

UPDATED TEXT PROPOSALS ON PESTICIDES FOR TARGET 7

Key points from PAN International (PAN) and Third World Network (TWN)

November 2022

Text from the Fourth Meeting of the Open-ended Working Group on the post-2020 Global Biodiversity Framework (OEWG-4) (see CBD/WG2020/4/4) has been 'streamlined' by the Informal Group on the post-2020 Global Biodiversity Framework (CBD/WG2020/5/2). A decision has yet to be taken on the basis for negotiations for the Montreal meetings. This analysis is on the 'streamlined' text.

For more detail and supporting information on the points made here, see TWN/PAN briefings in English, Spanish and French: <https://www.pan-uk.org/conserving-biodiversity>

Reducing pesticide use is important, measurable and achievable

The simplest, most effective and least expensive means of reducing the impact of pesticides is to reduce their use. We know that it is simply not possible to sufficiently mitigate the effects of pesticides on the environment once they are released. They harm non-target species in and around the crop, in soils and in water contaminated by run-off. Thanks to their long-range transport in the atmosphere, they are found everywhere in the world. We should maintain a pesticide use reduction target AND a toxicity-based target, not replace one with the other.

Butterfly. Credit
Photostocker/Canva.com



The possible streamlined text proposed by the Informal Group (CBD/WG2020/5/2) for Target 7 along with proposed changes by TWN / PAN (additions in bold¹):

*Reduce ~~pollution from all sources~~ ~~and pollution risks~~ ~~/~~ ~~emissions and deposits of pollutants~~ ~~[including light and noise]~~ ~~and plastic pollution~~, to levels that are not harmful to biodiversity and ecosystem functions ~~and human health~~, ~~considering cumulative effects~~, including by ~~significantly~~ ~~reducing excess nutrients lost to the environment~~ ~~by at least half~~ and through more efficient nutrient cycling and use, and reducing the overall ~~risks associated with the use of~~ ~~use~~ **and toxicity of and risks from** ~~synthetic pesticides and highly hazardous chemicals~~ ~~highly hazardous chemicals~~ ~~pesticides~~, ~~by at least half~~ ~~by at least two thirds~~, **phasing out highly hazardous pesticides by 2030**, ~~taking into account food security and livelihoods~~ and ~~preventing~~, ~~reducing and eliminating~~ ~~plastic pollution~~ ~~eliminating the discharge of plastic~~ ~~and electronic~~ waste.]*

Proposed text by TWN / PAN:

Reduce pollution from all sources to levels that are not harmful to biodiversity and ecosystem functions and human health, considering cumulative effects, including by reducing excess nutrients lost to the environment by at least half and through more efficient nutrient cycling and use, and reducing the overall use and toxicity of synthetic pesticides by at least two thirds, phasing out highly hazardous pesticides by 2030 and eliminating the discharge of plastic [and electronic] waste.

Why do we need to address ‘toxicity’ as well as ‘use’?

Addressing the quantity of pesticides in use is necessary but not sufficient. Some pesticides are many times more toxic than others. Restricting only the quantity in use can perversely incentivise the use of more toxic products. Therefore, it is important for both ‘toxicity’ and ‘quantity’ to be accounted for in the target to reduce pesticide harms.

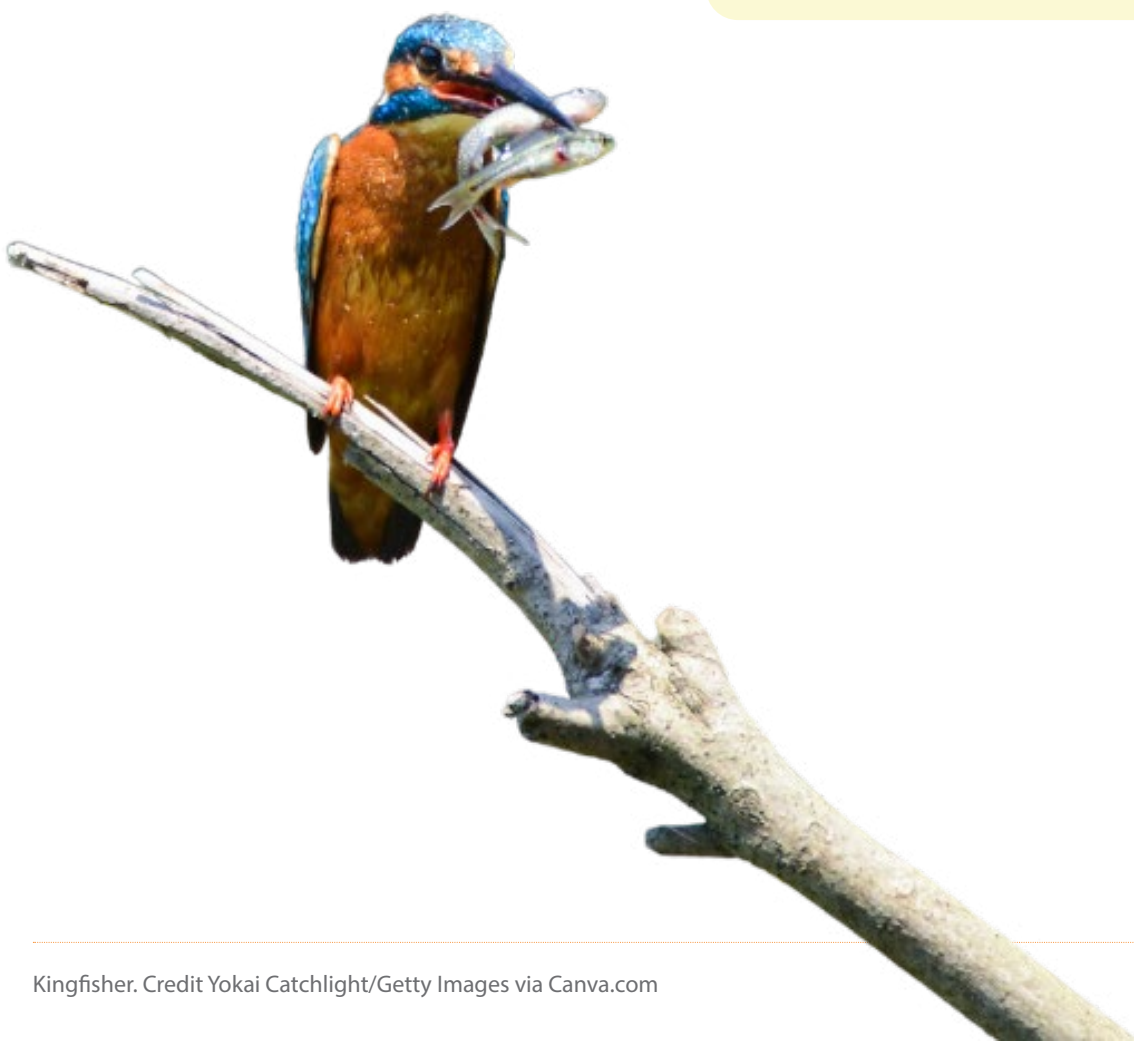
Prior to the last working group meeting in Nairobi, a CBD commissioned science brief (CBD/WG2020/4/INF/2/Rev.2) stated on pp.24 **‘It is of utmost importance to base pesticide policies and indicators on the toxicity of pesticides applied...’**. We agree.

Risk vs hazard

The term ‘risk’ causes confusion and is best avoided. It is not well defined in the CBD science brief, for example (CBD/WG2020/4/INF/2/Rev.2). Misinterpretation can lead to an unintended shift away from ‘use’ and ‘toxicity’ towards much less effective ‘risk mitigation’ measures (e.g. more accurate application methods, no-spray buffer zones), which are comparatively costly and the evidence of their impact is ‘still very scarce’ (as stated in the CBD Science brief p.26., also see [PAN/TWN brief on risk vs hazard²](#) for more information).

For reasons of practicality, clarity and effectiveness, we support the inclusion of ‘use and toxicity’ into the target and call for the avoidance of the word ‘risk’.

If, however, the concept of ‘risk’ is included in the target, it will be essential to add a clarification that refers to both quantity used and toxicity, such as: “...reducing the [use of and risks, **as measured by pesticide quantity and toxicity**, from] synthetic pesticides by at least two thirds....”.



Why phase out Highly Hazardous Pesticides?

Pesticides are inherently hazardous, and among them, highly hazardous pesticides (HHPs) cause disproportionate harm to environment and human health.

In the Informal Group text proposal, the wording 'highly hazardous chemicals' is proposed. However, this is not an internationally accepted term, and should thus be avoided. On the other hand, 'highly hazardous pesticides (HHPs)' is defined by WHO and FAO and is widely recognised. Reductions in HHPs are achievable and easily measurable using existing data on sales / imports. Phasing out the use of HHPs is necessary and consistent with developments in other international processes:

- ◆ [FAO and WHO. 2019. Detoxifying agriculture and health from highly hazardous pesticides - A call for action](#)
- ◆ In 2015, SAICM (Strategic Approach to International Chemicals Management, with the Secretariat hosted by UNEP) Fourth International Conference of Chemicals Management adopted a resolution (IV/3) that recognizes [HHPs](#) as an issue of international concern and [calls for concerted action to address HHPs](#)
- ◆ In 2021, the UN Special Rapporteur on the right to food stated in his report (A/HRC/49/43) on 'Seeds, right to life and farmers' rights' that "A gradual phasing out of pesticides, starting with highly hazardous pesticides, in accordance with WHO and FAO norms is considered a realistic objective by a large number of experts worldwide".
- ◆ In 2022 FAO and Zimbabwe began work to phase out HHPs [FAO, Government join hands to phase out Highly Hazardous Pesticides in Zimbabwe](#)

Why target 'synthetic' pesticides?

Synthetic pesticides tend to be much less specific in their action (doing harm to many non-target species) and more persistent in the environment than biopesticides. For these reasons they are considered generally much more hazardous to the environment. For example: *'Biopesticides, derived from nature and considered more environmentally friendly, are an important part of Integrated Pest Management and help reduce the use of chemical pesticides.'* [FAO - News Article: Q&A on Pests and Pesticide Management](#)



The monitoring indicators should measure ‘use’ and ‘toxicity’

Consistent with the points above, TWN/PAN propose that the indicators for Target 7 should include measures of

- ◆ Quantity / use
 - ◆ Toxicity (e.g. pesticide load^{3,4}, or toxic load⁵)
 - ◆ Name, amount, volume/weight of HHPs in use
- “Pesticide environmental concentration”, the proposed headline indicator in CBD/COP/15/2, is a completely new term that is ambiguous with no indication on what will be measured.
 - A good headline indicator for Target 7 should include measures of pesticide quantity and toxicity. ‘Pesticide load’, ‘toxic load’ and the pesticide risk indicators proposed in the CBD science brief and Report of the expert workshop on the monitoring framework (CBD/ID/OM/2022/1/2), i.e. ‘TAT (Total Applied Toxicity) indicator’⁶ and ‘Risk Score (RS)’⁷ and Pesticide Health Risk Index by Country (PHRIC)⁸, are all based on use/quantity and toxicity, and are thus suitable.
 - ◆ As stated on p.26 of the science brief, the type of data needed for such an indicator are: *“substance-specific pesticide use data based on sales at the country level as well as pesticide toxicity data which are publicly available for a large number of compounds (>380) and eight species groups (Schulz et al. 2021).”*
 - ‘Pesticide load’ is a suitable headline indicator that is proposed in the expert workshop report, although it could also be considered ambiguous if not linked to one of the indicators we propose above.

- ◆ A recent report by Neumeister (2022)⁹ provides some good examples of how a ‘Pesticide load’ indicator could be applied. The report shows trends in pesticide toxic load over time in several EU countries and reveals an over 50% reduction in pesticide use and toxic load in Denmark following a pesticide tax which is based on toxicity/pesticide load (with no negative consequences on Danish agricultural productivity).

- Weaker risk-based indicators which rely heavily on user compliance must be avoided. The necessary enforcement and monitoring systems to monitor such risk mitigation indicators would be complex, time consuming and costly and thus delay or even prevent action, particularly in resource-poor settings. See [PAN/TWN brief on risk vs hazard](#)¹ for more information.

References

1. These additions all came from Parties’ text proposals from OEWG-4.
2. Pesticide Action Network, Third World Network Hazard or risk? Why a hazard-based pesticide target offers much better protection to biodiversity at lower cost, 2022. <https://www.pan-uk.org/conserving-biodiversity/>
3. Kudsk, P., Jørgensen, L. N., & Ørum, J. E., Pesticide Load—A new Danish pesticide risk indicator with multiple applications. Land Use Policy, 2018. 70, 384-393.
4. Lewis K, Rainford J, Tzilivakis J, Garthwaite D (2021): Application of the Danish pesticide load indicator to arable agriculture in the United Kingdom. J Environ Qual 50, 1110-1122
5. Neumeister, L., Toxic Load Indicator - A new tool for analyzing and evaluating pesticide use. Introduction to the methodology and its potential for evaluating pesticide use. 2017. Hamburg, Germany. 34.
6. Schulz R, Bub S, Petschick LL, Stehle S, Wolfram J. 2021 Science 372:81-84.
7. Tang, F.H.M., Lenzen, M., McBratney, A. et al. Risk of pesticide pollution at the global scale. Nat. Geosci. 2021. 14, 206–210.
8. Maggi, F., Tang, F. H., Black, A. J., Marks, G. B., & McBratney, A. Science of the Total Environment, 2021. 801, 149731
9. Neumeister, L., Locked-in pesticides. The European Union’s dependency on harmful pesticides and how to overcome it. 2022. Foodwatch. Berlin, Germany. https://www.foodwatch.org/fileadmin/-INT/pesticides/2022-06-30_Pesticides_Report_foodwatch.pdf

Pesticide Action Network International (PAN International) is a network of over 600 participating nongovernmental organizations, institutions and individuals in over 90 countries working to replace the use of hazardous pesticides with ecologically sound and socially just alternatives.

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Third World Network (TWN) is an independent non-profit international research and advocacy organisation involved in bringing about a greater articulation of the needs, aspirations and rights of the peoples in the South and in promoting just, equitable and ecological development.

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