternatives to highly hazardous pesticides (HHPs). An important step in the process to reduce the risks posed by HHPs is the identification of alternative, lower risk, pest management measures, and their subsequent effective implementation. While this step is sometimes considered a major bottleneck which can block regulatory decision making with respect to HHPs, many examples in fact exist of successful implementation of low-risk pest management approaches.

ABOUT THE PRESENTERS



Mark Davis is an independent consultant specializing in pesticide management and sustainable agriculture.



Harold Van de Valk is an independent consultant in pesticide management and environmental toxicology and runs a small consultancy, called Falconsult based in the Netherlands.



Dr Ayanthi Karunaratne is a Medical Consultant in Health Care Management, and she is the National Director of Tertiary Care Services, of Ministry of health, Sri Lanka.



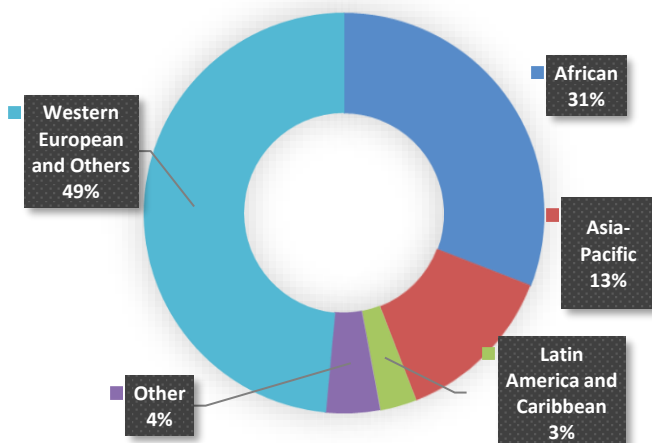
Sivapragasam Annamalai worked for CABI from 2010 to present as Principal Scientist and, from 2017 to September 2021, as Regional Director CABI Regional Center for South-East Asia.



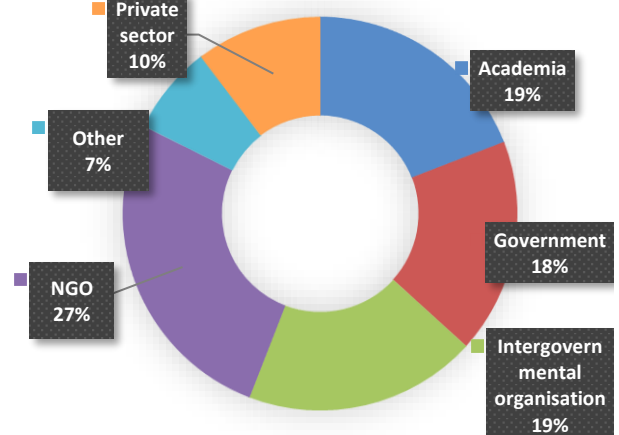
Suzanne Neave with CABI since 2012. Her background is in integrated pest management, and she has worked in Africa, on commercial farms for large part of her career, implementing IPM approaches for horticulture crops.

2021 DISCUSSION 4 ATTENDANCE BREAKDOWN

Regional Representation



Sector Representation



DISCUSSION 4 2021
TOTAL ATTENDEES: 68
Female: 32
Male: 32
Other: 4

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

2021 Discussion 4 Summary Points and Looking Ahead

From this discussion, the following key points were discussed and are important to be addressed and incorporated into the international discussions and work on HHPs:

1. The [draft Highly Hazardous Pesticides \(HHPs\) Alternatives UNEP document](#) is an important document for supporting countries in identifying and assessing alternatives to HHPs. Discussion participants indicated key areas to be included in this document which is important for others to consider when developing guidance documents. These include: The **inclusion of country case studies and success stories** about alternatives is important for other countries to have as examples.

- **Incentives** to switch to fewer toxic alternatives should be considered to accelerate behaviour change amongst stakeholders (e.g., farmers and organisations).
- **Education and training** were emphasised as key mechanisms to encourage sustainable agriculture and reduce pesticide exposure amongst vulnerable groups (e.g., female farmers).
- **Risks** of using alternatives and HHPs should be included (e.g., hazards of the product [with and without mitigation], risk of replacement [use of illegals], risks to crops).

2. Case studies in relation to HHP alternatives were presented by representatives from Sri-Lanka, Malaysia, Myanmar, and India. The case studies sparked interest amongst participants with these key elements being raised:

- The **feasibility of implementing alternative methods** in other countries who have different agricultural contexts (e.g., a tropical climate etc) should be discussed.
- **Efforts and feasibility** of transferring alternative practices to other farming communities.
- The process of **alternatives identification** in Sri Lanka before banning HHPs.

In addition to the questions asked, some members provided overall comments to the case studies. Interestingly, two comments from members representing countries in Africa were that indigenous knowledge plays a key role in replacing HHPs. Other comments were on which stakeholders (i.e., farmers and regulators) should be targeted and how they should be approached.

3. Members were invited to provide comments on the “FAO Pesticide Registration Toolkit” document (<https://docs.google.com/document/d/1Wkw3e5FMe8coNTdzRGR9YFTHoL9yas4h/edit?usp=sharing&oid=115654082375616089527&rtpof=true&sd=true>). Members were asked to provide successful alternatives in their country. From the responses, integrated pest management (IPM) was discussed as successful alternatives to HHPs in Belgium and Zimbabwe.

For a more detailed summary of the discussion, review the Annex.

ANNEX

DETAILED SUMMARY OF DISCUSSION 4 2021:

Disclaimer: The information in this digest represents the opinions of members participating from different stakeholder groups expressed during the discussion. 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 1: What aspects of the draft UNEP guidance are considered most relevant (or need most attention) to identify and implement alternatives to HHPs in your country or by your organization? What aspects are missing from the UNEP guidance and should be included?

<u>PARTICIPANTS'</u> <u>COUNTRY</u>	<u>Organisation responses</u>
Belgium	Private sector <ul style="list-style-type: none"> ➤ Risk analysis should be key - the risk of the product (with and without mitigation), risk of replacement (including use of illegal HHPs) and crop risks etc.
Canada	NGO <ul style="list-style-type: none"> ➤ Specific attention should be made to women farmers and the importance to educate women to minimize exposure.
Egypt	IGO <ul style="list-style-type: none"> ➤ Economic aspects of alternatives.
Germany	Academia <ul style="list-style-type: none"> ➤ Incentives for farmers to change practices. ➤ Farmers are afraid of losing their harvest, living and income.
Italy	Private sector <ul style="list-style-type: none"> ➤ Education and training have a role. The transition would start by shifting the mindset dependency on chemicals to managing the ecosystem, and all the necessary phases in between. ➤ There are many examples of farmers realizing that pesticides are causing more harm and therefore, it is beneficial to move away from them. ➤ The document so far refers to farmers as passive or unaware participants who do not use chemical pesticides correctly. Therefore, farmers' intelligence, creativity and voices should be considered.
Iran	Academia <ul style="list-style-type: none"> ➤ All seven IPM methods that were mentioned in the discussion existed for approximately 50 years. However, it is rarely followed correctly by farmers because of industry/pesticide corporations' pressure and the exportation of HHPs from high-income countries (HIC) to low-to-middle income countries (LMICs). ➤ If the defined economic lines like economic injury level, etc. are followed correctly and pest populations are managed at a lower level, HHPs won't be necessary.
India	Academia <ul style="list-style-type: none"> ➤ Effective alternatives (especially through case studies in their respective contexts) may be helpful for others to replicate and accept alternatives in their respective locations. ➤ Attention is required on the use of pesticides at a household level for vector control and small gardens. ➤ The use of antibiotics/antimicrobials as pesticides in agriculture especially in the rise of antimicrobial resistance is a major public health issue. NGO

	<ul style="list-style-type: none"> ➤ Incentives should be given to organisations (e.g., farmer producer organizations, self-help groups) to produce alternatives such as BCAs and semi chemicals.
Nigeria	Academia <ul style="list-style-type: none"> ➤ Identification of alternatives and ensuring their availability is a priority.
Sri-Lanka	Government <ul style="list-style-type: none"> ➤ Non-agricultural use of pesticides should be taken into consideration.
Scotland	Academia <ul style="list-style-type: none"> ➤ It may be important to critically assess IPM and how it currently works. Recent research indicates that the meaning of IPM has shifted toward allowing or justifying prophylactic uses of agrochemicals - which is against IPM principles.
Togo	NGO <ul style="list-style-type: none"> ➤ There is more emphasis on small-scale agriculture than large-scale commercial agriculture. The two situations are different and need different approaches. ➤ Emphasis on the role of agricultural workers, workers in pesticide industries and farm owners is needed.
UK	NGO <ul style="list-style-type: none"> ➤ The title is at odds with the content. It focuses strongly on HHPs, and more emphasis on agroecological approaches as alternatives. Private sector <ul style="list-style-type: none"> ➤ There is a need to ensure that focus is on HHPs and not pesticides in general.

Responses to **Poll 1**: Please rank the main topics from the UNEP guidance document in order of importance for your country (N=26)



Other (n=1)

- In Zambia the following will apply: Defining HHPs; who should be involved; what is to be replaced.

Responses to **Poll 2**: What aspects do you feel are missing from the UNEP guidance document? (N= 19)

- 10,5% - **pesticide regulators**
- 10,5% - **government decision makers**
- 5,2% - **farmers fix the others below as per the ones above**
- 0% - **agricultural input suppliers**
- 0% - **civil Society**
- 10,5% - **public**
- 0% - **researchers**
- 5,2% - **agricultural extension/advisory services**
- 47,3% - **other**

Question 2: What are your thoughts about these case studies? Do you have any questions? Do you think these kinds of examples could be carried out in your country?

PARTICIPANTS' THOUGHTS ON CASE STUDIES

- Case studies that took different approaches and contexts should be considered. The presented case studies were academic papers that focused on suicide prevention, they are very valuable, but they do not help regulators understand the process of replacing HHPs with alternatives or provide lessons learned by regulators in Sri Lanka. Therefore, it questions who the document is for and what the purpose is.
- There are important takeaways and fundamental concepts that should be taken into consideration everywhere in the world. The centrality of farmers' input and participation, allowing space for error, and learning from failures are important.
- Every nation and every agricultural context should be considered on a case-by-case basis. An important line of inquiry to start with is "Why are existing practices not seen as problems?" or in other words "What is working, and why?".
- A basket of practices being appropriate for the replacement of pesticides should be considered rather than swapping one product for another.
- Since considering the importance of alternatives for HHPs is key, more SAICM/UCT CoP discussions should take place.

PARTICIPANTS' PERCEPTIONS RELATED TO COUNTRY APPLICABILITY

INDIA	It is encouraging to see that there had been no adverse effects on yields when removing widely used HHPs on the market. The narrative in India is that banning HHPs will affect our food security and therefore, the Sri Lanka case-study is important.
ZIMBABWE	Indigenous knowledge is being practiced in Zimbabwe.
KENYA	Indigenous knowledge plays a big role in Kenya.

SRI LANKA CASE-STUDY

QUESTION	ANSWER
Were alternatives identified before Sri Lanka banned the HHPs? Or were alternatives identified and implemented after the bans had taken effect?	For every pesticide, the availability of less hazardous pesticides was considered (e.g., when paraquat was banned, availability of other weedicides was ensured).
Where can the Sri Lanka Control Act with the last amendment be retrieved?	https://doa.gov.lk/scppc-download/

MALAYSIA, MYANMAR, AND INDIA CASE STUDIES

QUESTION	ANSWER
Does Unilever intend to restrict the sourcing of all its tea this type of tea production with much less pesticide use?	A comment on Unilever's behalf cannot be made. However, many of their suppliers are Rainforest Alliance, which includes commitments to adopt IPM, and they are interested to drive transformation in the industry. The big challenge is demonstrating scalability, and cost.
How do you assess the necessary efforts & feasibility of transferring the practices to other farming communities and other countries/geographies?	Specifically for tea, this is a conversation currently underway. A broader industry perspective is the core of CABI's activities which is around the adoption of IPM/ICM practices.
What is the current situation with regards to the uptake of the approach that you were involved in developing?	There is a lot of interest in uptake. There is a need for participatory engagement with farmers to shift their mindset and help them mitigate risks.

Question 3: Please provide cases of successful alternatives in your country and why they were successful?

COMMENTS PARTICIPANTS AWARENESS OF OTHER CASE STUDIES:

UNITED KINGDOM

- Additional resources for regulators on alternatives in the toolkit are welcomed. Case studies would be very valuable, preferably with direct input stakeholders (farmers and regulators).

JAMAICA

- The issue of behaviour change is important in the step to reach farmers who are the main users of HHPs, having an anthropologist a part of the discussion could give some insights on theories on behaviour change.

ZIMBABWE

- IPM in relation to an implemented push-pull strategy to control cotton bollworm.

BELGIUM

- Adoption, adaptation and continues promotion of IPM is key.

PRESENTER REQUEST:

- **Please provide the information in the table below, as complete as possible, and send the file back to: pesticide-management@fao.org, with “Toolkit-Alternatives” in the subject line: <https://docs.google.com/document/d/1Wkw3e5FMe8coNTdzRGR9YFTHoL9yas4h/edit>**

Useful Resources:

1. Draft guidance document: <https://drive.google.com/file/d/1rEllvDQNiawhc-t0whYPL36Jgh7TRwNj/view?usp=sharing>
2. The impact of pesticide regulations on suicide in Sri Lanka: <https://academic.oup.com/ije/article/36/6/1235/816375?login=true>
3. Influence of pesticide regulation on acute poisoning deaths in Sri Lanka: <https://www.scielosp.org/article/bwho/2003.v81n11/789-798/en/>
4. Preventing deaths from pesticide self-poisoning—learning from Sri Lanka's success: [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(17\)30208-5/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(17)30208-5/fulltext)
5. FAO Pesticide Registration Toolkit – HHP module: <http://www.fao.org/pesticideregistration-toolkit/special-topics/highly-hazardous-pesticideshhp/introduction/en/>
6. Outline of the Toolkit's planned alternative's module: <https://drive.google.com/file/d/1rBB6EPFnMUa5eGecQKxwlwN2MeHGZl7/view?usp=sharing>

HHP 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)*.

If you have not already, please 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 or UCT at uctcops@outlook.com.