Climate change and biodiversity loss are among the greatest environmental challenges of our time. Historically, the international policy discourse on the environmental dimensions of sustainable development has largely taken place in the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD) and the UN Convention on Combating Desertification (UNCCD). Delivering on development, while simultaneously addressing global environmental challenges is daunting. Moreover, the achievement of the Sustainable Development Goals (SDGs) adopted in 2015 may be jeopardized by inconsistencies that emerge between different conventions. The SDGs require systemic solutions that are based on cooperation and are implemented across scales in an interconnected world. Is the current international policy framework with its system of sectoral conventions equipped to build these bridges in pursuit of sustainable development?

**Key issues**

The Rio Conventions raised the profile of global environmental issues. This is evident in the existence of international policy targets (e.g. Paris Agreement, Aichi targets). It is also evident in the increased volume of available funding and the proliferation of financing instruments, aimed at catalyzing and upscaling action on climate change and environmental protection. However, collectively we have not succeeded in sufficiently decoupling socioeconomic progress from environmental impacts. The combined impacts arising from the human domination of natural systems from local to global scales (e.g. climate change, biodiversity loss, land degradation, waste, marine and terrestrial pollution) undermine the earth life-support functions, threatening livelihoods, economic prospects and security.

Important interlinkages between climate change, land-use and biodiversity are inadequately addressed. Due to the fragmented institutional structures and policy focus, there is a real risk of suboptimal outcomes that do not adequately address the complexity of the problem. Strategies optimizing for policy objectives of one convention may impact adversely on the ability of achieving the objectives of another.

**Example 1:** When the UN Secretary-General asked the International Institute for Applied Systems Analysis (IIASA) to do the background calculations for the Sustainable Energy 4 All initiative, it became evident that the combined costs of climate change mitigation, energy security, and air pollution control can significantly be reduced if the three areas are tackled in an integrated manner as compared to being treated separately. Separately, climate mitigation costs would amount to 1 trillion USD annually for the period 2010-2030, air pollution control to 600 billion USD and energy security to 200 billion USD per year, i.e. 1.8 trillion USD in total, whereas an integrated solution for all the three would cost 400-600 billion USD per year less. In the absence of integrated planning approaches, the risk of misalignment of strategic solutions and ineffective allocation of resources is even more pronounced in the land-use space, where basic human needs (e.g. food security) interface with local and global environmental concerns.

**Example 2:** Aggressive pursuit of mitigation objectives to limit global warming may place constraints on land-use, which could undermine food security even more than the avoided food security impacts due to climate change. Integrated modeling results suggest that by 2050 climate change could put an extra 24 million people at risk of hunger. Over the same time frame aggressive climate policies could put 78 million people at risk of food insecurity. This is if agriculture is included in a stringent carbon tax scheme and the impacts on agricultural development objectives are not adequately managed.

There is now a unique window of opportunity to redress this: The SDGs call for an integrated approach to addressing economic, social and environmental objectives, providing qualitative and quantitative benchmarks. Achieving the SDGs requires coordination across sectoral ministries and collaboration among diverse stakeholder groups. Yet this is currently not happening at the level needed to create the required economic and societal transformation.

**Recommendations**

The policy discourse focused on targets within the conventions needs to be complemented by a focus on integrated pathways towards the SDGs across conventions and other multilateral agreements. Despite the need for integrated strategies, Nationally Determined Contributions (NDCs) and long-term Low-
Emission Development Strategies under the UNFCCC and National Biodiversity Strategy Action Plans (NBSAPs) under the CBD are not coordinated, neither in government, nor at a scientific assessment level. The use of bioenergy to meet climate mitigation targets, for example, needs to be carefully assessed in its impact on food security and biodiversity. Relying on massive scale-up negative emission technologies in the future also represents a risky strategy for managing climate change, biodiversity and development concerns. It certainly should not be used as a reason for further delaying already available demand and supply side measures.

To catalyze and upscale concerted action on climate, environment and land-use, multi-objective financing frameworks are needed. The UNFCCC, CBD and UNCCD have been successful to varying degrees in increasing funding volumes for their respective objectives. This has also been accompanied by a proliferation of funding instruments. While links between the conventions are recognized through an emphasis on generating co-benefits e.g. for climate, biodiversity, etc., the objectives of the conventions are not treated on an equal footing. Calls for transformative and programmatic funding initiatives should further emphasize the need to deliver on multiple objectives simultaneously to create further incentives for identifying and resolving trade-offs between the conventions. The improvement of funding opportunities should be mirrored by a better coordination at the implementation level, including the existence of strategic cross-sectoral plans at the national and subnational levels, which are informed by the best available technical expertise.

Bringing about economic transformation towards sustainability requires the engagement of the private sector and considering the multi-faceted role of trade. While the conventions recognize the role of the private sector, this often occurs without a mechanism to facilitate broad level engagement of the private sector in this discourse. In addition, there is a need to account for the role of trade in providing or impeding solutions to addressing climate change and biodiversity loss. This applies to efforts aimed at reducing greenhouse gas emissions, but particularly to biodiversity concerns and services delivered by nature to society across scales. Trade and environment connections need to be strengthened among international organisations and bi- and multilateral agreements, e.g. by facilitating trade in environmental goods and services, or by levelling the playing field for environmentally friendly production systems across the conventions.

The economic performance of countries needs to be assessed more comprehensively to reflect the full dimensions of sustainable development. While GDP remains an important economic indicator, its inadequacy as an indicator of human welfare is well recognized. There is a need for more comprehensive wealth accounting by countries, which also captures the management of natural capital. The link between the ecological and societal functions of nature needs to be acknowledged in mainstream economic decision-making and planning, thereby accounting for the objectives of the UNFCCC, CBD and UNCCD.

A shared policy narrative is needed that promotes integrated action on climate, biodiversity and land-use change. The science, policy and business communities, working on food systems, climate action, biodiversity, water, land degradation and desertification, and other dimensions of land-use, need to come together to arrive at a shared framing of the challenges. This will help overcoming the tendency to emphasize one dimension of the overarching problem and promote the devising of comprehensive strategies for sustainable land-use and secure food systems. The World in 2050 initiative (TWI2050)\(^3\), the FABLE Consortium\(^4\), and the Food and Land-Use Coalition (FOLU)\(^5\) are examples of research initiatives which provide a platform to identify sustainable development pathways and associated transformation needs from a multi-sectoral perspective.

The 15th Conference of the Parties to the CBD, where the post 2020 CBD policy framework will be developed, provides an important opportunity to close the gap between the conventions. The host country China together with the EU should step into the current void of global leadership by taking on active roles in catalyzing multilateral collaboration for a more integrated approach to the conventions within the overall framework of the SDGs.

Prepared by the participants of the Alpbach-Laxenburg Group meeting, Alpbach, Austria, 28 August 2018

---

\(^3\) The World in 2050 (TWI2050): http://www.iiasa.ac.at/web/home/research/twi/TWI2050.html
\(^4\) FABLE Consortium: http://www.iiasa.ac.at/web/home/research/researchPrograms/EcosystemsServicesandManagement/event/170403-fable.html
\(^5\) FOLU: https://www.systemiq.earth/folu/