The ingredients for a successful GBF



Target 7: Pollution

Scope of the target

• Inclusion of measurable or quantifiable targets

The current text has quantified reducing nutrients lost to the environment [by at least half] and pesticides [by at least two-thirds]. It is essential to keep these quantifications, in addition to the fact that pollutants need to be held at levels non-detrimental to biodiversity. In this way, progress can be measured through the amounts by which these pollutants are reduced. Concerning plastic waste and the proposal to phase out Highly Hazardous Pesticides, the quantifiable target should be elimination to zero.

Elements that should be part of the target

Reduce pollution from all sources

All pollutants must be addressed, even if the list is not exhaustive or new pollutants are identified.

- Levels that are not harmful to biodiversity and ecosystem functions, and human health. All pollutants should respond to overall environmental and health considerations, not only as separate entities but also in their combined effects so that they have no harmful impact on the ecosystem. Gender-differentiated impacts should be taken into account and monitored through appropriate indicators.
 - Phasing out Highly Hazardous Pesticides

A relatively small number of HHPs cause disproportionate harm to the environment and human health, including severe environmental hazards and acute and chronic toxicity. Phasing out the use of HHPs is necessary and consistent with developments in other international fora addressing chemicals and pesticides.

• A hazard-based approach to pesticides, rather than risk mitigation

A "hazard-based" approach focuses on limiting the release of the hazardous chemical into the environment (e.g. through bans and restrictions), while a "risk-based" approach tends to emphasise managing / mitigating risks in use (e.g. more accurate application methods, nospray buffer zones). The most reliable, efficient, and cost-effective way of reducing pesticide harm to biodiversity (and human health) is to focus on eliminating the most hazardous pesticides at source rather than during their use. This means reducing synthetic pesticide use and toxicity, by a measurable quantity, with priority given to phasing out Highly Hazardous Pesticides.

• Reducing nutrients lost to the environment

Excessive use of manure and other organic and synthetic fertilisers leads to pollution levels that destroy sensitive plants and animals. They also negatively affect water bodies and terrestrial ecosystems such as meadows and forests. Synthetic fertilisers have devastating impacts on soils and their microbial communities, reducing their health and fertility over time until those soils become unable to yield a crop without them.

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• Synthetic pesticides

Undeniable evidence exists that synthetic pesticides pose significant risks to biodiversity and ecosystem functions affecting non-target species, ranging from beneficial soil microorganisms, insects, plants, fish, and birds to humans, with an alarming number of deaths and chronic diseases related to pesticide exposure.

Light and noise pollution

Light pollution significantly impacts nocturnal life and can increase the risk of extinction of numerous insects. Noise pollution affects marine life significantly but can also interrupt the communication between terrestrial species, undermining e.g. their mate-finding and therefore threatening the species.

Reduce agricultural practices that encourage the intensive use of pesticides

GM crops engineered to tolerate pesticides encourage the application of large amounts of agrotoxics, often from the air, with deadly impacts on biodiversity and the health of local communities, while the development of disease and weed resistance means the application of additional toxins.

Further reading on target

TWN briefing paper on the pesticides component of target 7: https://www.twn.my/title2/biotk/2021/btk210802.htm

TWN/PAN International Briefing Paper: Hazard or Risk? Why a hazard-based pesticide target offers much better protection to biodiversity at a lower cost. https://wp.twnnews.net/wp-content/uploads/2022/05/A-hazard-based-pesticide-target-better-protects-biodiversity.pdf
Villa-Galaviz, E, Smart, SM, Clare, EL, Ward, SE, Memmott, J. Differential effects of fertilisers on pollination and parasitoid interaction networks. J Anim Ecol. 2021; 90: 404–414. https://doi.org/10.1111/1365-2656.13373

Sud, M. (2020), "Managing the biodiversity impacts of fertiliser and pesticide use: Overview and insights from trends and policies across selected OECD countries", OECD Environment Working Papers, No. 155, OECD Publishing, Paris, https://doi.org/10.1787/63942249-en.