

# **A conversation with Mark Davis, Michael Eddleston, and Leah Utyasheva, June 18, 2020**

## **Participants**

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- Prof. Michael Eddleston – Director, Centre for Pesticide Suicide Prevention
- Dr. Leah Utyasheva – Policy Director, Centre for Pesticide Suicide Prevention
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**Note:** These notes were compiled by GiveWell and give an overview of the major points made by Mr. Davis, Prof. Eddleston, and Dr. Utyasheva.

## **Summary**

GiveWell spoke with Mr. Davis, Prof. Eddleston, and Dr. Utyasheva of the Centre for Pesticide Suicide Prevention (CPSP) as part of its investigation into a potential renewal of the GiveWell [Incubation Grant](#) it received in 2017. Conversation topics included CPSP's country-level work, regional intergovernmental organizations, global interest in pesticide regulation, international chemical conventions, integrated pest management, and CPSP's exit strategy.

## **CPSP's country-level work**

### **India and Nepal**

To achieve the goal of eliminating pesticide suicide globally, the Centre for Pesticide Suicide Prevention (CPSP) believes it must engage with the two countries where the most pesticide suicides are occurring: China and India. So far, CPSP has prioritized working with India first. CPSP is also doing work in Nepal, which it expects to serve as an exemplar project demonstrating that its program is effective in reducing suicides.

### *Monitoring*

Progress on pesticide bans has already been made in both India and Nepal. CPSP plans to continue collecting data on pesticide suicide in these countries, because banned pesticides could be replaced by alternative hazardous chemicals. In most cases, these new chemicals are less hazardous than the ones they're replacing, but CPSP believes it is important to continue monitoring the pesticide suicide situation in the wake of a ban to collect data on the effectiveness of the bans. In India and Nepal, data collection will occur through police departments and toxicology laboratories. CPSP expects to see marked falls in suicide rates in these countries over the next three years.

### *Ongoing legislation*

CPSP is continuing to engage with the legislative process in India, where a government entity called the Anupam Verma Committee was established in 2013 and recommended banning 66 pesticides. CPSP is drafting written materials to support local entities approaching the government in support of the most recent bans of 27 pesticides proposed by the pesticide regulator. Industry groups are opposing the proposed bans, but CPSP believes their opposition is primarily focused on malathion and chlorpyrifos, which are not major contributors to pesticide suicide.

### **Other countries**

CPSP also seeks to work in other small countries, similar to Nepal, where a success story may serve as a proof-of-concept and as an example for other countries to follow. Some countries experiencing particularly severe effects from highly hazardous pesticides (HHPs), such as Guyana and Tanzania, have approached CPSP for assistance individually. In those cases, CPSP works closely with the country's government (typically the pesticide registrar) to address HHP reduction and suicide prevention in whatever manner is most appropriate in the context of that country.

Some of the countries that have requested assistance from CPSP have needed relatively small amounts of support, such as Taiwan and Malaysia. These small-scale projects can also serve as examples of the effect of pesticide regulation on pesticide suicide prevention. CPSP also believes that its program will increase national regulatory bodies' capacity to engage with the pesticide evaluation process as well as educate them about sustainable replacements for HHPs.

### **Regional intergovernmental organizations**

Regional collaboration in pesticide regulation has been increasing over the past decade. Part of CPSP's strategy is to engage with regional intergovernmental organizations, which aim to help member nations develop economically and politically within their regions. Within these organizations, pesticide regulatory bodies already exist in many regions, including each of South, East, and West Africa, Southeast Asia, the Caribbean, and the Andes, and they take on some of the key roles and support national pesticide regulations in their member countries. These regional bodies are typically forums for national pesticide regulators. They typically meet on an irregular basis, and generally require external funding to do so.

One of the benefits of working with regional bodies is that individual countries often have limited resources to devote to pesticide evaluation and regulation. Developing countries typically employ fewer than five people to work on pesticide regulation, and many of these regulators don't have access to an in-country laboratory. Working regionally allows countries to pool their resources and share laboratories, testing facilities, data, expertise and experience across national borders. Increasing countries' regulatory capacity could also allow them to begin evaluating the

environmental and health-related effects of pesticides, rather than focusing solely on their agricultural efficacy.

### **Influencing national policy**

While regional bodies support their member countries in evaluating pesticides and may develop regional pesticide regulation guidelines, individual countries are ultimately responsible for passing legislation. However, CPSP believes that cooperation between national and regional entities can accelerate the passage of national pesticide regulations.

Additionally, countries may have more power to influence countries within their own regions than they do on the global stage, because countries within the same region often share environmental conditions and cultural practices. Countries may also be more likely to follow the example of countries with which they have political ties.

#### *Examples of regional influence over national regulations*

The West African regional organization, Comité Sahélien des Pesticides (CSP), assisted one of its member countries, Burkina Faso, with the data collection and data analysis processes of its evaluation of paraquat, a chemical that the country then banned nationally. Burkina Faso also shared the results of its investigation at the Rotterdam convention through a formal notification, where it had the potential to be listed as a Severely Hazardous Pesticide Formulation and influence many other countries' policies.

Guyana, which is active in the Caribbean regional regulators' body, the Coordinating Group of Pesticide Control Boards of the Caribbean (CGPC), is also interested in reducing suicides from pesticides, most of which are caused by paraquat and aluminium phosphide. It is planning to discuss the issue with the rest of the countries in the region to find out whether others are experiencing similar problems with the chemical and to seek collaboration in figuring out what further work can be done to solve these problems. Guyana has approached CPSP for assistance.

While many of the regional bodies are still in the early-stage process of developing their operational systems, some have already taken steps on the pesticide regulation front. The West African CSP has already recommended chemicals to be listed on the Rotterdam Convention, while the Caribbean CGPC has created an internal list of chemicals it would like to eliminate.

### **CPSP's role in regional bodies**

CPSP believes that national regulatory successes can be amplified at the regional and global levels by countries' participation in these regional intergovernmental bodies. CPSP's aim is for there to be sustainable and effective pesticide regulation mechanisms at the national and regional levels within the next three to five years.

CPSP's immediate goal is to have one full-time staff member for each of the regional intergovernmental organizations it's working with, except in cases where a full-time staff member is not required or is already in place. These staff members will also participate together in a forum, in order to improve the interconnectedness between regional organizations and potentially provide additional resources to one another when necessary. CPSP believes that increasing the capacity of these regional bodies by even a small amount could accomplish a lot, if resources are used efficiently.

CPSP's role in these regional bodies will be to provide expertise and promote suicide as an important factor in pesticide regulation considerations. CPSP plans to engage with local experts and United Nations (UN) agencies within each of these regional bodies, as well as facilitate the UN's Food and Agriculture Organization (FAO) staff's efforts to help with local legislation by making connections that might not be obvious or easily accessible to them, such as health and forensic services. CPSP is also helping with local data collection on HHPs within individual countries.

CPSP intends to do a Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis for each of the regions it works in, in order to form an action plan for how best to work with national and regional authorities, including regional economic councils and national finance and environment ministries, in each region. Ultimately, CPSP is aiming to find ways to get issues related to HHPs, health, and pesticide suicides more highly prioritized in pesticide regulation discussions, which often involves promoting awareness of these issues among national and regional authorities.

## **United Nations involvement**

### **Pesticide regulation toolkit**

Pesticide regulators' daily work typically centers around ensuring that farmers have plant protection tools available to them; they are not typically focused on banning HHPs and do not always have the resources to engage in such a difficult and complex process. The UN's FAO has developed a pesticide registration toolkit to help regulators in developing countries navigate the complex pesticide evaluation and authorization process.

This toolkit is an important resource for countries working on pesticide regulation, especially because it enables information collected by one country to be accessed globally. One of CPSP's goals is to facilitate the use of this toolkit and ensure that sufficient training is provided to countries interested in using it, perhaps via online platforms.

### **Model laws**

The FAO, along with the World Health Organization, has also approved an International Code of Conduct on Pesticide Management, which provides standards of conduct for those involved in the life cycle management of pesticides. The Code is supported by detailed technical guidelines on aspects of its implementation,

including HHPs and monitoring and reporting of poisoning incidents. It has also developed model laws for pesticide regulation and often assists countries with adopting them.

## **Global interest in pesticide regulation**

CPSP has observed an increase in international interest in HHP regulation and pesticide suicide reduction, but so far there has been little impact. There has been increased activity surrounding international chemical conventions and the Strategic Approach to International Chemical Management (SAICM). CPSP is currently assisting with the development of a global action plan on HHPs and has also been asked to help develop documentation on alternatives to HHPs and guidance for pesticide regulators on how to take suicides into account during the regulatory process.

There is also increased global awareness about the negative health consequences of using HHPs. In the past, pesticide regulations primarily focused on the technical details of how to register, deregister, and sell pesticides, with limited consideration of potential harms. Nowadays, the dangers of HHPs are more widely known by consumers, and there is a growing consensus that HHPs should be regulated for purposes related to health and environmental protection.

## **Chemical conventions**

### **Stockholm Convention**

Of the two international chemical conventions CPSP is interested in, the Stockholm convention is unique in having the power to ban chemicals internationally. When a chemical is listed on the Stockholm convention, it means that there is a global agreement to eliminate its production and use, and member nations are expected to take steps to ensure that bans are implemented in their home countries.

The first dozen or so chemicals to be listed on the Stockholm convention had already largely been eliminated from use, with the exception of dichloro-diphenyl-trichloroethane (DDT). As time went on, the convention began to add chemicals that remained in widespread use and which were being actively produced and used by member nations, which has made negotiations to ban them more complex.

### **Rotterdam Convention**

The Rotterdam Convention is different from the Stockholm Convention in that member nations are not obligated to ban the chemicals it lists. Instead, entities producing or exporting chemicals listed on the Rotterdam Convention are required to inform importing countries that the chemicals are hazardous. However, countries do sometimes choose to ban chemicals because they have been listed. In order to be listed on the Rotterdam Convention, there must be unanimous agreement among member nations.

Of the two conventions, CPSP is more interested in chemicals being listed on the Rotterdam Convention, because the Stockholm Convention deals exclusively with a category of chemicals called persistent organic pollutants, which make up very few of the HHPs currently in use. Because attempts to list chemicals on one of these global conventions may not suit all countries, CPSP believes that working at the national and regional level could allow progress to be made internationally, without needing to reach a global consensus.

### **Integrated Pest Management paper**

A systematic review of Integrated Pest Management (IPM) systems in Africa and Asia demonstrates that farmers in these areas are able to reduce their chemical pesticide usage without incurring financial losses. IPM systems were developed in the 1980s in response to the overuse of chemical pesticides in agriculture. Chemical pesticides can cause long-term damage to ecosystems by inadvertently wiping out populations of pests' natural predators, in addition to the pests themselves. Because predator populations often take longer to recover, farmers had to use increasing amounts of chemical pesticides to protect their crops, as the pest population was no longer held in check by natural predators. This cycle continued until pest populations were essentially uncontrollable.

IPM, which has been adopted in a variety of countries, involves extreme reductions in pesticide usage, which allows the ecosystem to return to its natural equilibrium, where predators hold pest populations in check. Farmers using IPM typically maintain the same yield sizes on average, but they save money by reducing the amount they spend on pesticides. In some cases, they also make more money selling their crops, because crops that haven't been treated with pesticides can be sold for higher prices, especially on the international market.

### **CPSP's exit strategy**

CPSP expects that its involvement with each country will last for about five years. Its goal will be to work with local academics, as well as with regional organizations to ensure that its pesticide suicide work will continue after CPSP ceases its direct involvement. CPSP hopes that by the time its direct involvement in a country ends, suicide rates will have fallen dramatically, and the country's Ministry of Agriculture will have developed sustainable pesticide assessment and regulation infrastructure.

Organizations like the UN typically maintain a permanent presence in countries, which has the potential to disincentivize prioritizing independence and sustainability in national programs. By contrast, CPSP plans to be transparent with countries about the fact that its work will be temporary and that the country will have to sustain the program on its own once CPSP completes its mission and departs.

Ultimately, CPSP's goal is for the global pesticide suicide rate to decrease so much that there no longer needs to be an organization devoted to decreasing it, which it expects could occur in as little as five years. It's possible that after CPSP has exited

the pesticide regulation space, new chemical pesticides will be developed to replace the ones that have been banned, but CPSP anticipates that newly developed chemicals are unlikely to cause as many suicides as HHPs created in the past.

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