

Mobilising the chemical conventions to protect biodiversity

An example with pesticides and the Stockholm and Rotterdam Conventions

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Chemical pollution is a major driver of biodiversity loss. In the face of growing chemical production and use worldwide, biodiversity faces on-going and increasing threats from the 40,000 to 60,000 industrial chemicals in commerce and active use globally, and among them pesticides, as confirmed in IPBES reports. Worth over €45 billion globally, the pesticide industry alone uses about 600 different active substances, six times more than in 1960 according to UNEP's *Global Chemicals Outlook II* (2019). In addition to the Aichi Biodiversity Targets of the Convention on Biological Diversity (CBD), which do not specifically address pesticides under the pollution reduction target (Target 8), another international goal critical to biodiversity conservation will also "expire" in 2020. Initially outlined at the 2002 World Summit on Sustainable Development in Johannesburg¹ and reiterated at Rio+20 in 2012, the goal sets out to achieve that chemicals, throughout their life cycle, are "used and produced in ways that minimise significant adverse impacts on human health and the environment"; while some progress has been made, it will not be met by 2020. Parallel to the preparation of a post-2020 global framework for biodiversity governance, there are thus currently post-2020 discussions taking place on the sound management of chemicals and hazardous waste.

Actors of biodiversity have seldom engaged with the actors of chemical governance so far, while such collaboration could be fruitful to enhance the implementation of the post-2020 global biodiversity framework, to be adopted at CBD COP15 in China in late 2020. By taking the example of pesticides, this brief proposes to explore why increasing collaboration between the CBD and chemical conventions is an important issue for post-2020 biodiversity governance, as well as the forms such collaborations could take.

¹ Plan of Implementation of the World Summit on Sustainable Development, paragraph 23.

KEY MESSAGES

Despite their direct impacts on biodiversity, pesticides are largely governed in the chemicals arena by policies and institutions separate from those governing biodiversity. The Stockholm and Rotterdam Conventions could be an effective avenue for mobilisation and connection of the biodiversity and chemicals regimes.

We identify four ways in which the biodiversity community could engage with the chemicals regime: helping to reinforce the mechanisms to add pesticides to the Stockholm and Rotterdam Convention annexes and addressing implementation challenges of the conventions; working to

reinforce institutional collaborations between biodiversity and chemicals conventions; building cooperation in non-state and multi-stakeholder action; and creating collaboration between national-level instruments and actors.

It is possible to develop similar rationales and synergies for other substances, such as plastics. For an effective post-2020 biodiversity framework, stronger collaboration with chemical governance actors could help weigh in on sectoral discussions in which critical decisions relevant to biodiversity are made.

1. BIODIVERSITY, PESTICIDES, AND CHEMICAL GOVERNANCE AT A GLANCE

Recent years have seen mounting evidence of the negative effects of pesticides (fungicides, herbicides, insecticides, etc.) on biodiversity. The IPBES pollination assessment highlighted the evidence on the broad range of lethal and sublethal effects of insecticides on pollinating insects, and a recent review has detailed the detrimental effects of pesticides on all families of terrestrial and aquatic insects that are reported in the scientific literature.² The IPBES Global Assessment treats pesticides as a cause of biodiversity loss with no ambiguity, and quotes for instance a study reporting an up to 42% reduction of macroinvertebrate richness in French and German rivers, even at concentrations that current European legislation considers environmentally protective.³ These impacts on insects and invertebrates in general can then have detrimental effects all along food chains, of which invertebrates are often the basis.

The governance of pesticides falls within the governance of chemicals more broadly. Negotiations on chemicals are often outside the scope of "traditional" biodiversity discussions but, likewise, biodiversity is much more often than not absent from chemical discussions.

The three conventions of the "chemical cluster" (the Basel, Rotterdam, and Stockholm Conventions) are central instruments in the international governance of chemical substances. Given their overlap in subjects and expertise, they have been holding combined "triple COPs" every two years since 2013. Among these conventions, the Stockholm and Rotterdam Conventions target specifically pesticides and could be used to further mobilise action on these substances, notably highly hazardous pesticides.⁴ In addition to these treaties, several voluntary initiatives govern pesticides internationally, notably FAO's Code of Conduct on Pesticide Management and the Strategic Approach to International Chemicals Management (SAICM), a UNEP-hosted policy framework for international cooperation and consensus between government, industry, NGOs, and civil society.

The Stockholm Convention on Persistent Organic Pollutants, signed in 2001, targets chemicals which are highly toxic, persist in the environment, bio-accumulate in food chains, and have the capability to travel long distances through air and water. The current list includes 31 chemicals, of which 13 are pesticides listed for elimination, plus DDT (formerly a widely used pesticide), whose use is restricted to disease control under

specific circumstances. Parties are required to have national action plans to respect these obligations to phase-out the listed chemicals.

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, signed in 1998, sets up a procedure for importing countries to accept or deny the import of certain hazardous pesticides which have been regulated or banned elsewhere by providing full access to information about those pesticides' risks. Once a chemical is on the prior and informed consent (PIC) procedure list for the Rotterdam Convention, exporting countries are required to inform potential import partners of the risks of the chemical, as well as of regulatory action which has been taken in other countries on its production or use. Importing countries must provide consent before trade can occur.

2. WHAT THE STOCKHOLM AND ROTTERDAM CONVENTIONS CAN DO ON PESTICIDES

During Stockholm and Rotterdam COPs, the addition of chemicals to the convention annexes is usually on the agenda. The COP decides on the addition of a substance only after the independent chemical review committee for each convention assesses it based on agreed-upon scientific criteria and recommends its addition. At the 2019 COP, the Stockholm Convention COP added the pesticide dicofol to the ban list, and, India, the only remaining producer in the world, declared it will cease all production. Under the Rotterdam negotiations this year, three "new" chemicals and four chemicals previously considered (but left unresolved) were discussed by the COP. Of the five pesticides considered, only one (phorate) was added to the list, while four (acetochlor, carbo-sulfan, paraquat, and fenthion) were postponed to the next COP despite consensus regarding the fact that those also meet the criteria for listing. One [positive] outcome of the 2019 Rotterdam negotiations which was met with applause by a majority of parties was the adoption of a long-awaited compliance mechanism, from which Parties can however opt-out.

These conventions have been criticised for their weakness in effectively governing pesticides (largely because they only cover a small fraction of all pesticides, leaving all others unregulated at the international level), and various actors are calling for stronger international instruments to fill this gap, notably through a stronger legally binding mechanism on pesticides, particularly highly hazardous pesticides. One proposal is the adoption of a global protocol on pesticides, an idea supported by the UN Special Rapporteur on the right to food,⁵ the Nordic Council of Ministers,⁶ and several civil society organisations,

² Sánchez-Bayo, F., & Wyckhuys, K. A. (2019). Worldwide decline of the entomofauna: A review of its drivers. *Biological Conservation*, 232, 8-27.

³ Beketov, M. A., et al. (2013). Pesticides reduce regional biodiversity of stream invertebrates. *Proceedings of the National Academy of Sciences*, 110(27), 11039-11043.

⁴ The Basel Convention on Transboundary Movement of Hazardous Wastes and Their Disposal, signed in 1989, focuses on reducing the transfer of hazardous waste from developed to developing countries, including some obsolete pesticide stocks, but is principally focused on industrial chemicals and wastes.

⁵ United Nations Human Rights Council. (2017). Report of the Special Rapporteur on the right to food. A/HRC/34/48.

⁶ Nordic Council of Ministers (2019). Report on the Investigation of elements in support of the global post-2020 framework for chemicals and waste.

like Pesticide Action Network. Recent political developments suggest that the adoption of such an instrument is highly unlikely—as it stands, the conventions as they currently exist are already facing political challenges, especially regarding the addition of pesticides to expand the existing lists.

Adding a pesticide to the PIC list (Rotterdam) may appear less politically contentious than banning its use (Stockholm), but is not necessarily so, notably because the addition to the PIC list operates *by consensus* among the parties of the COP. Although adding a pesticide to the Rotterdam list is not a ban, it has symbolic value and practical effects. The additions oblige national agencies to review the chemicals before approving their importation, often triggering national consultation processes, and in a few cases do translate to automatic bans due to some national legislation which uses a Rotterdam listing as a proxy for decision-making (for example, Vietnam). During informal discussions, some delegates highlight that a listing in the Rotterdam convention can also help them push for a ban in their countries. Even if countries do proceed to allow imports, Rotterdam annex is considered to be a “black list” and is used to ban pesticides for use by producers adhering to secondary (private) standards and certification schemes, such as the Rain-forest Alliance. As a result, many chemicals that parties agree meet the criteria to be listed do not reach consensus at the COP due to “perceived or real implications of such action”, usually linked to industry interests and concerns about trade, maintaining jobs, or protecting crops.

The low priority of biodiversity issues (as evidenced by the simple fact that the word “biodiversity” does not appear even once in the last COP reports of the two conventions) in the chemical cluster thus far should not deter mobilisation to increase pressure and promote biodiversity-related concerns in these conventions, as addressing chemicals for environmental reasons (and not only for direct health impact) falls within their mandate. Increasing the mobilisation of expertise in ecotoxicology could help in this regard.

Overall, while new instruments may be necessary to fill current governance gaps, the Stockholm and Rotterdam Conventions currently remain the major instruments available to negotiate the international regulation of pesticides and there are already multiple ways in which biodiversity actors could engage with it, as illustrated below. The reasoning proposed here for pesticides could apply to different types of pollution harming biodiversity and covered by the chemical cluster. The Basel Convention is now giving increased attention to marine plastic pollution and microplastics and reached a new agreement restricting plastics trade at the 2019 triple COP. While this brief mostly focuses on how such collaborations could benefit biodiversity objectives, they would likely benefit chemical governance as well, a subject which should be the object of further analyses.

3. FOUR OPPORTUNITIES TO MOBILISE THE CHEMICAL CLUSTER FOR BIODIVERSITY

3.1. Expanding the list of pesticides included in the Stockholm and Rotterdam convention annexes

A straightforward way to use chemical governance for biodiversity would be to expand the list of chemicals included in the Stockholm and Rotterdam conventions annexes, subjecting them to a ban or to the prior and informed consent (PIC) procedure for trade. CBD negotiators could try to engage their national chemical counterparts to push for such additions and also contribute to work on finding safer alternatives. Pesticides can be nominated for addition in Rotterdam either as a result of two countries notifying the secretariat of a final regulatory action (which needs to be based on a risk evaluation), or of one developing country nominating the substance based on risks from its conditions of use in that country. The pesticides listed under the second category, “severely hazardous pesticide formulations”, have so far always been nominated for addition based on health hazards. Pushing for nominations based on environmental criteria, which is formally possible, could help increase the overall pesticide nominations as well as further substantiate the case for those nominated for health reasons.

Although the nomination of substances by one or more Parties (and its subsequent approval by the scientific review committee) does not guarantee their addition to the conventions annexes due to the need for consensus among all COP parties, even the occurrence of such blockages can be politically useful. Identifying which country is against the listing of specific pesticides could be informative and increase the name-and-shame capacity of other Parties, and of civil society, in biodiversity-related arenas. Efforts are also being made to increase the effectiveness of the scientific review committee of the conventions, discussions in which the added weight of biodiversity experts would be useful.

3.2. Reinforcing institutional collaborations between biodiversity and chemicals conventions

In its recommendations to the CBD for the preparation of the post-2020 framework, UNEP highlighted the importance of engaging with other sectors through traditional partners such as the FAO as well as other partners in the UN Environmental Management Group (EMG), an interagency mechanism of the UN which aims to enable coordinated responses to environmental problems. The EMG has hosted a nexus dialogue on the sound management of chemicals and waste, bringing together government, UN agency, and civil society actors in February 2019, almost a year after a nexus dialogue on biodiversity and human security in 2018. Despite the linkages between the issues, they remained disconnected. Plugging into an existing

mechanism such as the EMG could enable structured discussions with existing partner organisations lacking from CBD discussions (such as SAICM, which is currently discussing priority issues and stakeholder involvement beyond 2020⁷) and could take place within already established guidelines and procedures around a specific issue such as pesticides. A report on the environmental and health impacts of pesticides and fertilisers is also currently being prepared by the executive director of UNEP in collaboration with the WHO, FAO, and other relevant organisations to be presented at the fifth meeting of the UN Environment Assembly (UNEA-5) in 2021. The report could potentially lead to a decision on pesticides and fertilisers at UNEA-5, in particular with continuous engagement and support from biodiversity actors. Another way of structuring collaborations could be through joint programmes, such as the strategic initiative on pollinators developed by the CBD and FAO, which was updated at CBD COP14 and recommends measures on pesticides.

3.3. Enhancing non-state and multi-stakeholder cooperation between biodiversity and chemicals actors

There are currently post-2020 discussions taking place on the sound management of chemicals and hazardous waste through SAICM, the voluntary, multi-stakeholder and multi-sectoral chemicals governance initiative. SAICM is considered critical because, while voluntary, it is the only participatory international framework for addressing chemicals issues outside the scope of the conventions and it is based on a multi-stakeholder approach. Building bridges between SAICM and the "Sharm El-Sheikh to Kunming Action Agenda for Nature and People"⁸ could help reinforce collaboration between multi-stakeholder initiatives around pesticides. Bringing biodiversity onto the post-2020 agenda in SAICM could help raise ambition on biodiversity-chemical issues, helping to do so internationally beyond the narrow scope possible through the conventions themselves. Bringing SAICM actors into the biodiversity action agenda would help biodiversity actors to directly work with actors engaged in pesticide regulation.

⁷ SAICM. Strategic Approach and sound management of chemicals and waste beyond 2020 - The Intersessional Process.

⁸ Rankovic, A., et al. (2019). An Action Agenda for biodiversity: Expectations and issues in the short and medium terms, IDDRI, *Issue Brief* N°04/19.

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In addition, the biodiversity community could, in the future, organise side events at the chemical convention COPs (and vice versa) in order to help the two communities interact, facilitate knowledge exchange, and ultimately work together. Biodiversity side events could help both communicate the risks of inaction and share success stories that address these concerns through alternative practices, for example.

3.4. Building collaboration at the level of national instruments and actors

For the global post-2020 biodiversity framework, countries could work on adopting specific, measurable and time-bound targets on pesticides, at the global level and/or in national instruments developed to implement the post-2020 biodiversity framework. Currently, few countries include goals on pesticides in their National Biodiversity Strategies and Action Plans (NBSAPs); these could be updated, or countries may also prepare "biodiversity commitments" before (and maybe after) COP15, with actions on pesticides. The design and implementation of such targets could be conceived and monitored jointly between chemical and biodiversity governance actors at the national level, especially where national action plans to phase out specific pesticides (such as the National Implementation Plans of the Stockholm Convention) and minimise the use of others exist. This would help create synergies between such generally disconnected actors within environmental ministries, allowing knowledge sharing and cooperation, as well as with other ministries such as agriculture and trade. Increasing reporting obligations on pesticides in post-2020 biodiversity governance could increase pressure on national actors to better collaborate, at least at the administrative level. This could also help pesticide regulation-inclined actors to work more closely together and help them gain more weight in domestic negotiations.

In turn, stronger biodiversity-chemicals coalitions at the domestic level could also help push more strongly for changes in party positions on adding substances to the convention annexes, raising the political profile of chemicals issues, or increasing financing, for example. Since regulatory action triggers the review of chemicals by the Chemical Review Committee, a lack of notifications and underreporting is considered to be posing challenges for the Rotterdam Convention's effective implementation. Here, biodiversity actors could, for instance, assist with capacity to help notify the Rotterdam Convention secretariat of existing national regulatory action on pesticides.

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