EDITORIAL

Monitor biodiversity for action

This week, Montreal, Canada, is at the epicenter of international negotiations for biodiversity. Thousands of people from around the world are attending the 15th Conference of the Parties to the United Nations Convention on Biological Diversity (COP15) to witness the negotiation of a new Global Biodiversity Framework. Its goals and targets replace the previous framework—the Aichi Biodiversity Targets—that failed to bring about the transformative change needed to reverse the alarming trends in biodiversity loss.

The current draft Global Biodiversity Framework is built upon four goals and 22 targets designed to galvanize immediate society-wide action by governments, nongovernmental organizations, businesses, local communities, and Indigenous peoples. The goals address the urgent need to protect and restore biodiversity, sustain the benefits that people derive from healthy ecosystems, ensure that these benefits are shared equitably, and mobilize all forms of enabling conditions, including knowledge and sufficient financial resources. The targets accompanying the goals focus measurable actions for all life on land, in fresh waters, and in the oceans.

At the heart of the Global Biodiversity Framework is a new and vital piece—a monitoring framework that proposes a suite of indicators by which the Parties can measure progress toward both national and global targets. Much like a satellite-navigation system, the monitoring framework alerts when Parties are not on track and suggests alternative pathways to adjust a country's direction and journey. Approximately 40 headline indicators have been proposed to measure progress across all targets; examples for protecting and restoring biodiversity include the Red List Index, the Species Habitat Index, and the percentage of degraded or converted ecosystems that are under restoration.

Given their importance, it is perhaps surprising that the selection of indicators has been a source of disagreement during negotiations over the past year. There are three reasons for this tension. Countries differ greatly in their capacity to generate and use data, and to calculate the indicators and update them over time. This has resulted in a highly uneven global picture of biodiversity loss. A recent estimate indicates that global datasets cover less than 7% of the world's surface at 5-km resolution, and less than 1% for most species at higher resolutions. This knowledge gap can be filled over time if infrastructure and expert knowledge are available to implement the monitoring framework—a subject that is part of the negotiation process. International organizations such as the UN Environment Programme World Conservation Monitoring Centre and the Group on Earth Observations Biodiversity Observation Network (GEO BON) are offering support to countries. International financial support for monitoring will be needed to ensure that biodiversity observations are possible for all countries.

Another key issue is data sovereignty. Countries must have confidence in the data used to update the indicators. This is best achieved if national datasets that are validated by experts are used along with global data. In the absence of adequate access to and sharing of data, the negotiation can only center on a minimum set of indicators that all countries can calculate with the available data.

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There is also a risk that the framework will be too flexible. Parties may pick and choose indicators to show progress on certain facets of the Global Biodiversity Framework targets, while ignoring others. At this time, there is no consensus on which aspects of the monitoring framework are essential and must be employed by all Parties to provide a global picture of progress.

These issues of data availability, international disparities regarding data production and access, and sovereignty have prevented the Parties from reaching a consensus on quantitative targets and SMART (specific, measurable, achievable, relevant, and time-bound) indicators. This raises the specter of a Global Biodiversity Framework with low ambition that emerges from COP15. These problems are not unsolvable but require the international community and national governments to work together to invest in new or existing biodiversity monitoring systems that help all Parties. If the Parties of COP15 can agree on a global biodiversity observing system that links national monitoring networks, analogous to the Global Climate Observing System in place for climate tracking, then a path will be initiated for boosting the production and sharing of biodiversity data worldwide. Over time, this will allow all countries to implement an ambitious monitoring framework that supports the decisions and actions needed to achieve the vision of the Global Biodiversity Framework.

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