

# Highly Hazardous Pesticides

Syngenta Responses to Public Eye, 23 January 2019

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## QUESTION 1

**According to the World Health Organization (WHO), exposure to highly hazardous pesticides is “a major public health concern” and they should be phased out and replaced with safer alternatives.**

➤ **Does your company share this view?**

### **Syngenta Response**

It is important to correctly reference the WHO, its research and the actual recommendations contained in the paper as opposed to selective commentary. The quoted WHO source's is: “Exposure to highly hazardous pesticides: a major public health concern”:

[https://www.who.int/ipcs/features/hazardous\\_pesticides.pdf](https://www.who.int/ipcs/features/hazardous_pesticides.pdf)

This paper from 2010 concludes with risk mitigation recommendations and we share the WHO's broad look at a comprehensive set of risk mitigation strategies. To reduce exposure to highly hazardous pesticides and their health impacts, WHO recommends four clusters of action:

- Handling, storage and use
- Elimination and replacement of pesticide use
- Education
- Regulation, monitoring and surveillance
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The WHO confirms that safe use, training and regulation are effective means to reduce potential risks from pesticides. For the ‘elimination and replacement of pesticide use’, the WHO specifically refers to persistent highly hazardous pesticides, pesticides regarded as obsolete, and recommends integrated pest and vector management strategies.

## QUESTION 2

According to the [Food and Agriculture Organization \(FAO\)'s Guidance on Pest and Pesticide Management Policy Development](#), the first two steps to mitigate the risks associated with pesticides are to reduce their use as much as possible and to select products with the lowest risk to human health and the environment. Ensuring the proper use of pesticides is only the third step. The [International Code of Conduct on Pesticide Management](#) clearly states that pesticide manufacturers have – along with governments – a responsibility to take the most toxic pesticides off the market.

- What did your company do in recent years to support the phasing out of highly hazardous pesticides?
- Do you have a concrete plan to phase out highly hazardous pesticides within a determined time frame?

### Syngenta response

The 'pesticide risk reduction' section referred to in the FAO Guidance (page 10) acknowledges both the important role pesticides are playing in pest management and the fact that they pose risks to human health and the environment. The Guidance states that 'pesticide risk reduction and risk management are thus essential to proper and responsible use of pesticides'. On page 12, the Guidance specifies that 'pesticide risk reduction programs generally should contain all three elements simultaneously' viz:-

- 1) Ask the question to what extent pesticide use is actually needed to protect yields;
- 2) Carefully select the pesticides;
- 3) Ensure the proper use of selected products.

*In relation to point 1:* we have no interest in farmers overusing our products as this may lead to resistance or result in adverse environmental issues. Our life-cycle approach to pesticides includes extension services offered to farmers so that they take agronomic decisions including those relating to pesticide use that are sustainable.

*In relation to point 2:* the Guidance specifies that "the choice of formulation and mode of application can have significant effects on volume used and risk of exposure". We believe it is important that farmers can choose from a wide range of formulations and modes of application. This choice is however narrowing due to an increasing politicization of the pesticide registration process. Less choice also leads to higher risk of resistance development. We invest more than USD \$1.3 billion in product research and development each year. These investments result in new product introductions (chemical and non-chemical) that are most often lower risk alternatives to existing products.

*In relation to point 3:* the safe use of products is a key commitment Syngenta has made in The Good Growth Plan. Since 2014, we have trained more than 25 million people in the safe use and handling of our products and to promote awareness around the importance of safe handling and use of products. In many parts of the world we partner with Civil Society groups who support this training and engagement and we would welcome the opportunity to sit down with you and explore how we might be able to further extend this training and its reach in key smallholder markets around the world. Smallholders make up some 70 percent of the people we train.

Read more: [https://www.syngenta.com/~/\\_media/Files/S/Syngenta/2018/Syngenta-Sustainable-Business-Report-2017.pdf](https://www.syngenta.com/~/_media/Files/S/Syngenta/2018/Syngenta-Sustainable-Business-Report-2017.pdf)

The International Code of Conduct on Pesticide Management stipulates that "prohibition of the importation, distribution, sale and purchase of highly hazardous pesticides may be considered if, based on risk assessment, risk mitigation measures or good marketing practices are insufficient to ensure that the product can be handled without unacceptable risk to humans and the environment." Syngenta, along with CropLife International, supports this approach to managing highly hazardous pesticides.

Going beyond regulatory requirements to ensure the responsible use of products through their life-cycle, Syngenta, along with the industry has in recent years conducted full portfolio review. We have

assessed all our formulations sold in the market and have made appropriate risk mitigation decisions on the use or sale of any identified highly hazardous pesticide.

Read more: <https://croplife.org/a-responsible-approach-to-highly-hazardous-pesticides/>

### QUESTION 3

**Fourteen of the 32 active substances that Syngenta uses in its "key marketed products" (see list in [20-F report](#) on page 19) are on the [list of highly hazardous pesticides of the Pesticide Action Network](#). Among them, one WHO Class 1b pesticide (tefluthrin), four classified as likely human carcinogens by the US EPA (chlorothalonil, isopyrazam and sedaxane) and IARC (glyphosate), and two classified as endocrine disruptors by the EU (atrazine and lambda-cyhalothrin). Also, two other active substances (cyproconazole and propiconazole) Syngenta uses in its "key marketed products" have just been classified by the EU as reproductive toxicant category 1B and will make it in the next version of the PAN HHP list.**

- **How is this compatible with the need to phase out highly hazardous pesticides (HHPs) in order to protect human health and the environment?**
- **Would you be ready to commit to phase out all highly hazardous pesticides in your portfolio?**

#### **Syngenta response**

A hazard is the potential of a substance to cause harm. Whether harm from this substance actually occurs depends on the extent of exposure to the hazard (the risk of harm). By way of example: Ultraviolet radiation (sunshine) is inherently hazardous because its energy can burn the skin and cause genetic damage in skin cells. Efficient risk mitigation measures include reducing exposure by staying in the shade, using sun cream, wearing a hat and covering the skin with clothes.

The hazardous nature of crop protection chemicals alone does not make them 'highly hazardous'. The crucial point is their risk versus benefits under recommended use conditions. A specific active ingredient may be considered potentially hazardous but it is the dose that makes the poison. Everyday chemicals like caffeine, gasoline (benzene), alcohol (ethanol), ibuprofen, and table salt can be hazardous at high doses, but normal uses are considered safe. The same is true of pesticides.

Syngenta is committed to ensuring that such risk is appropriately addressed and minimized so a variety of products are available to help protect crops, people and the environment. We follow stringent product development criteria and while thousands of chemicals are analyzed, those with potential negative side effects are screened out from the very beginning. Products are then thoroughly tested according to local regulatory requirements and independently agreed international standards. If they are safe for intended uses, and approved by the competent authorities, they are delivered to the market responsibly.

Going beyond regulatory requirements to ensure the responsible use of products through their life-cycle, Syngenta has in recent years, along with the industry conducted an individual portfolio review. We have assessed all of our formulations sold in the market and have made appropriate risk mitigation decisions on the use or sale of any identified highly hazardous pesticide.

Together with the industry, we support the International Code of Conduct on Pesticide Management, which calls for regulating crop protection products based on risk, not hazard. We do not agree with the list that PAN has developed and we would be happy to meet with you and to discuss our position, explain our decision making criteria and scientific assessment processes.

#### QUESTION 4

**According to our estimates based on industry data, the sales of the 40 Syngenta pesticides listed by PAN as highly hazardous represented about 40% of Syngenta's pesticide sales in 2017. We therefore come to the conclusion that the sale of HHPs is a key part of Syngenta's business model.**

- **Can you confirm this assessment? If not, what is the share of your pesticides listed by PAN as HHPs in your global pesticide sales?**
- **How is this compatible with Syngenta's commitment to improve the sustainability of agriculture, to help biodiversity flourish and to help people stay safe?**

#### **Syngenta response**

Our strategy is to grow through customer-focused innovation. We accept our responsibility to develop safe and sustainable products and steward them carefully, investing approximately 30 percent of the cost of a new active ingredient on product safety.

As noted in the response to Question 3, we have in recent years undertaken a thorough assessment of our portfolio and we have taken appropriate risk mitigation actions where required. We would be happy to meet with you and explain our decision making and assessments in more detail.

Together with industry, we support the International Code of Conduct on Pesticide Management, which calls for regulating crop protection products based on risk, not hazard. With this assessment methodology in mind we do not agree with the list that PAN has developed. A principle point of difference with the position of PAN is that we sell formulations in the marketplace and it is therefore entirely appropriate and indeed to look at formulations, not active ingredients.

The Good Growth Plan is informing the way our products and services contribute to a sustainable agricultural system. Collectively, the Plan's six commitments contribute towards delivering the UN Sustainable Development Goals. The Plan's principles and priorities are deeply embedded in the way we do business. As it has continued, we have begun to assess not only our progress but also the nature and quality of the value we are adding: the impact on people, communities and the environment. As we build what we learn into our commercial offer, we are also compiling the evidence that it delivers real, measurable value for growers and society at large.

The sustainability of agriculture relies on biodiversity – for plant breeding, pollination and food diversity. A key strategy to reverse the loss of species is managing less-productive farmland alongside fields and waterways to reintroduce local species, provide buffers for soil and water, and connect wildlife habitats. This enables sustainable intensification on more productive land.

We have also made the commitment to train 20 million farm workers on labor safety by 2020. We share good agronomy practices, combined with safe-use and environmental stewardship, through initiatives such as locally-tailored Syngenta Learning Centers on demonstration farms.

Read more in our Sustainable Business Report 2017 (the 2018 Sustainable Business Report will be released in late March 2019.)

<https://www.syngenta.com/~media/Files/S/Syngenta/2018/Syngenta-Sustainable-Business-Report-2017.pdf>

## QUESTION 5

**According to our research, your company sells 50 different pesticides that are not authorized for use in your home country, Switzerland. 16 of them are specifically listed in the [Swiss PIC Ordinance](#) as having been “banned” for reasons of health or environmental protection. Nevertheless these pesticides are sold in low and middle income countries.**

- **Is it legitimate to sell products that are considered too dangerous in Switzerland to lower income countries, where regulations are weaker and workers less protected?**
- **Would you be ready to commit to stopping the sale of pesticides that have been banned in Switzerland for reasons of health or environmental protection?**

### **Syngenta response**

The Prior Informed Consent (PIC) procedure is an administrative transparency and control mechanism connected with the international trade of affected products between contracting countries (called parties). It requires each party to decide whether or not it allows the import of affected products. PIC listing does not constitute an international ban, any prohibition of use or recommendation to do so and it is disingenuous to suggest otherwise.

We manufacture active ingredients in a just few countries but we sell these products in more than 90 countries the world over. Monthey is the largest of our six production sites worldwide. It is however nonsensical to suggest that any given industry could or should create production facilities in every country where its products are sold and our industry is no different. We choose locations for manufacture that have the highest standards of quality, safety and environmental performance, including Switzerland. The 90+ countries to which we sell our products then benefit from this world class manufacturing.

In the manufacture of products we comply with all of the regulatory and safety standards required by the manufacturing regulatory authorities of that country. Similarly we comply with all of the regulatory and safety standards of the countries where our products are registered for sale. The decisions of sovereign governments to support and allow product manufacturing are entirely separate from the decisions of sovereign governments to support the sale of products that have been manufactured whether in that country or elsewhere.

Registration and commercialization of a product take into account specific local needs and it is very common for a specific product to be registered in one country but not in another. Different regulatory systems, climatic and agronomic conditions, farming systems and farmers' needs are a reality. From a business perspective, the registration of a product only makes sense if the market potential justifies the expenditures. This explains very clearly why what we produce in Switzerland may not be necessarily registered or sold in this country.

## QUESTION 6

***On its website, Syngenta Brazil claims: Nós da Syngenta somos orientados para desempenhar uma agricultura capaz de alimentar uma população crescente de uma forma verdadeiramente sustentável – respeitando o meio ambiente e todas as pessoas da cadeia que participamos. Our research shows a different picture. Syngenta is the leading seller of highly hazardous pesticides in Brazil. Syngenta sells 45 pesticides in Brazil, 20 of them are on the [list of highly hazardous pesticides of the Pesticide Action Network](#) and nine of them are specifically listed in the [Swiss PIC Ordinance](#) as having been “banned” for reasons of health or environmental protection.***

- ***How is this compatible with your commitment to promote a "truly sustainable" agriculture that "respects the environment and all the people"?***
- ***By doing so, aren't you violating your obligation and commitment to respect human rights and the environment (that "exists independently of States' abilities and/or willingness to fulfil their own human rights obligations"), as defined by the UN Guiding Principles on Business and Human Rights?***

### **Syngenta response**

We do not agree with the list PAN has developed. Furthermore, the properties of a specific active ingredient should not be confused with the risks of formulated products under actual agronomic conditions of use. Formulated products include active ingredients in diluted form to ensure there are no unacceptable risks from their use. In all the markets where we are present, we sell formulations that have been carefully assessed and approved by the respective regulatory authorities. Syngenta complies with the rule of law and all regulations wherever we operate.

Pesticides undergo extensive health, safety and environmental testing and rigorous regulatory review before gaining market approval. Globally, the industry carries out rigorous studies on the possible effects of products on human and animal health before applying for a pesticide registration. These are further supplemented by the studies of national regulatory agencies. It is also important to emphasize that industry and regulatory authorities regularly monitor developments in the patterns of potential exposures among pesticide users in order to ensure continued safety in use.

All Syngenta crop protection products are thoroughly tested to ensure that there are no unwanted effects on human health, beneficial insects such as bees, the environment, or on water sources.

The Regulatory System for pesticides in Brazil is one of the most rigorous in the world and it takes, approximately 10 years of studies and research before reaching the market as an effective and safe new product. Before a product may be sold, it must comply with all requirements and standards and be classified and approved as safe by the competent regulatory authority (in Brazil, this may be the ministry of Health, the Environment, or Agriculture).

Like any market, all products developed by Syngenta for the Brazilian market are subject to an extremely rigorous assessment and regulation process. The authorities focus on the definition of farmer safety, safe dosages and maximum residue limits in food, the environment, water and crops. To perform their work, they thoroughly look at toxicological and residue studies that follow international standards of quality and meet the legal requirements for registration of pesticides.

It is also very important to acknowledge that agricultural pesticides are produced to combat pests and diseases that affect certain crops. In tropical countries like Brazil, pest pressure can be very intense. Products used in Brazil may not be necessary in countries where low winter temperatures naturally reduce some of the pest pressure. In other words, the demand for a certain product varies according to the type of pest, crop and climatic conditions, thus influencing the market. Countries have different regulatory structures and this characteristic is also valid for the registration of pesticides. Each country presents its own approach to the risk management of these substances.

See more about our commitments made to improve the sustainability of agriculture

<https://www.syngenta.com/what-we-do/the-good-growth-plan>

<https://www.youtube.com/watch?v=ucdMpoSPrGI&feature=youtu.be>

<https://www.syngenta.com/media/media-releases/yr-2018/30-08-2018>

## QUESTION 7

**According to our analysis of the data from the official drinking water monitoring program of the Brazilian Ministry of Health (Vivagua), seven pesticides sold by Syngenta in Brazil (atrazine, diuron, glyphosate, mancozeb, s-metolachlor, profenofos and simazine) are commonly found in the drinking water of millions of Brazilians at levels sometimes 10-20 times higher than what is permitted in Switzerland and the European Union.**

- **Do you think that it is responsible to expose millions of people to highly hazardous pesticides in their drinking water?**
- **Are you taking any concrete measures in Brazil to prevent the contamination of drinking water with highly hazardous pesticides? Are you contributing to the water testing in order to identify the risks?**

### **Syngenta response**

Good management practices and the responsible use of pesticides are essential in avoiding point source contamination. Syngenta works directly with farmers and communities through its sales teams and allies in expanding its product stewardship programs to advise them on the best safe and efficient use of our products to ensure safety to human health, the environment and water sources.

Chemical products are tested by regulatory authorities across the world on their impact on water quality before they are approved for commercialization. Residue levels are highly regulated and constantly monitored and the reality is that tolerance levels differ between jurisdictions and some countries may take approaches that are not necessarily based on scientific criteria. For example, the EU general groundwater limit for all pesticides is 0.1 parts per billion (ppb), regardless of toxicity. This standard is neither health-based nor scientifically supported. And, the WHO has raised its recommended safe level of atrazine in drinking water to 100 ppb, which is 33 times higher than the US limit of 3 ppb.

We do not consider the active ingredients mentioned in the question to be 'highly hazardous'.

Read more: Regulatory limits for pesticide residues in water (IUPAC Technical Report):  
<http://publications.iupac.org/pac/2003/pdf/7508x1123.pdf>