Foreword

This volume, consisting of a collection of essays examining the emerging institutional and governance arrangement known as REDD+ (reducing emissions of greenhouse gases from deforestation and forest degradation) from a multiplicity of perspectives, provides an excellent opportunity to think about what students of governance know as "the problem of interplay."[1] This concern, which has become the focus of a considerable volume of research in recent years, directs attention to the fact that regimes or governance systems do not exist in a vacuum. They can and often do interact with one another in ways that have significant consequences, not only for the attainment of stated goals but also as sources of more or less prominent unintended consequences or side effects.

In the case of REDD+, this is partly a matter of thinking about interactions between this initiative and other elements of the regime complex dealing with climate.[2] There is some disagreement about the exact contribution of deforestation and forest degradation to global greenhouse gas (GHG) emissions.[3] Nonetheless, trees not only store carbon; they also remove carbon from the atmosphere by fixing carbon as they grow. A successful effort to protect forests would make a real difference with regard to addressing the problem of climate change. The question, then, is how does REDD+ dovetail with other elements of the climate regime? Does this initiative compete for a finite pot of funds available to deal with climate change, so that investing in REDD+ would reduce resources available to support other efforts to combat climate change? Or conversely, is REDD+ likely to increase the overall pool of resources available for

[1] Oran R. Young et al., *Institutional Dimensions of Global Environmental Change (IDGEC) Science Plan*, Report No. 9. Bonn: IHDP, 1999; Oran R. Young, Leslie A. King and Heike Schroeder (eds), *Institutions and Environmental Change: Principal Findings, Applications, and Research Frontiers*. Cambridge: MIT Press, 2008.

[2] Robert O. Keohane and David G. Victor, "The Regime Complex for Climate," *Perspectives on Politics*, 9 (2011): 7–23.

[3] Authoritative sources generally include deforestation as a component of a larger category of emissions from "land use changes." The Global Carbon Project (www.globalcarbonproject.org/), perhaps the most authoritative source, indicates that land use changes accounted for 36 percent of annual emissions in 1960 but less than 10 percent of emissions in 2013.

efforts to address climate change, either because it taps funds that are not available to support other elements of the climate regime, or because success in dealing with deforestation and forest degradation is likely to produce demonstrable effects showing what can be done in combating climate change when we get the relevant governance arrangements right?

Even more important is the observation that forests produce a variety of values that have little or nothing to do with climate change. Wood products are important commodities. Harvested sustainably, forests can provide the raw materials needed to support a thriving industry for the indefinite future. Forests provide essential habitat for numerous species, especially in tropical regions where each hectare of forest typically hosts a unique assemblage of species and where there are many species that have yet to be identified by scientists. Forests are important to subsistence gatherers who depend on them for a variety of valuable products ranging from nuts and mushrooms to firewood. Forests provide ecosystem services, including the prevention of soil erosion and the maintenance of hydrological systems. Beyond this, forests have aesthetic value and have been an important source of inspiration for creative writers and poets. Think of Thoreau's classic work on *The Maine Woods* or the evocative opening lines of Longfellow's famous narrative poem, *Evangeline*: "This is the forest primeval, the murmuring pines and the hemlocks."[4]

This leads us to think about the regimes created to protect these other values associated with forests and to ask whether REDD+ is compatible with these arrangements or even interacts with them in a synergistic manner. Among the most prominent of these arrangements are the Convention on Biological Diversity (CBD) with its mandate to promote conservation at the genetic, species, and ecosystem levels, the International Tropical Timber Agreement (ITTA) aimed primarily at regulating plywood markets to prevent overharvesting in Southeast Asia, the non-governmental Forest Stewardship Council (FSC) established to encourage sustainable harvesting of wood products on a global basis, and the Convention on the Conservation of Migratory Species concerned with habitats of critical importance to migratory species. All these arrangements operate at the international level. In addition, there are municipal regimes that include provisions applicable to the management of forests. These address an array of issues, including the preservation of endangered

[4] These are iconic nineteenth-century American contributions to nature writing. Many Americans of my generation were expected to memorize sizable chunks of *Evangeline*. But nature writing in other cultures includes similar contributions.

species and the protection of wilderness areas as well as the production of wood products.

Is REDD+ likely to prove beneficial or harmful from the perspective of those responsible for operating these other regimes? Responding to this question poses issues relating to what the regimes literature characterizes as horizontal and vertical interplay. Are programmes sponsored under REDD+ likely to be well-received by those seeking to fulfill the goals of the CBD? And what about the interplay between REDD+ activities and the efforts of those seeking to maximize income from the sale of forest products? How will international arrangements like those envisioned under REDD+ interact with national measures designed to protect endangered species or set aside tracts of forest as components of wilderness systems?

One interesting issue that runs through many of these concerns relates to the harvest of wood products.[5] There is a debate about whether the protection of old growth forests is the best option from the point of view of climate change. Mature trees store large quantities of carbon, especially in their root systems. Yet younger, fast-growing trees may fix more carbon than mature trees that are not growing so fast. The promotion of dubious practices, such as the wholesale destruction of existing forests to make way for oil palm plantations, as contributions to combating climate change constitutes a distinct danger in this context. Intact forests provide a variety of ecosystem services, and the majesty of old growth forests is undoubtedly a source of inspiration for many of those who derive value from non-consumptive uses of forests. Viewed from this broader perspective, decisions about harvesting wood products are complex; they raise important questions that extend well beyond the usual calculations of sustainable yields that are the stock in trade of silviculturalists or the calculations relating to profit maximization that occupy the attention of forest economists.

In my view, it is always desirable to treat applied analyses, like the essays in this book on various aspects of REDD+, as opportunities to work back and forth between theoretical concerns and more applied or practical matters. Many analysts who began to think hard about the phenomenon of institutional interplay in the 2000s were motivated by a concern that unconnected institutional arrangements would interfere with one another and might well give rise to conflicts. Such interactions might make it difficult to attain the goals of individual arrangements or lead to

[5] Valentin Bellassen and Sebastiaan Luyssaert, "Carbon Sequestration: Managing Forests in Uncertain Times," *Nature*, 506 (13 February 2014): 153–5.

counterproductive battles for primacy among the proponents of interacting regimes. But reality has turned out to be considerably more complex than we anticipated.[6] Interactions can give rise to complementarity as well as conflict. Consider the ozone regime as a prominent example. Most ozone-depleting substances (ODSs) are also GHGs. So far, the success of the ozone regime in phasing out a wide range of ODSs has produced reductions in GHG emissions that exceed reductions achieved via the UN Framework Convention on Climate Change (UNFCCC) together with the Kyoto Protocol by a wide margin.[7] Hydrofluorocarbons (HFCs), on the other hand, are not ODSs, a fact that has made them attractive to those looking for substitutes for ODSs in various uses. But HFCs are powerful GHGs. In this case, what seems attractive from the perspective of protecting stratospheric ozone intensifies the problem of dealing with GHGs. As this example suggests, it is important to explore ways to alleviate conflicts of this sort, once the significance of the problem is fully documented. In the case of HFCs, efforts are underway to find alternatives to these chemicals for various uses. Negotiations aimed at reaching an agreement to phase out HFCs under the terms of the Montreal Protocol are advancing steadily; they may reach a successful outcome during the course of 2016.

More generally, however, we need to encourage sustained research both to identify the conditions under which institutional interplay will lead to complementarity or conflict and to identify best practices in dealing with such conflicts when they do arise. The detailed analysis of various aspects of REDD+ set forth in the contributions to this volume provide a welcome opportunity to contribute to this larger agenda in thinking about the phenomenon of institutional interplay.

Oran R. Young
Wolcott, VT
July 2015

---

[6] Sebastian Oberthür and Thomas Gehring (eds), *Institutional Interaction in Global Environmental Governance: Synergy and Conflict among Global and EU Policies*. Cambridge: MIT Press, 2006; Sebastian Oberthür and Olav Shram Stokke (eds), *Managing Institutional Complexity: Regime Interplay and Global Environmental Change*. Cambridge: MIT Press, 2011.

[7] "The deepest cuts," *The Economist*, 20 September 2014. URL: www.economist.com/news/briefing/2168680-our-guide-actions-have-done-most-slow-global-warming-deepest-cuts.