Centre for Pesticide Suicide Prevention

ANNUAL REPORT

2022

Working to reduce pesticide suicides worldwide
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FOREWORD

It has been an incredible year of growth for the Centre for Pesticide Suicide Prevention (CPSP).

When CPSP was formed in 2017, there were just two members of staff. Now, at the end of 2022, we have a team of over 20 based across four different continents.

It is not just our team that has grown, but also our international partnerships. Over the last year, we have really strengthened our existing relationships with the World Health Organisation (WHO) and Food and Agriculture Organisation (FAO), enabling us to work more closely together on pesticide regulation and suicide prevention.

While our work in Asia remains a key focus, new partnerships have allowed us to expand into other regions. We have developed links with regional groupings of pesticide regulators, establishing collaboration arrangements with five pesticide regulatory forums in Asia, Southern, Eastern & Western Africa and the Caribbean. We have also started new country-based project work in Zimbabwe and Uganda.

Our expansion has enabled us to grow our presence on the global stage, presenting at over 30 international events and forums in the last year.

While there is much more work to be done, the Centre has never been in a stronger position to achieve its mission to prevent deaths from pesticide poisoning.

Prof. Michael Eddleston
DIRECTOR, CENTRE FOR PESTICIDE SUICIDE PREVENTION (CPSP)
2022 HIGHLIGHTS

Team Expansion
6 new CPSP team members recruited

Research
7 academic research publications

External Engagement
>30 presentations at international events and forums

Regional Work
5 partnerships established with regional groups of regulators

Country Work
2 new projects established within countries

Policy Implemented
Ban on rat poison paste implemented by state of Tamil Nadu

OUR ASIA TEAM HOLDING THEIR FIRST IN-PERSON MEETING IN CHENNAI

HOSTING A HIGH-PROFILE VIRTUAL SESSION ON HUMAN RIGHTS

MICHAEL EDDLESTON & LEAH UTYASHEVA NAMED ON VOX’S FUTURE PERFECT 50 LIST

OUR FILMMAKER & COLLEAGUES MEETING WITH FARMING COMMUNITIES IN NEPAL
The CPSP team has expanded significantly over the last 12 months, reflecting our growing programme of work.

Key appointments include:
- a full time communications officer
- a research coordinator to support the work of the Director
- a research assistant to progress work in Central and West Africa
- a consultant to support regulatory work in the Caribbean and West African regions
- two technical specialists, seconded to the UN’s Food and Agriculture Organisation (FAO)

To help build capacity, CPSP has also funded positions within key partner organisations:
- **World Health Organisation (WHO)** - two technical specialists
- **Centre for Environment Justice and Development (CEJAD)** - a project officer to support work in Southern and East Africa
- **University of Bristol** - a post-doc researcher to to carry out epidemiological reviews
- **Division of Environmental Health at the University of Cape Town** - a pesticide network coordinator and a lectureship position to support training and information sharing for pesticide regulators
PARTNERSHIPS

GLOBAL
- World Health Organisation (WHO)
- Food and Agriculture Organisation (FAO)

AFRICA
- East African Community (EAC)
- West African Pesticides Registration Committee (WAPRC)
- Southern African Pesticide Regulators Forum (SAPReF)

ASIA
- Asia & Pacific Plant Protection Commission (APPPC)
- South Asian Clinical Toxicology Research Collaboration (SACTRC)

AMERICAS
- Pan American Health Organization (PAHO)
- Coordinating Group of Pesticides Control Boards of the Caribbean (CGPC)

REGIONAL

AFRICA
- East African Community (EAC)
- West African Pesticides Registration Committee (WAPRC)
- Southern African Pesticide Regulators Forum (SAPReF)

ASIA
- Asia & Pacific Plant Protection Commission (APPPC)
- South Asian Clinical Toxicology Research Collaboration (SACTRC)

AMERICAS
- Pan American Health Organization (PAHO)
- Coordinating Group of Pesticides Control Boards of the Caribbean (CGPC)
BANGLADESH

We are supporting a large scale clinical trial that is exploring new treatments for patients with organophosphorus (OP) or carbonate poisoning. The trial aims to test whether existing calcium channel blocking medicines (CCB) or magnesium can help treat poisoned patients.

The study aims to recruit around 3,100 patients from 5 Bangladeshi hospitals. As of December 2022, over 700 patients have been recruited to the trial.

We have also facilitated funding from the FAO to set up a Poison Information Centre in Chattogram.

MALAYSIA

Over the last few years, we have collaborated with the National University of Malaysia to monitor the impact of Malaysia’s 2020 ban of the highly toxic herbicide paraquat.

This project has now come to a successful conclusion. Preliminary analysis suggests that the ban resulted in a reduction in paraquat poisoning cases after the ban, particularly among agricultural workers.
COUNTRY WORK

INDIA

We are continuing to work at both central and state level across India.

At a national level, we have been collaborating with WHO India. This has enabled us to hold meetings with the Ministry of Health and Family Welfare and National Centre for Disease Control (NCDC). As a result, NCDC agreed to take a lead on raising concerns about highly hazardous pesticides.

Evaluation of organic farming programme, Andhra Pradesh

In April, we published findings of a project evaluating the impact of the Andhra Pradesh Community-managed Natural Farming (APCNF) programme.

The programme aims to transition 100% of the state’s agricultural land to organic by 2030.

The study found that APCNF farmers were significantly less likely to use synthetic pesticides compared to conventional farmers. However, pesticide use remained high and very few retailers reported a decrease in the sale of pesticides.

*This project was led by Professor Lindsay Jaacks, Global Academy of Agriculture and Food Systems at the University of Edinburgh.*

Community responses to pesticide suicide, Chhattisgarh

A two year pilot project, run by the Emmanuel Hospital Association (EHA) and supported by CPSP, has now been completed.

The project aimed to understand how rural communities respond to pesticide use and pesticide suicides. It also aimed to empower them to address the issues and take action for their own wellbeing and safety. Workshops and training sessions were delivered to local communities, including young people, suicide survivors and family members.

The project team reported a reduction in suicide cases in study areas and in the EHA hospital in Champa.

Supporting policy development, Tamil Nadu

We have been working closely with both the health and agriculture departments in the state of Tamil Nadu, supporting the development of new policy.

This has included involvement in key meetings with government officials, as well as discussions with pesticide manufacturers groups.

In August, the government introduced a ban on the sale of rat poison paste (yellow phosphorous). We are also supporting a draft bill to withdraw a further six lethal pesticides.
NEPAL

Monitoring impact of 2019 bans

Following bans on eight pesticides in 2019, a study is now underway to monitor their impact.

Data collection from forensic laboratories is ongoing and will be used to understand if there has been a change in suicide rates and whether banned compounds are still being used in suicide cases.

Agricultural data have also been collected to understand the impact on selected crops yield.

We have also conducted interviews with vendors, farmers and agricultural extension officers to understand the successes and challenges in implementing the bans.

Public attitudes to suicide in Nepal

In May, we published findings from a study exploring the relationship between suicide reporting and public attitudes to suicide in Nepal.

The study found that there is a widely shared perception in Nepal that suicide is a criminal offence, despite this never having been the case.

It identified three key factors that contribute to this misperception:

- A prevalent stigma of suicide
- Police investigations can be conducted in an accusatory way, with all suicides reported in crime statistics
- A confusion between the aiding and abetting suicide (a criminal offence) and suicide attempt (not a criminal offence)
SRI LANKA

Online news framing of 2021 pesticide import ban

In April 2021, the Sri Lankan government announced an immediate ban on the import of fertilizers and pesticides, which was later revoked. This ban had widespread impact and has been partly linked to Sri Lanka’s economic crisis.

We have explored how the ban was framed in online newspapers. Our analysis shows a trend towards support for the ban among health, environment and organic farming frames; while opposition was dominant among frames related to farmer or industry livelihoods.

We found that very few articles represented the voices of farmers and other agricultural workers directly impacted by the ban.

‘Gatekeeper’ training programme

We are supporting a large study testing whether pesticide vendor training is an effective way to reduce pesticide self-poisoning in rural Asia.

The research is being led by Dr Manjula Weerasinghe at the Rajarata University of Sri Lanka and Dr Melissa Pearson of the University of Edinburgh.

In April, we published a study protocol. This outlined how the intervention is being introduced into 70 administrative divisions, covering population of over 2 million people, over 4 years.

If found to be effective, the training will be introduced worldwide.

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Sri Lanka's pesticide bans: a tale of two policies

Recently, there has been some confusion on the role HHP bans played in Sri Lanka’s economic crisis.

This crisis has been partly linked to Sri Lanka’s sudden move to organic agriculture in April 2021, with an overnight ban on all synthetic fertilizers and pesticides. This was later revoked in November 2021.

However, it is important not to confuse this with the countries highly successful bans on several HHPs between 1980 – 2010.

1980–2010 HHP bans

Bans on specific lethal pesticides. Carefully considered with alternatives available to farmers.

70% fall in suicide rate

no impact on
agriculture

2021 total ban

Sudden ban on import of all synthetic pesticides and fertilizers with no preparation.

harvests collapsed

prices soared
We have expanded our country work, starting new projects in Uganda and Zimbabwe.

UGANDA

We have established a collaboration with Makerere University School of Public Health to identify pesticides used in acts of self-poisoning between 2017 – 2021.

Data will be collected from seven regional police headquarters, four regional referral hospitals and one forensic lab.

The study will also include a review of highly hazardous pesticides registered for agricultural and public health use in Uganda, with the aim of advocating for their ban.

ZIMBABWE

A collaboration agreement has been signed with the Government of Zimbabwe.

Our work aims to strengthen national capacity for HHP management with a focus on suicide prevention.

In August, our delivery partners CEJAD held a first consultation meeting with key stakeholders, including the Government of Zimbabwe, FAO, University of Zimbabwe and Forensic Laboratories, to introduce the project and agree next steps.
Throughout 2022, we have been developing our links with regional groupings of pesticide regulators, establishing collaboration arrangements with five groupings in Asia-Pacific, Southern, Eastern & Western Africa and the Caribbean. We are supporting each of these to develop and implement a strategy on highly hazardous pesticides.

In addition to our work with regulators, we have formed a collaborative partnership with the WHO, FAO and Pan American Health Organization (PAHO) to work on pesticide suicide prevention in the Americas region.

We are also partnering with the University of Cape Town to assess current pesticide surveillance methods used across Africa.
SOUTHERN AFRICA

Our work in Southern and East Africa is supported by our delivery partner, the Centre for Environment Justice and Development (CEJAD) - a non-governmental organisation based in Kenya.

CEJAD have taken a lead role in Southern Africa, supporting the Southern African Pesticide Regulators Forum (SAPReF) to draft a regional HHP strategy.

In December, we helped coordinate the first in-person meeting of the SAPReF Technical working group on HHPs.

We are also funding a consultant based at the University of Cape Town to manage the administration and coordination of SAPReF.

EAST AFRICA

After a pause lasting several years, a regional HHP strategy has now been drafted.

In July, CPSP and CEJAD helped coordinate the first in-person meeting of the East African Community (EAC) Technical Working Group on HHPs, who discussed and agreed the draft strategy.

WEST AFRICA

Formal letters of collaboration have been exchanged with the West African Pesticides Registration Committee (WAPRC/COAHP), which includes 15 countries in West Africa.

We have also recruited a part-time Research Assistant to progress our work in West and Central Africa.

ASIA

A formal letter of collaboration has been sent to the Asia & Pacific Plant Protection Commission (APPCC) Secretariat at FAO.

We are now working with FAO to prepare a joint workshop on HHPs and pesticide management for South East Asian countries.

CARIBBEAN

We have established a collaboration with the FAO Sub-Regional Office to develop a regional strategy on pesticide risk reduction for the Caribbean countries.

In June, preliminary consultations were held with pesticide regulators from Guyana, Trinidad and Tobago, Barbados and Suriname.

In October, we facilitated three sessions as part of an FAO-led series of online training workshops for Caribbean pesticide regulatory authorities.

We have also worked directly with Suriname to identify alternatives to paraquat.
Paraquat is one of the most commonly used herbicides worldwide. It is also highly toxic and fatal when ingested. Although it has been banned in over 67 countries, it is still widely used in many others.

**Revealing problems with paraquat's 'safety measure'**

In August, we published a systematic review of over 30 studies which reinforced the dangers of paraquat exposure.

The paper explored the effectiveness of an emetogenic chemical (a substance that causes vomiting), that is included as a safety measure in standard paraquat products.

It exposed issues with the manufacturer’s data, showing the dose of vomiting agent to be based on flawed evidence.

**Review of existing legislation**

We are currently conducting a scoping review, exploring how legislation to restrict access to paraquat has been implemented. This is due to be published next year.

**Identifying alternatives and learning lessons**

Pesticide Action Network (PAN) UK, with support from CPSP, has undertaken a study to identify alternatives to paraquat.

The study found evidence that eliminating paraquat saves lives without reducing agricultural productivity. It identified numerous alternative and less hazardous methods for weed management and foliage removal.

A paper outlining the findings and sharing examples from countries where paraquat has already been banned is due to be published early next year.

All publications can be found on the CPSP website [www.centrepsp.org/category/publications](http://www.centrepsp.org/category/publications)
SPECIAL INTEREST PROJECTS

COMMERCIAL DETERMINANTS OF HEALTH

CPSP is supporting academic research into the commercial determinants of health - the ways that commercial actors’ strategies and practices impact on health and the environment.

While industries such as tobacco have been researched extensively, little attention has been given to the pesticide industry.

We are currently contributing to a scoping review, examining the activities of the pesticide industry. The findings will be discussed in relation to strategies of other industries.

In August, we co-hosted a session at the European Symposium on Suicide and Suicidal Behaviour that explored the role of commercial determinants of health in suicide prevention.

ROLE OF ALCOHOL IN PESTICIDE SUICIDE

Alcohol is an important risk factor for self-harm, but little is known about its involvement in pesticide self-poisoning.

We are currently undertaking a scoping review to better understand existing research into the role of alcohol.

We also hosted a session at the European Symposium on Suicide and Suicidal Behaviour, exploring the complex relationship between alcohol, self-harm and suicide.

HUMAN RIGHTS

In March, we hosted a virtual satellite session at the Consortium of Universities for Global Health (CUGH) Conference. The session focussed on human rights and included a panel of prominent experts and activists, including the UN Special Rapporteur on toxics and human rights, Dr Marcos Orellana.

The event coincided with the launch of a new video exploring the rights of the child and obligations of states to offer them protection.

We are also currently developing a paper to dispel myths surrounding pesticide 'misuse', where instances of harm are blamed on the users, such as farmers and agricultural workers.

CAPACITY BUILDING

We have developed a formal partnership with the Division of Environmental Health at the University of Cape Town, supporting their activity to develop capacity in low- and middle-income countries.

Our support centres on two taught programmes - Diploma in Pesticide Risk Management and Masters in Chemical Risk Management - and includes:

• financial support for a two-year lectureship;
• contributing to course material;
• and bursaries for students who intend to focus on pesticide suicide prevention.

We also provided financial support to enable CEJAD’s Project Officer to complete a Master’s in Chemicals Risk Management.
COMMUNICATIONS STRATEGY

In January, we welcomed our new Communications Officer. Throughout the past year, she has developed and implemented a communications strategy, aimed at raising the profile of CPSP work.

Key activities include: a full website update; increased activity on social media; development of brand guidelines; and production of targeted resources for key audience groups.

FILMMAKING

In March, we released a new film exploring children’s rights and the obligations on authorities to offer them protection. The film told the story of Warunika, a 16 year old girl who died after drinking a lethal pesticide.

Our filmmaker has also undertaken field trips to Nepal & Bangladesh and is developing new material to be released next year.

All videos can be found on the CPSP YouTube channel: [www.youtube.com/channel/UCKY6cwYXuYXpNnxbl5rp4g](https://www.youtube.com/channel/UCKY6cwYXuYXpNnxbl5rp4g)
EXTERNAL ENGAGEMENT

EVENTS AND MEETINGS

- Participating at IASP’s Asia Pacific Conference
- Presenting at a Medical College Hospital in Bangladesh
- Our Partners CEJAD Attending the Rotterdam Convention COP
- Contributing to SAICM’s 4th Interessional Meeting
- Participating in the Silent Springs Conference in Germany
- Leading a University of Cape Town Pesticide Discussion Forum
6 papers in progress & expected to be published within the next 6 months

All publications can be found on the CPSP website www.centrepsp.org/category/publications.
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Centre for Pesticide Suicide Prevention

Queen's Medical Research Institute
The University of Edinburgh
47 Little France Crescent
Edinburgh
EH16 4TJ

CPSP@ed.ac.uk
www.centrepsp.org