

## Policy paths for protecting biodiversity and human health

NEGOTIATORS NEED TO EMPHASIZE NATURE-BASED SOLUTIONS FOR BIODIVERSITY LOSS

- **Negotiators need to focus** on targets that support both the Kunming-Montreal Global Biodiversity Framework and the Paris Agreement
- **Emphasis on nature-based solutions** as a means for meeting Paris Agreement goals will also support biodiversity efforts.
- **Investment in research** into nature-based solutions and financial support is vital for success.
- **Elevate voices of indigenous communities** for traditional knowledge and medicine to be share continuously.
- **Develop and implement infrastructure** for the health crisis many communities are already experiencing.
- **Focus and momentum are vital** to keep progressing to meet the Paris goal of 1.5 degrees Celsius.

### What's the issue?

Biodiversity is declining at rapid speeds, faster than any other time in human history, putting more than 1 million species at risk of extinction. As of 2023, approximately 1/3 of the planet's land is degraded (Altman 2023). There are currently 36 recognized biodiversity hotspots, which must contain at least 1,500 species of vascular plants and are endemic species. These hotspots also have lost at least 70% of its primary native vegetation, but many exceed these criteria. Additionally, these hotspots are home to around 2 billion people, (CEPF 2023). Ecosystems are also responsible for great amounts of absorption of human-caused emissions.

In addition to absorbing emissions, biodiversity largely impacts human health. From habitat destruction and migration to medicinal practices, many societies have integrated practices that rely on their ecosystems. For example, 70% of all cancer drugs today are natural or bio-inspired products (Altman 2023), but these are at risk with rapid biodiversity loss. Land and aquatic ecosystems alike prevent the spread of zoonotic diseases, which are diseases that occur when pathogens jump from animals to humans. More than 75% of emerging infectious diseases in humans are caused by pathogens that originally circulated in animals (Altman 2023). Habitat loss and change in migration patterns have been known to increase the potential of zoonotic spill over, demonstrating how biodiversity loss relates to human health.

Like the UNFCCC, the UN hosts the Convention on Biological Diversity (UN CBD), which is an international treaty for the conservation of biodiversity, the sustainable use of the components of biodiversity, and the equitable sharing of the benefits derived from the use of genetic resources. Between these two conferences, there has been a push for nature-based solutions.

### Why is this important?

Nature-based solutions promote remedies that support ecosystem thinking, which benefits both biodiversity and human health. COP27 had the first ever cover decision to include nature-based solutions. At the last COP for the UN CBD, the Kunming-Montreal Global Biodiversity Framework was adopted, which includes 4 long term goals focused around maintaining, enhancing, and restoring ecosystems, biodiversity, etc. At least 70% of these targets in the GBF, are estimated to directly or indirectly help parties deliver on the Paris Agreement, (UN PRI 2023).

When it comes to medicinal practices, approximately 60% of the world's population uses traditional medicine, which relies on biodiversity, (WHO 2015). Nature-based solutions are designed to conserve in-tact ecosystems and restore affected ones, which will support traditional medicinal practices. There is significant overlap between how nature-based solutions support biodiversity enhancements and human health efforts.

If the issue of biodiversity loss is not addressed, there will be continued instances of zoonotic spill over, along with negative impacts on ecosystem health. Forced migration will increase, which can further exacerbate the spread of disease and invasive species, hurting human health and ecosystems alike.

### What happened at COP 27 on this issue?

For the first time, there was a thematic health day at COP28, which was Sunday, December 3. The focus of side events, panel discussions, pavilion talks on this day included health, relief, recovery, and peace. Additionally, Sunday, December 10, was Nature, Land Use, and Ocean Day, which included conversations and events around biodiversity. Both days led to historic declarations and statements regarding the climate crisis.

Much of the discussions highlighted that the climate crisis is also a health crisis and that nature-based solutions are a viable option for addressing both issues. During COP28, the “COP28 UAE Declaration on Climate and Health” was backed by over 120 countries, in partnership with the UAE Ministry of Health and Prevention and the World Health Organization. This Declaration highlights the overlap of climate and change and health issues, as well as emphasizes the importance of having equitable infrastructure to support those experiencing the impacts of the climate and health crises.

For biodiversity, the COP28 UAE Presidency and the People’s Republic of China, as President of the Convention on Biological Diversity CBD COP15, released the COP28 Joint Statement on Climate, Nature, and People. This statement recognizes the importance of addressing biodiversity loss and land degradation at the same time as climate change. These issues are related and must be dealt with accordingly. Between the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework, there are common goals that are addressed and outlined in the joint statement and will continue to be prioritized to address the growing climate crisis.

## Policy recommendations

### 1) Develop and build healthcare infrastructure for the communities most at risk of climate-health issues.

There are large discrepancies of quality of health care globally, which are exacerbated by the effects of climate change. Those most affected may not have access to the level of care they need, whether because of forced migration, lack of energy, or the like. It is vital to get infrastructure in place for those countries and communities that are most at risk. The Health Declaration emphasizes the importance of implementing “climate-resilient, sustainable, and equitable health systems,” (“Over 120 countries...”, 2023).

### 2) Invest in nature-based solutions as a means of mitigating and adapting.

Nature-based solutions are a viable option to support biodiversity. Countries and communities that are experiencing the greatest impacts of climate change are also great candidates of nature-based solutions. University of Miami has started working with communities to implement nature-based solutions and are seeing great results as learned during a pavilion presentation and discussion at COP28. Similar types of projects supporting the most vulnerable are vital for to reduce the impact of climate change in the most equitable and effective manner.

### 3) Elevate voices of indigenous communities and those most greatly impacted by climate change.

In indigenous communities, traditional knowledge is an asset that must be shared globally. Amongst indigenous communities, as well as Small Island Developing States (SIDS), they are seeing the greatest impacts of climate change and must be supported and funded appropriately. There are many methods and adjustments made in these communities already that can likely be applied to others. There must be equitable representation at all tables, especially for the most vulnerable communities that can be most impactful. Between UNFCCC and UN CBD, these are the voices that must be elevated and heard to see the most change globally.

## References

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