



BOFAXE

Towards a Sustainable Agriculture – PART I

The Case of Pesticides Between Food Security and Climate Change

Not least since Russia blocked Ukrainian grain exports and thereby endangered global food security has agriculture moved into the international spotlight. Between global environmental issues like climate change and food security, agriculture is not only a victim, but also a contributor to major environmental degradation.

One crucial factor of this is the excessive and dangerous use of pesticides. Should the global use of pesticides continue in light of the demand for food and the pressing environmental issues? Envisioning the detrimental consequences of pesticides, it is argued that the fragmented international legal framework on pesticide use does not suffice to pave the way towards a sustainable agriculture and that therefore, exporting states should adopt an export ban on pesticides which are prohibited in their own country.

The Significance of Pesticides and their Consequences

Bearing in mind the need for chemicals to ensure the protection of plants and the conservation of food, it does not surprise that agriculture is classified as a chemical-intensive industry sector. At the same time, especially in less developed countries, the food and agriculture sector accounts for up to one quarter of the GDP. Not only the population is counting on an adequate food supply, but also the economies depend more or less on the agricultural sector. Since the world population is growing more and more, the demand for crops equally increases, which thus leads to a fueled use of pesticides. These chemical substances, which build an umbrella term for i.a. herbicides, insecticides, and fungicides, are used to repel or control certain types of animals and plants in order to safeguard the harvest.

Despite its benefits for food production, pesticides lead to a range of negative consequences on human health and the environment, such as poisonings and cancer, degradation of soils and water, and threats to bee and bird populations as well as biodiversity. Additionally, to these adverse impacts on the environment, pesticides contribute to climate change in a twofold way: First, their production and also their disposal are energy-intensive and contribute to greenhouse-gas emissions; second, the loss of biodiversity and contaminated soils and water indirectly contribute to climate change.

Consequently, the use of pesticides does not only affect the environment and human health, but simultaneously attacks the basis of agriculture by fomenting climate change.

The International Legal Framework on Pesticides

The international relevance follows from the global character of the aforementioned environmental and health issues on the one hand, and from the globalization of food trade and – not to be neglected – trade with pesticides, on the other. International law is not silent on these topics and provides, in contrast, three multilateral agreements directly applicable to pesticides. The Stockholm Convention on Persistent Organic Pollutants as well as the Montreal Protocol on Substances that Deplete the Ozone Layer incorporate binding obligations to ban or restrict the production of certain types of pesticides. While the Montreal Protocol only involves one pesticide, namely methyl bromide, the Stockholm Convention covers at least 18 different types – with the USA as a non-party. Alone the EU authorized 487 different active substances that are used in pesticides, which let us guess the effectiveness of this ban. Directly tailored to hazardous chemicals and pesticides is the third treaty of this trio: the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. As its name already suggests, it does not involve a ban of certain pesticides, but aims for a consent between parties to add certain substances to a list, which allows importing countries to refuse the import of pesticides on that list. Rather than a strict ban, it only impedes the trade with listed substances by demanding a consent of the importing country. The reason for this weak compromise is evident: A strong influence by the pesticide industry and by countries benefitting from pesticide trade. More general treaties like the Convention on Biological Diversity and the Paris Agreement emphasize the need to protect the environment from the threats of hazardous substances, but concrete measures regarding the use of pesticides are missing.

Besides these highly fragmented hard law instruments, there exist a range of voluntary standards by private initiatives, restricting pesticide use and thereby highlighting the growing awareness of the threats in the agricultural sector. One famous example is the International Code of Conduct on Pesticide Management. Adopted on a FAO Conference in the 1980s, the Code of Conduct seeks to improve food safety and to promote sustainable agricultural development. Further developed in 2016, it provides guidelines on highly hazardous pesticides, helping governments to identify, assess, and mitigate the risks of highly hazardous pesticides (1.3). Although involving support for countries and building an important framework to address the threats from those substances, they remain voluntary and thus non-binding.

BOFAXE

Towards a Sustainable Agriculture – PART II

The Case of Pesticides Between Food Security and Climate Change

This leads over to the question whether a combination of both the hard law instruments and the soft law guidelines is sufficient. Binding treaty law and non-binding guidelines together can build a complementary framework to address certain issues – at least in theory. The problem in the case of pesticides lies with the strong pesticide industry on the one side and the non-neglectable advantages of pesticides on the other. Food security is a major target of a state's agricultural sector. With due regard to the increasing problems of climate change and – partly related to this – plant diseases, the majority of states does not see another solution for this interplay than the use of pesticides. Economic interests of all stakeholders involved, including benefiting states, intensify this approach and their willingness to follow restricting guidelines like this Code of Conduct is low. Arguably, the development of those voluntary standards can even slow down or completely hinder the incorporation of more pesticides to the list of the Rotterdam Convention and, therefore, have contradictory effects. Within this mixture of interests, the awareness that this behavior is anything but sustainable is less pronounced.

Between the fragmented treaty law and the constraints of the economic benefits of pesticides that hinder the extensive adherence to non-binding standards, the role of international cooperation becomes decisive.

Legal Solutions for Restricting Pesticide Use

In light of the strong pesticide industry, the consensual extension of the ban under the Stockholm Convention or even a new treaty, restricting the use of pesticides in general, is less probable. What is then necessary is the initiative of individual states launching new approaches:

One promising idea was lately presented by the German minister of agriculture, proposing an export ban on those pesticides which are not authorized in the EU. Although their use is prohibited in the EU, pesticides are still produced in EU member states and exported to other states, where looser regulation applies. With such a prohibition, exporting countries like Germany could indirectly pass the stronger standards of the EU to other countries, which still use these hazardous pesticides. If more countries would follow this approach, highly hazardous pesticides could thereby be eliminated. Could exporting states even be obligated to introduce export bans on pesticides under international law?

As already stated, the export of the majority of hazardous pesticides is not expressly prohibited under international law. However, considering the detrimental effect to human health and the environment, the question becomes whether the impacts of these pesticides on the environment and human health could be classified as violating basic principles of international (environmental) law such as the prohibition of transboundary harm or the preventive principle. This would require an action originating within the territory or under the jurisdiction of one state, directly causing environmental damage on the territory of another. Although the development of environmental law moves away from the strict transboundary requirement, the sole responsibility of the exporting country for environmental damages in another state is hard to prove. First, the receiving country also bears responsibility by voluntarily importing these pesticides and letting them be used. Second, uniform concrete standards for environmental damage caused by pesticides are still lacking. Then again, the increasing climate change litigation (e.g. Lliuya v. RWE), trying to attribute the responsibility of environmental consequences to individual contributors, marks the approach of revealing the proportionate contribution of single companies or even states. In the similar example of Kivalina v. ExxonMobil Corp. the claim was dismissed by the court due to its political rather than legal character. Despite setbacks like this in the actual jurisprudence, the order of taking evidence in the case of Lliuya v. RWE marks a milestone in legal history and points towards a growing importance of asserting climate justice on a legal level. This strategy, based on the polluter pays principle, could build the foundation of making individual entities liable for environmental damages and thus could be transmitted to the responsibility of pesticide exporting states. The outcome of these cases will therefore not only be path-breaking for climate protection, but also in other areas of assigning individual liability for environmental damages.

Role Models and Cooperation for a Sustainable Agriculture

Nonetheless, this judicial development shows that the idea of holding entities, which enable these damages in the first place, liable, increasingly gains traction and is not far-fetched anymore. To anticipate these developments, states would be well-advised to prepare for the demands of sustainable agriculture already: For exporting states, this could be achieved by the suggested initiative of the German ministry. For importing states, Costa Rica currently leads the way, after the country has changed to the use of non-chemical alternatives combined with a reduced rate of non-highly hazardous fungicides while maintaining its yield of crops. These examples show how joint efforts and cooperation can solve the conflict between food security and environmentally sound agriculture, safeguarding the livelihood of present and future generations.

VERANTWORTUNG Die BOFAXE werden vom Institut für Friedenssicherungsrecht und Humanitäres Völkerrecht der Ruhr-Universität Bochum herausgegeben: IFHV, Massenbergrasse 9b, 44787 Bochum, Tel.: +49 (0)234/32-27366, Fax: +49 (0)234/32-14208, Web: <http://www.ruhr-uni-bochum.de/ifhv/>. Bei Interesse am Bezug der BOFAXE wenden Sie sich bitte an: ifhv-publications@rub.de. **FÜR DEN INHALT IST DER JEWEILIGE VERFASSER ALLEIN VERANTWORTLICH.** All content on this website provided by Völkerrechtsblog, and all posts by our authors, are subject to the license [Creative Commons BY SA 4.0](#).