

2

ARCHITECTS, AGITATORS, AND ENTREPRENEURS

International and Nongovernmental Organizations in Global Environmental Politics

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This chapter introduces two types of representative organizations active in global environmental politics—international governmental organizations, also known as intergovernmental organizations (IGOs), and nongovernmental organizations (NGOs)—and discusses their roles in instigating, coordinating, and implementing global environmental governance over the past decades. IGOs and NGOs represent very different constituencies: nation-states and civil society, respectively. As *agitators* for environmental action, *architects* of governance solutions, and *entrepreneurs* for new sorts of initiatives, they have been critical in shaping and directing the international community's response to global environmental challenges.¹ Both IGOs and NGOs have, in the face of intransigence, low capacity, and/or low commitment of national governments, taken on larger and more autonomous roles in global environmental governance than these organizations were initially designed or intended to do. They have played a critical role in building larger visions, or goals, for achieving a sustainable future that have helped frame intergovernmental action on a larger scale, for example, through the seventeen Sustainable Development Goals (SDGs) developed by United Nations agencies and adopted in 2015 by all 193 UN member states. The historic 2015 Paris Agreement on Climate Change would not have been possible without the organizing and steering work done by international agencies with the support of NGOs.

State-led global environmental governance has been the dominant mode of global environmental governance for the past forty-plus years, whereby national governments cooperate to establish multilateral environmental agreements (MEAs) and the networks of institutions and organizations that manage them.² Its history can be traced through four major “Earth Summits” held since 1972 and through the multitude of MEAs negotiated over time, many since the first

global environmental conference, held in Stockholm, Sweden, in 1972. Over this time, IGOs and NGOs have multiplied and spread across the arena of global environmental governance. The remainder of this chapter examines and evaluates the emergence and evolution of these two sorts of representative organizations and, through them, global environmental governance. Other chapters in this volume focus in more detail on the roles of treaties and other types of international law (Chapter 3) and international regimes (Chapter 4).

INTERNATIONAL GOVERNMENTAL ORGANIZATIONS AND THE GLOBAL ENVIRONMENT

Nation-states establish IGOs to ease international cooperation by taking on the tasks of coordinating interstate negotiations and implementing and enforcing resulting agreements. IGOs are “organizations that include at least three states among their membership, that have activities in several states, and that are created through a formal intergovernmental agreement such as a treaty, charter or statute.”³ Examples range from the United Nations and its associated agencies down to single-issue IGOs such as the International Whaling Commission and regional IGOs such as the Association of Southeast Asian Nations. This section reviews the many forms and functions of IGOs that have a role in global environmental governance.

IGOs can be *agitators*, taking advantage of opportunities to raise governmental concern about the state of the global environment and generating knowledge that informs understanding of the causes of these problems and what to do about them. They are also, of course, *architects* of global environmental governance, given their instigating and coordinating roles delegated to them by member states. They are *managers* of governance regimes and processes established under their auspices, and they are *entrepreneurs* as well, shaping the norms that underlie the overall architecture of global environmental governance and pushing for new directions, often when states are unable or unwilling to push for stronger measures.

The United Nations System

The United Nations and key actors within it have played a central role as instigators and architects of global environmental governance, starting with the first global summit on the environment, held in Stockholm in 1972. The United

Nations was established in 1945 as a global security organization to maintain collective security and peace in the wake of World War II. In 2018, it had 193 member states. Its most recent member, South Sudan, joined in 2011. Its two most important governing bodies are the General Assembly, in which each member country is represented and has a single vote, and the Security Council, which consists of representatives from fifteen countries, including five permanent representatives (from the United States, the United Kingdom, Russia, France, and China) who have veto power over council decisions.⁴ The UN's powers include establishing peacekeeping operations, meting out international punitive sanctions, and authorizing military action. The United Nations is administered by the office of the secretary-general. Its specialized agencies and programs are responsible for promoting different aspects of the UN's global mandate, from economic and social development to agriculture to world health.⁵

The UN's early years were marked by Cold War divisions and intransigent interstate disputes. However, as countries in Asia and Africa emerged from colonial rule in the 1950s and 1960s, membership increased dramatically. By 1962, the organization had doubled in size from its initial fifty-one members, including many more developing and nonaligned nations, which were not as invested in the Cold War face-off between the United States and the Soviet Union.⁶ These new members pushed for social and economic issues to lead the UN's agenda, partly through the collective influence of the Group of 77 (G-77), which formed in 1964 during the first UN Conference on Trade and Development (UNCTAD).⁷ In turn, these developments invigorated the UN's social and economic development programs and helped open the door for the inclusion of global environmental issues in the UN's suite of activities.

Within this same time frame, scientists and environmentalists were converging in their concerns and beginning to see environmental problems as global and transboundary threats. In some cases—such as transboundary air pollution and species loss—the threats were familiar but had come to be understood to exist on a far larger scale than previously thought. Others were newly recognized problems or problems that had been theorized but the impacts and causes of which were now being demonstrated by scientific research—such as climate change and stratospheric ozone layer depletion as a result of human economic activity. These two latter problems, furthermore, could be understood as existential risks: like global nuclear war, each posed a significant—perhaps highly potent—threat to human civilization (as highlighted by the National Oceanic and Atmospheric Administration in 2009). In addition, prior to 1972, existing environmental treaties were not housed under any particular institution, nor had there been much attempt to bring

them together as a coherent system with unifying principles, despite the existence of an already extensive body of international environmental law.⁸

During this time, the United Nations was instrumental in helping to raise international concern and to frame ways the international community could move forward and address global environmental concerns in a systematic fashion. First, it sponsored some of the leading international scientific collaborations that generated research on the biosphere and atmosphere in the 1950s, 1960s, and early 1970s.⁹ Examples include the World Meteorological Organization's involvement in the 1956–1957 International Geophysical Year and its leadership, with the International Council of Scientific Unions, of the Global Atmospheric Research Program—a fifteen-year multicountry endeavor—and UNESCO's leadership of the Man and the Biosphere program, which began in 1971. The UN was able to take advantage of this and other new scientific research and use it to push for global action on pressing environmental issues at the same time that the environmental movement (see following section) was also gathering strength and advocating for global solutions.

The late 1960s and early 1970s were a propitious time for creating a new arena of global politics. Cold War tensions were starting to ease, at least for a time, and the superpowers—the United States and the Soviet Union—were beginning to talk about arms control agreements. The global environment could not only be a new issue for a somewhat embattled UN to claim as its own, but it could also help erode long-standing political rivalries, uniting enemies in a common cause. The United Nations was, therefore, able to provide an effective platform from which efforts to protect the global environment could be launched. Particular individuals and countries within the UN system took the lead in initiating the process that led to the first global environmental summit in 1972.¹⁰

Designing Global Environmental Governance: The Role of Global Summits

In 1972 the UN convened the first global “Earth Summit,” the UN Conference on the Human Environment (UNCHE), in Stockholm (see Table 2.1), initiating what would prove to be a watershed moment in global environmental governance. UNCHE brought together representatives from 113 countries to discuss how to address the newly recognized global scope of environmental problems. The resulting agreements accomplished several goals. Delegates agreed that the most effective way forward would be through multilateral diplomacy: the negotiation of binding legal agreements among

nation-states on an issue-by-issue basis. This decision ratified existing practices, for by then a large number of multilateral environmental agreements were already in existence, from the 1946 International Whaling Convention to other cooperative arrangements dating back to the nineteenth century. Second, the Stockholm Declaration codified twenty-six principles of international environmental law, including the rights of states to use their own resources but also their obligations not to harm the environments of other states.¹¹ Third, UNCHE established the UN Environment Programme (UNEP), whose job it would be to coordinate global environmental governance through identifying important problems, convening and enabling international negotiations, and monitoring the resulting agreements. UNEP, discussed in more depth shortly, has remained the most important international institution in the area of global environmental governance, anchoring this highly complex system.¹²

Primarily, but not wholly, under the auspices of UNEP, the ensuing decades saw the negotiation of a large number of MEAs. One database identifies more than four hundred full MEAs, with additional protocols and amendments, many of which have come into being since 1972.¹³ These include the “flagship” agreements on issues of global concern—the Vienna Convention for the Protection of the Ozone Layer (1985) and its subsequent Montreal Protocol (1987), the 1992 UN Framework Convention on Climate Change (UNFCCC) and the 1997 Kyoto Protocol, and the 1992 Convention on Biological Diversity (CBD) and its associated Cartagena and Nagoya Protocols (2000 and 2010, respectively). They also include agreements on transboundary issues, such as the 1979 Convention on Long-Range Trans-boundary Air Pollution (CLRTAP) and the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. Some MEAs drawn up during this period are forty years old or older, such as the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Others are more recent, such as the 2001 Stockholm Convention on Persistent Organic Pollutants (POPs) and, most recently, the 2013 Minamata Convention on Mercury, which addresses the production of, trade in, and storage of mercury (see Chapter 11).

Each of these multilateral processes is governed by a secretariat and often involves additional bodies, such as scientific advisory committees. The parties to a given agreement meet every one or two years at a Conference of the Parties (COP), where decisions are made (or are supposed to be made) to strengthen the agreement or to deal with new problems. Each MEA has its own goals, decision-making processes, and underlying norms and engages its own range of actors, including nonstate actors such as NGOs. The combination of these different elements, along with the ongoing processes of negotiation that

characterize each MEA, leads analysts to describe each MEA as a regime: a set of rules, norms, principles, decision-making procedures, and organizations that steer actor behavior around a given issue area.¹⁴

Since 1972, three subsequent “Earth Summits” have been held, each organized by the UN and its agencies. The UN Conference on Environment and Development (UNCED) convened in Rio de Janeiro, Brazil, in 1992; the World Summit on Sustainable Development (WSSD) was held in Johannesburg, South Africa, in 2002; and the UN Conference on Sustainable Development (Rio+20), marking twenty years since UNCED, was held in Rio de Janeiro in June 2012. Table 2.1 provides a brief comparison of the components and outcomes of these four conferences.

The 1992 Rio Summit marked the high point of international environmental diplomacy, with the opening for signature of two major conventions, the CBD and the UNFCCC.¹⁵ The WSSD, held under the looming shadow of the second Iraq War, was a far more subdued event, also reflecting many parties’ disillusionment with multilateral diplomacy as the primary global environmental governance tool.¹⁶ Both UNCED and WSSD were marked by the convergence, both at and around the conferences, of civil society actors, some as accredited observers but many more attending parallel summits and other events designed to draw attention to broader social, environmental, and human rights issues not necessarily being addressed by the main delegates.

The 2012 Rio+20 conference was convened by the UN Commission on Sustainable Development (UNCSD).¹⁷ Its theme, “The Green Economy,” indicated how much closer together the agendas of global environmental and global economic governance had moved in the preceding decades. Many observers—and indeed many participants—found the agenda and the results of this summit to be rather empty of substantive content and goals. John Vidal, environment correspondent for the British newspaper the *Guardian*, offers an alternative view: that Rio+20 succeeded to the extent that it did not fall apart. He notes that it was “an extraordinary trade fair” of NGOs, business, and other representatives and resulted in the strengthening of UNEP (see following section) and reform of the UN Commission on Sustainable Development.¹⁸ Nonetheless, the deep disappointment that was the majority opinion after Rio+20 dampened plans for future megasummits on the global environment. The center of gravity of state-led global environmental governance has shifted to the climate regime, anchored by the UNFCCC. The 2015 Paris Agreement brought the highest level of attention so far to global environmental governance processes.

These summits, nonetheless, are significant for two reasons. First, they demonstrate the role of the United Nations and its agencies in setting a longer-term

Table 2.1 The “Earth Summits,” 1972–2012

1972: UN Conference on the Human Environment (UNCHE)
<ul style="list-style-type: none">• Held in Stockholm, Sweden• 113 nations represented• 225 accredited NGOs represented• Established UNEP• Produced the Stockholm Declaration: twenty-six principles of international environmental law
1992: UN Conference on Environment and Development (UNCED)
<ul style="list-style-type: none">• Held in Rio de Janeiro, Brazil• 172 nations represented; attendees include 108 heads of state• 1,420 accredited NGOs represented; another 17,000 representatives attend a parallel NGO summit• Produced the Framework Convention on Climate Change and the Convention on Biological Diversity, but states failed to agree on a Forests Convention; established the UN Commission on Sustainable Development (UNCSD) and the Global Environment Facility (GEF)• Produced two documents: the 300-page Agenda 21 and the Rio Declaration on Sustainable Development
2002: World Summit on Sustainable Development (WSSD)
<ul style="list-style-type: none">• Held in Johannesburg, South Africa• 191 governments represented• 8,000 accredited NGOs represented; accompanied by two parallel civil society summits• Produced no major treaties but reached agreement on a series of smaller-scale initiatives, including “Type II partnerships” among NGOs, governments, and other actors on the ground to meet goals around fresh water, biodiversity, and hazardous chemicals• Produced the Johannesburg Declaration on Sustainable Development
2012: UN Conference on Sustainable Development (Rio+20)
<ul style="list-style-type: none">• Held in Rio de Janeiro, Brazil• 191 governments represented, with 79 heads of state in attendance• 44,000 badges issued for official events, with strong side events and parallel participation by NGOs, business, and local government representatives• Institutional reforms included upgrading UNEP and restructuring UNCSD• Produced the 49-page document “The Future We Want”

agenda of global environmental governance. This can be seen in the activities at the summits themselves as well as in the documents and declarations they produced. Agenda 21 (1992) has remained a foundational document in state and nonstate circles for developing political goals. “The Future We Want,” produced at Rio+20, outlines the plan to develop a series of SDGs by 2015.

Second, these summits have articulated the trends that shape the actions of the leading actors in the system, which themselves shape global environmental governance institutions. These trends—the convergence of international environmental, development, and economic norms and agendas; the rising role of nonstate actors; and a shift away from large, flagship agreements—are all important in the stories told in this chapter and others in this volume. The trends sketched here demonstrate that the architecture of state-led global environmental governance is not static. IGOs such as the UN, UNEP, and treaty secretariats, as well as nonstate actors such as NGOs, have played fundamental roles in shaping the direction and strength of global environmental governance regimes.

The United Nations Environment Program

UNEP was established as a UN program under the auspices of the UN General Assembly and UNESCO.¹⁹ As a program, UNEP lacks the authority and autonomy to make binding decisions on its members, as a specialized UN agency such as the World Health Organization can.²⁰ Nor can it enforce treaty provisions when they are violated or settle disputes, compared with the UN Security Council and the World Trade Organization (WTO). It was, however, designed to be able to respond quickly to global environmental demands.²¹

UNEP is the first UN agency to be based in a developing country, with headquarters in Nairobi, Kenya, although its associated secretariats and offices are distributed worldwide. It serves as a focal point for and coordinator of international environmental initiatives and engages in monitoring, assessment, and early warning, fostering compliance with MEAs and long-term capacity-building efforts.²² It is funded through voluntary, not mandatory, assessments by member states: in 2010, the funding requirements across UNEP’s work programs added up to about \$218 million.²³

Assessments of UNEP’s performance are mixed, although many analysts do point out the financial and political constraints the program must operate under.²⁴ Though it has not been able to push much beyond its original mandate, it has been more successful in monitoring and assessing the state of the global environment and in establishing and managing many different international environmental regimes and negotiating processes.²⁵ It has helped

advance existing regimes and has pushed for new ones. However, UNEP's persistent problems of underfunding and inefficiencies, along with the fact that the program is a small player in the universe of UN agencies, have led to calls for reform and/or expansion.

In 2012, following the Rio+20 meeting, the UN General Assembly "upgraded and strengthened" UNEP, rebranding it at the same time, renaming it "UN Environment."²⁶ Previously its membership was restricted to a governing council of fifty-eight UN member states. Now it is open to all 193 member states, with the creation of the UN Environment Assembly, and has the promise of enhanced funding and structural capacity to fulfill its mandate. How these changes will play out, and how they will change the status of UNEP compared with other IGOs, remains to be seen, but the changes demonstrate a significant commitment on the part of nation-states to UNEP's ongoing work.

Treaty Secretariats and Other Regime Bodies

Each international environmental regime is governed by its own secretariat, a permanent body. The secretariat reports to the regime's COP and has its own full-time staff. Many secretariats are nested within UNEP and are housed in its offices in Nairobi, Geneva, Bonn, and other cities. The UN manages some secretariats, such as the secretariat of the UNFCCC, whereas others, such as the Ramsar Convention secretariat, exist entirely outside the UN system.²⁷

Although the secretariats are often dismissed as merely functional bureaucracies, coordinating treaty-related paperwork and COPs, it has become clear that in many cases they have been able to exercise considerable (but usually not explicit) influence, steering their member states toward particular outcomes.²⁸ For example, the secretariats of the various biodiversity/conservation regimes have worked to manage overlap among them, taking advantage of synergies and reducing conflict.²⁹ These activities are often undertaken by informal interregime liaison groups. In recent years, the secretariats of UNEP and the WTO have started working together to minimize conflicts and manage overlap between their respective jurisdictions.³⁰ Secretariat influence varies. Although, for example, the ozone regime secretariat, despite its small size, has been an important force behind the success of the regime, others have found themselves limited by the political conflicts between member states that have restricted their mandates.³¹ The UNFCCC secretariat has taken on far more of a technocratic role than its more activist equivalents in other regimes for these reasons.³²

Many treaty-based environmental regimes also contain subsidiary bodies, often for scientific and technical advice.³³ Many of these bodies are permanent;

some are ad hoc, established to fulfill particular tasks and then disbanded. The UN Framework Convention on Climate Change and the Kyoto Protocol have a particularly complex combined administrative structure, with permanent and ad hoc committees serving under the overall authority of the UNFCCC secretariat to deal with matters such as scientific advice, implementation, and funding mechanisms. The most prominent international scientific body associated with the climate regime, the Intergovernmental Panel on Climate Change (IPCC), operates outside the UNFCCC. Coestablished by UNEP and the World Meteorological Organization in 1988, the IPCC collects, assesses, and summarizes global scientific research on climate change.³⁴ The scientific advisory group for the Convention on Biological Diversity (CBD) is the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). The CBD also has a working group, established under Article 8j of the convention, whose mandate is to integrate local knowledge and knowledge holders into the regime. In 2012, the Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES) was established as an independent organization (along similar lines to the IPCC) to evaluate the science surrounding biodiversity and ecosystems, to inform various different international policy processes. Even in regimes not anchored by multilateral agreements, more informal international bodies—such as the UN Forum on Forests—provide venues and assistance for multilateral dialogue and advice.

Crosscutting Environmental IGOs

Some IGOs work across environmental regimes. The Global Environment Facility (GEF), founded in 1991 and restructured in 1993, coordinates funding and capacity-building projects across several regimes and issue areas: climate change, ozone depletion, biodiversity, oceans, persistent organic pollutants, and desertification or land degradation. It is the main funding mechanism of the CBD, the POPs treaties, the UNFCCC, and the UN Convention to Combat Desertification, and it supplements the activities of the Multilateral Fund of the ozone regime. The GEF is administered by UNEP and the United Nations Development Programme (UNDP), with funding coordinated by the World Bank, and has its own council and decision-making body. It is funded by its member states, with replenishments every four years.

Critiques of the GEF often revolve around the nature of its funding and its size relative to other sorts of international aid and spending.³⁵ The GEF funds projects according to the principle of additionality—the extent to which a local project is expected to generate global benefits in one of the GEF's focal areas. Additionality is hard to measure, and it is hard to tell what projects might have gone ahead even without GEF funding. The GEF has, however, been

lauded as an example of cooperation among three international agencies and as an entity that has been able to learn and adapt, to give recipient countries significant voice in its decision-making processes, and to incorporate NGOs.

As it moves forward, the GEF will need to find its place in the ever more complex landscape of global climate (and environmental) funding. This arena has boomed in recent years, as governments, aid agencies, NGOs, and private actors have sought to develop funding mechanisms that can protect the environment, mitigate greenhouse gas emissions and their impacts (for example, through carbon sequestration), and encourage green investment. Early experiments in climate funding, such as the Clean Development Mechanism (CDM), a global carbon offset program, faltered. The CDM fell victim to its design. It favored complex projects with uncertain returns in terms of emissions reductions. CDM registration processes relied on assumptions of additionality—the extent to which a project would build in emissions reductions it otherwise would not have. CDM projects also had unanticipated side effects, for example, not taking into account negative social impacts such as population displacement through large hydro-electric dam projects. Others, such as the Green Climate Fund, established in 2011, and the UN-administered Reducing Emissions from Deforestation and forest Degradation (REDD) program, have struggled to reach their financing goals.³⁶ Altogether, dozens of bilateral and multilateral initiatives, leveraging public and private funding and investment, have emerged in recent years. The Paris Agreement made developing a strong and coordinated funding architecture for adaptation and mitigation a priority, although parties stopped short of setting up compensation mechanisms for displaced peoples under a putative “loss and damage” protocol.

On a smaller scale, other environmental IGOs do important work. The Green Customs Initiative trains customs officials in developing countries to be able to identify and prevent the smuggling of various goods and substances prohibited across different environmental regimes, from ozone-depleting substances to hazardous wastes to wildlife and genetically modified organisms. Although by no means exclusively environmental, the UN Institute for Training and Research (UNITAR) plays an important role in building capacity at local and national levels to address a variety of environmental problems—from climate change to chemicals management.

Nonenvironmental IGOs with Environmental Functions

Finally, issues of global environmental change and sustainable development have spilled over into the activities of IGOs that traditionally have had

little association—in practice or by mandate—with these issues. The World Meteorological Organization, for example, worked with UNEP to set up the early meetings that led to the 1985 Vienna Convention for the Protection of the Ozone Layer and with the UN to set up the Intergovernmental Panel on Climate Change in 1988. UNESCO oversees the 1972 World Heritage Convention, an early conservation agreement that protects sites of natural and cultural importance worldwide. The International Maritime Organization (IMO), among other important functions to do with maritime security and safety, oversees the International Convention for the Prevention of Pollution from Ships (MARPOL, 1973/1978).

The major international trade, development, and finance organizations have, somewhat unwillingly but very significantly, taken on environmental responsibilities in recent years. Set up after World War II, the World Bank, the International Monetary Fund (IMF), and the General Agreement on Tariffs and Trade (GATT)—known as the Bretton Woods institutions, after the town in New Hampshire where Allied leaders met to establish them—were designed to foster postwar reconstruction and economic development.

The World Bank provides aid and loans at different terms to developing nations. Among its most high-profile activities, it funds large-scale development projects, such as dams, power plants, and roads. The IMF was designed to intervene in fiscal and monetary crises and has taken on a powerful role in lending to countries in trouble, imposing structural adjustment conditions as part of its terms. The GATT, signed in 1948, fostered trade liberalization among signatory states by lowering tariffs on traded goods and forbidding discrimination between trading partners and between domestically produced and foreign-produced goods. In 1995, signatories to the GATT created the WTO to rationalize and strengthen the capacity of the GATT and related trade and services agreements.

None of these organizations had an environmental mandate when first established. In the late 1940s there was little real awareness of resource constraints, and in the 1950s, theories of development optimistically assumed that all countries could follow an upward trajectory under the right conditions. These assumptions turned out to be wrong, and by the late 1970s and early 1980s, the environmental impacts of rapid and unequal global economic growth and development began to become apparent, with subsequent impacts on the policies and actions of the World Bank and the GATT/WTO.

Starting in the late 1980s, a concerted campaign by NGOs, targeting both the World Bank and the national legislatures that authorize its funding, forced the World Bank to address the environmental degradation and social dislocation that had followed many of the large-scale infrastructure projects it

had funded in developing countries.³⁷ NGOs, both local to the affected communities and transnational, were able to apply pressure to politicians in donor countries to get the World Bank to start integrating environmental assessments into its funding process and to establish an inspections panel to allow affected citizens a voice.³⁸ The World Bank also established an environment unit within its overall system while also emphasizing the need to mainstream environmental priorities across all its activities. It has, as mentioned earlier, been active in funding global environmental initiatives via the GEF and other global funds, and it has pioneered methods of carbon accounting and valuation of ecosystem services. Similar reforms have been put in place across other multilateral development banks, such as the Asian and African Development Banks. The World Bank also pulled out of or refused to fund a number of high-profile projects, including India's controversial Narmada dam project. In that and other cases, independent studies demonstrated that the social and environmental impacts were likely to be far greater than government assessments stated. In the face of losing funding from its highest donor nations, and of widespread publicity, the World Bank made a strategic decision to withdraw from many such high-profile projects.

The World Bank's reforms have had a mixed reception, and it has remained a target of high-level controversy. While many recognize that it has been far more responsive to public pressure (exerted through its largest donor governments, the United States and the European Union) than other international financial institutions, some have criticized the World Bank's actions in important areas. For instance, it has retained "brown" lending in its portfolio of investments—including being the leading global investor in coal-fired power plants.³⁹ Paradoxically, the World Bank's withdrawal from controversial projects has led not to the projects necessarily being halted but to the governments concerned reaching out to other entities—private financial actors or expert credit agencies, for example, that have few or no environmental criteria, meaning that projects go ahead without any supervision.⁴⁰ The World Bank has, together with the global NGO community, developed voluntary standards for these actors to sign on to, but these, like many voluntary standards programs, have been slow to spread, particularly to the "bad actors" that most need supervision.

Similarly, the global trade regime, governed by the GATT/WTO, has been pressured to take on an environmental governance role (see Chapter 14). From the early 1990s, many observers became concerned that trade liberalization could lead to environmental harm, primarily for two reasons. First, trade liberalization would lead to economic growth, which in turn would lead to environmental degradation along with the negative externalities of increased

shipping and transportation. Second, domestic environmental regulations could themselves be seen as barriers to trade: if a country required importers to meet certain environmental standards, that could conceivably be seen as a restriction on trade or as trade discrimination. The GATT/WTO came under fierce criticism in the 1990s for high-profile rulings against U.S. regulatory actions to restrict imports of tuna (from Mexico), shrimp (from Southeast Asia), and gasoline (from Venezuela) on environmental grounds.⁴¹ These cases generated fears that any environment-related trade restrictions, including those under multilateral environmental agreements, might be struck down in the interest of fostering global trade liberalization. In fact, these rulings were either never enforced or overturned on appeal,⁴² and over time, the GATT/WTO has demonstrated a shift away from a narrow interpretation of its rules with respect to trade restrictions.⁴³ Similarly, the results of the unilateral cases referenced earlier suggest that the WTO is less likely to strike down an environmental rule when there is wide, and possibly universal, support for it among nation-states. However, the WTO has in recent years been bogged down by some of the same problems that plagued the GATT pre-1995, and by growing North-South differences. Regional and bilateral trade agreements have, by contrast, flourished.⁴⁴ Such agreements may or may not contain measures that weaken environmental protections, but their lack of direct commitments or coordination is troubling.

NONGOVERNMENTAL ORGANIZATIONS AND THE GLOBAL ENVIRONMENT

Nongovernmental organizations have come into their own over the past fifty years as important players on the international stage, particularly in the context of global environmental politics. NGOs mobilize around different issues to engage in collective action and effect political change.⁴⁵ They are recognized as playing important roles in global environmental governance. They are *agitators* and *conscience keepers*, raising concerns about environmental problems and the solutions proffered by, or the slowness of, government and corporate actors. They exert moral force in global environmental governance, providing a voice for marginalized populations or even for nature itself, reminding policy makers of greater responsibilities. They are *witnesses* of actions that lead to environmental degradation, a role played by Greenpeace's small boats in highlighting whaling in the 1980s,⁴⁶ and to the activities of the governance system itself, observing and documenting negotiations.⁴⁷ They can be *whistle-blowers*, notifying relevant authorities or the world press when governments or private-sector

actors violate environmental rules and obligations.⁴⁸ Finally, like IGOs, they are *architects* and *entrepreneurs*, suggesting governance solutions, engaging constructively in the negotiation process, and, increasingly, working themselves or with private-sector actors to create their own governance initiatives and their own sphere of nonstate governance.⁴⁹ All these examples suggest that NGOs are taking on a critical role in global environmental governance, working with states to achieve their goals and, on occasion, taking on roles traditionally associated with governments or international agencies.

NGOs: Definitions and Numbers

There is no universal definition of the term *nongovernmental organization*. Kal Raustiala, in studying the role of NGOs in international law, adopts a broad definition: “non-state organizations that seek to influence international law and policy.”⁵⁰ NGOs are usually nonprofit, and their memberships consist of individual citizens or organizations, including firms, trade unions, and religious organizations. By some definitions (including under the UN’s formal accreditation process), local governments and municipal authorities, although officially “government” entities, count as NGOs, for they are not members of official state delegations and often represent perspectives counter to the positions of their own central or federal governments.⁵¹ Because there are so many types of NGOs, variations are often distinguished for official, and unofficial, purposes by acronyms.⁵² Some of these are self-explanatory, and some indicate contradictory purposes—for instance, GONGOs, or government-organized NGOs, are often established by governments to subvert activity by other NGOs. Still other acronyms may be used only because they are clever (e.g., market advocacy NGOs, or MANGOs). Table 2.2 lists the NGO subcategories officially recognized by the United Nations. They are accredited as such and have their own caucuses at international meetings.⁵³

The number of NGOs engaged in global environmental governance has increased dramatically over past decades. For example, 255 NGOs were accredited—that is, recognized by the UN as official observers—at Stockholm in 1972.⁵⁴ By contrast, nearly 1,000 nonstate organizations and 20,000 individuals attended the UNFCCC summit in Copenhagen in 2009.⁵⁵ Some estimates put the number of international NGOs at more than 50,000 by 2005.⁵⁶ The United Nations has officially accredited approximately 3,000 NGOs, and even more are admitted to individual negotiations and meetings.⁵⁷ The UNFCCC itself recognized over 1,880 NGOs in 2015, compared with a mere 506 in 2002.⁵⁸

Arriving at an accurate total of the number of NGOs globally is difficult. In addition to different definitions of what constitutes an NGO, it is easy for a

Table 2.2 Subcategories of NGOs

ENGOs	Environmental NGOs such as Greenpeace International and the African Forest Forum (Kenya)
YOUNGOs	Youth NGOs such as the UK Youth Climate Coalition and Zero Carbon Africa
BINGOs	Business and industry NGOs such as the World Business Council on Sustainable Development
RINGOs	Research and independent NGOs such as the American University delegation (United States) and Pesticide Action Network Asia (Malaysia)
TUNGOs	Trade union NGOs such as the Norwegian Federation of Trade Unions
LGMA s	Local governments and municipal authorities such as C40 and the International Council of Local Environmental Initiatives (ICLEI)
IPOs	Indigenous peoples' organizations such as the Gwich'in Council International (Canada)

small group of individuals—or even a single individual—to form an NGO for various reasons (including to obtain funding from Western donor organizations). Also, many NGOs are simply fluid, forming, dissolving, and reforming over time. However, there is little doubt that NGOs are a large presence in global environmental governance. Although there is some debate over their actual influence on governance processes and outcomes, it is also becoming clear that their influence is significant, despite the fact that they have no formal vote in intergovernmental negotiation processes.⁵⁹

Most NGOs are advocacy organizations, working to further particular causes: the environment; human and political rights; land rights; and rights pertaining to sexuality, gender, class, youth, or seniority, to name but a few. They have varying strategies, resources, and support at their disposal, but they all seek to change government action and policy, public opinion and attitudes, and/or corporate action to achieve their goals, ideally framed for the public good. Environmental movement organizations—very generally, “broad networks of people and organisations engaged in collective action in pursuit of environmental benefits”—make up a high percentage of NGOs involved in global environmental governance.⁶⁰ They do not, however, have a monopoly, for development, human rights, and other NGOs are demonstrating the ways environmental issues are connected to most of the other important issues of our age.

NGO Characteristics and Differences

NGOs share important similarities to and also differ from one another in important ways. These similarities and differences are not absolute. Many NGOs can inhabit different points on organizational and political spectrums at different times and in different political spaces. The characteristics they exhibit, as outlined in this section, apply to both Northern and Southern NGOs, although the large Northern NGOs dominate the entire field in resources and capacity, a situation that creates its own set of tensions when organizations need to work together across borders or in international negotiations.

First, NGOs differ according to their *organizational forms*. Large, professional organizations such as the World Wide Fund for Nature (WWF, formerly the World Wildlife Fund), Conservation International, and Greenpeace are becoming increasingly differentiated from smaller, less well-resourced grassroots organizations in terms of funding, members, and staffing. These large NGOs are able to mount several campaigns at once, establish offices in different cities and countries, and operate at a highly professional level. They are often the most visible face of the environmental movement and drive NGO participation in global environmental governance. Some elite NGOs have gained an almost corporate level of power—including, in the conservation arena, the ability to purchase large swaths of land for preservation purposes.⁶¹

At the other end of the spectrum, smaller groups, such as those organized around one issue or within a single community, are able to punch above their weight through strategic use of web-based and other media, as well as form alliances with similar groups or larger organizations. Such groups include antidam movements; landless movements; and groups opposing mining, oil production, and other types of resource exploitation.⁶² For example, Narmada Bachao Andalan, a coalition of Indian farmers, landless people, and activists, fought both the World Bank and their own government against dam construction, with activists allowing rising waters to come close to drowning them as a public act of defiance. Many such organizations rely on uncertain pools of personnel, including volunteers, and funding resources, as large foundation grants, a key source of NGO funding, become more complex to apply for and maintain.

Second, NGOs differ according to their *strategies* and their *actions*. Some organizations focus on lobbying and other mainstream ways of engaging with political or corporate actors, whereas others use more confrontational tactics. Many NGOs directly lobby politicians and government officials and may be included in policy making or advisory bodies, although their access to the policy process and their level of influence vary according to political systems and the

party in power.⁶³ They may also forge partnerships with the corporate sector to ensure sustainable production or use of sustainable goods, as the Rainforest Action Network was able to do with the large hardware chain Home Depot in the 1990s. Sometimes this activity backfires, as when WWF came under fire for certifying “sustainable” palm oil plantations in 2009, despite some scientific and activist consensus that palm oil plantations are unsustainable per se.

NGOs also engage in public protests against political decisions or lead boycotts against companies. On-the-street demonstrations remain part of their repertoire, but so are art installations and other visual media, as well as use of social media to arrange flash-mob-style protests or to spread information about a product or company quickly. Activists dressed as tomatoes and sea turtles at anti-WTO protests in the early 2000s highlighted the dangers of genetically modified organisms and of the bycatch resulting from mass seafood harvesting. Art installations have been a part of the mounting global antiplastics movement, as have extensive Twitter and Facebook campaigns. These groups have also used graphic images and video of sea creatures directly affected by plastic debris in the oceans. At the Paris climate negotiations in 2015, NGOs—unable to march because of terrorist attacks right before the meeting—put out thousands of pairs of shoes in the Place de la Republique to stand in for civil society voices.

Another function a subset of NGOs has taken on is the generation and dissemination of scientific knowledge about the state of the environment. Think tanks such as the Center for Science and the Environment in India and the U.S.-based World Watch Institute generate information, reports, and indicators across a range of issue areas. Other NGOs, such as Oceana, based in Washington, D.C., undertake research on particular issues expressly to contribute to political debates. The information-provision function extends to the global level, for NGOs document meetings and disseminate the information they collect to broader publics.

In 1989, the World Bank drew a distinction between “operational” and “advocacy” NGOs: operational NGOs “fund, design or implement development-related programs or projects,” and advocacy NGOs “defend or promote a specific development cause and . . . seek to influence the development policies and practices of the Bank, governments, and other bodies.”⁶⁴ This distinction (though clearly not rigid) matters as NGOs become more engaged in projects related to the primary global funding mechanisms, including the GEF, REDD, and the Green Climate Fund, where states and IGOs are relying more and more on NGO expertise and ground-level experience. There could, therefore, be some tension between NGOs of different types, as well as tension within NGOs in choosing the directions they should emphasize.

Finally, although NGOs are often assumed to be progressive, individual organizations may lobby for either side of a cause. For example, business and industry NGOs, or BINGOs, representing the U.S. oil industry have played an obstructionist role in climate negotiations.⁶⁵ They have backed climate denial organizations (especially in the United States) and their efforts to discredit climate science.⁶⁶ In all cases, NGOs are becoming more transnational, as the scope of environmental issues broadens and environmental governance has shifted to the global level. They have increasing capacity to network easily across borders and to organize systems of representation at different levels.

NGOs across Borders

The international NGO sector has grown significantly, not least because of the emergence and rapid diffusion of global communication technologies. This sector consists of NGOs that attend international negotiations and transnational activist networks (TANs), with significant overlap between these two groups. At negotiations, NGOs attend as individual observers, are represented by peak associations, or both. Peak associations are made up not of individual members but of organizational members sharing a common goal. They can speak for a large number of actors with a common voice and can wield more influence than organizations on their own. For example, the more than seven hundred member organizations of the Climate Action Network (CAN), based in ninety-five countries, have agreed to a common vision with respect to action around climate change.⁶⁷ CAN's activities at UNFCCC COPs and other meetings are designed both to raise awareness and to participate constructively in negotiations. Publicly, CAN is probably most well known for its Fossil of the Day award, given out at COPs to the country considered most obstructive in negotiations each day: Canada, Saudi Arabia, and the United States have been frequent recipients. The International Union for the Conservation of Nature (IUCN) represents conservation and biodiversity groups from around the world, including some governmental organizations, at CBD and other relevant meetings.

TANs are made up of groups that network horizontally across borders around specific issues, such as preventing the building of large dams or protecting the rain forests, without necessarily directly targeting international negotiations.⁶⁸ Within the TAN arena, organizational structures vary widely. For example, WWF, Greenpeace International, Conservation International, the Third World Network, and others follow a vertical model, with main headquarters in one country and branches in many others. The Pesticide Action Network, Via Campesina, Climate Justice Now!, and other groups that

affiliate around particular issues such as dams or biotechnology tend to build horizontal networks, partnering with comparable groups in other countries. The Global Alliance of Waste Pickers has member organizations in twenty-eight countries and represents the interests of informal waste workers to their governments and on the global stage.

Climate justice TANs have served to represent more radical perspectives on the impacts of climate change and how it should be addressed.⁶⁹ Climate Justice Now! (CJN!) and Climate Justice Action (CJA) are networks that represented “outsider” views at Copenhagen in 2009. They make a direct connection between climate change and its impacts on vulnerable populations, highlighting the need for structural change in the global economy—particularly the global fossil fuel-based economy—to address greenhouse gas emissions. Climate justice networks bring together a diverse set of interests that, though they may overlap with groups within CAN and similar networks, place a different frame on climate action, tend to use less mainstream tactics, and focus more on mobilizing grassroots activists than on working at more elite levels.

NGOs and the International Environmental Policy Process

At every stage of the international policy process NGOs have devised actions and roles for themselves, as well as fulfilling roles that have been formally delineated through international law and practice. Although environmental NGOs make up the bulk of participants at global environmental negotiations, development and antipoverty NGOs, agricultural workers, human rights activists, indigenous peoples, and others who would not immediately describe themselves as “environmentalists” are active in negotiation processes.

The global environmental governance arena has been particularly open to participation by nonstate actors (not just environmental NGOs, or ENGOs, but also business groups, scientific experts, and others), in stark comparison to some other global policy arenas, such as international trade and arms control. The provisions of international law—which is not generally known for its openness to nonstate actors—have provided important channels of access for NGOs. The codification of international law—namely, the formalization of international law into treaties and other sorts of documents, which began in the 1920s—gave nonstate actors the information and the opportunities they needed to start weighing in on various negotiation processes.⁷⁰ Specific treaties contain language that allows for the incorporation of NGOs. The 1973

Convention on International Trade in Endangered Species was the first MEA to allow the admission of NGOs engaged in related activities,⁷¹ and other major MEAs, such as the CBD and the UNFCCC, have followed suit.⁷² Likewise, the United Nations and its agencies have, as IGOs, been open to participation by nonstate actors, at the very least in an advisory capacity, having granted NGOs accredited consultative status since the UN was created. Accreditation grants group representatives official observer status as well as access to the main building where negotiations take place and to many (but not all) meetings and plenary sessions taking place among the parties. Not all NGOs that attend international meetings are accredited. Many meet outside the official convention halls, holding parallel summits and side events of their own—often protesting the official meeting.

NGOs and Agenda Setting

NGOs help raise awareness of and concern over particular problems. They do this in many ways, from producing major scientific and technical reports to staging protests like sit-ins and witnessing events, such as the Sea Shepherd Conservation Society's pursuit and documentation of the actions of Japanese whaling vessels. Greenpeace, for example, collected data on waste dumping in the South by Northern countries in the 1970s and 1980s that was instrumental in kick-starting negotiations that led to the 1989 Basel Convention.⁷³ WWF and other conservation organizations raise awareness about endangered species—particularly the charismatic megafauna whose plight is likely to trigger widespread public concern. Environmental health-related organizations such as IPEN (the International POPs Elimination Network) publicized the impacts of mercury on human health as mercury treaty negotiations heated up in 2010 and 2011. Sometimes NGOs' role is to translate scientific concern into public and political awareness, as has been the case with climate change. NGOs also help to set the international political agenda in particular issue areas by providing information and ways to frame problems, sometimes by offering draft texts and focal points for negotiations. IUCN, for example, was instrumental in pushing for, and indeed provided a draft text for, the CBD.

Negotiating at International Meetings

NGOs are visible and active participants in all but name at international environmental meetings. They lobby delegates; provide information, data, ideas, and talking points; and report on the meetings' results. Lobbying at the international level has become an important additional channel of influence for NGOs, although it has not yet displaced lobbying at the domestic level.⁷⁴

CAN provides a daily bulletin, ECO, at UNFCCC negotiations, as well as its Fossil of the Day award. The Earth Negotiations Bulletin (ENB) team, an informational rather than an advocacy NGO, provides daily summaries and summary reports across a wide range of international negotiations.⁷⁵ For activists, the rise of social media, giving them the ability to use Twitter, Facebook, and Instagram to report on negotiating events as they happen, has generated many opportunities. Youth activists launched the Adopt a Negotiator project, in which individuals track members of their countries' or regions' negotiating teams and report on their activities.

NGO members have served as delegates on the negotiating teams of smaller or poorer states, which cannot always afford to send full complements of delegates. On rare occasions (usually in smaller or lower-profile negotiations), NGO representatives have even been able to insert treaty language directly from the floor, or to influence how rules and policy mechanisms are defined. At the UNFCCC negotiations after Kyoto, for example, NGOs were able to suggest mechanisms to help enforce compliance.⁷⁶

Another important role for NGOs at international meetings is organizing and participating in side events—officially sanctioned panels, roundtables, and other discussions that may bring together actors from across the spectrum of global environmental governance on specific topics. At the major COPs, ENB now provides a separate report on daily side events, as the numbers of these events have grown so much. Likewise, parallel summits, which are not part of the main meeting and are separately organized by civil society groups, are often hailed as the parts of meetings where the most is accomplished, often simply through networking effects of bringing so many groups together who would not otherwise have met.

NGO actions inside the conference halls are matched by equally, and probably louder, activity outside. Sometimes there are protests—at the UNFCCC COP in The Hague in 2000, protesters surrounded the conference hall with flood barriers made of piled sandbags. Organizations have marched, unfurled banners, staged “drown-ins,” donned gas masks, dressed up as penguins, and installed highly creative art installations. Unlike the protests surrounding the meetings of the Bretton Woods institutions in the 1990s and 2000s, protests at COPs have not tended to involve violence or property damage—protesters are more interested in pushing the official delegates further than where they might be going than in stopping the process all together.⁷⁷ This has not prevented tensions, however. At Copenhagen in 2009, the atmosphere became tense when the COP organizers decided to allow only ninety observers into the final days' high-level talks, at which heads of state would be present.⁷⁸

This incident was prescient of future developments in the climate regime. Whereas NGO participation in many environmental negotiations around the world remains strong, and in some cases is getting stronger, the opposite trend is apparent at global climate negotiations. Climate change has become a “high politics” global issue, alongside global trade, finance, and security, and as such, it has become more the territory of states and their direct associates. NGO observer delegations—those allowed into convention halls—have been slashed in size and have far less access to national negotiators. At the Paris meeting, NGOs were relegated to a separate area and subject to enhanced control and security.⁷⁹

NGOs and Implementation

NGOs play an important role in the implementation of international environmental agreements. They help to carry out their objectives on the ground; blow the whistle when governments fail to comply with, or violate, their obligations; and engage with the ongoing work of regime strengthening, generating and disseminating new knowledge and information and pushing their governments to ratify agreements. In these respects they work to supplement the low capacity of global governance organizations to carry out these tasks directly.

NGOs often work in partnership with state, IGO, or private-sector actors.⁸⁰ Such partnerships may be on the ground. For instance, NGOs are accorded an important role in implementing GEF projects and projects funded by other donor agencies on the ground. In one example, microcredit NGOs serve as vehicles for the distribution of funds.⁸¹ IPEN, with the help of GEF funding, has assisted more than 350 NGOs in sixty-five countries in working with local communities on education about, identification of, and reduction of persistent organic pollutants in local communities.⁸² Other sorts of partnerships are designed to do more than implement existing projects or undertake projects under their own steam. Visseren-Hamakers, Leroy, and Glasbergen show how some partnerships actually seek to shape international policy processes, using as cases the Great Apes Survival Project (GRASP) and the Critical Ecosystem Partnership Fund.⁸³

In other ways, both direct and indirect, NGOs inform the ongoing work of many international environmental regimes. As with participation at meetings, this engagement varies across regimes and tends not to be formalized, with some exceptions. Treaties such as CITES, the 1994 Convention to Combat Desertification, and UNESCO include provisions for NGOs to take on a range of roles at this level.⁸⁴

Finally, NGOs have been crucial in alerting the international community when, for example, toxic waste from the wealthy North is dumped in a poorer Southern nation or when illegal trading of endangered species is taking place. They have brought new dimensions of issues to the forefront, including electronic waste trading and increased poaching of ivory in African war zones. The Silicon Valley Toxics Coalition, the Basel Action Network (BAN), and Greenpeace published influential reports in the early 2000s on emerging e-waste disposal problems and their impacts in developing countries and have continued to press governments on this issue.⁸⁵ BAN's E-Trash Transparency Campaign has tracked illegal e-waste exports using GPS devices attached to discarded electronics, as detailed in a 2016 report.⁸⁶ TRAFFIC, the main wildlife trade reporting network, has active campaigns on the poaching of elephant and rhino horns for trade in Africa and Asia, information that it submits directly to the CITES secretariat as well as makes available to the general public.

In the 2010s, diverse organizations such as GAIA (a grassroots TAN that campaigns against incineration and for zero waste), the Ellen MacArthur Foundation, the Oceans Conservancy and others started to organize around the production, use, and discard of plastics. Over 1,600 groups from around the world have banded together to create the umbrella campaign organization #breakfreefromplastic. By 2018, local, national, and global regulatory agencies were moving to ban or restrict many single-use plastics, such as plastic bags and straws, within their jurisdictions (see Box 2.1).

Beyond Regimes: Transnational Networks and Nonstate Market-Driven Governance

A significant part of NGOs' role in global environmental governance goes beyond working within international treaty processes and targeting governments and other state representatives. This chapter has outlined how NGOs have targeted the World Bank and other Bretton Woods institutions, as well as multinational corporations, challenging the "business as usual approach" of economic globalization.⁸⁷

Beyond the role of challenger, NGOs have been instrumental in the design and construction of governance regimes beyond the state, usually in partnership with private-sector actors, particularly in issue areas where state-led global environmental governance has failed. Leading examples of this phenomenon are transnational, third-party certification initiatives, through which goods—such as timber, fish, coffee, and cocoa—are certified by independent auditors as being sustainably produced according to environmental, social, or other criteria. Two of the better-known of these initiatives are the Forest Stewardship Council

NGOS, IGOS, AND OCEAN PLASTICS

Each year, an estimated 8 million metric tons of plastic waste and debris enter the world's oceans.⁸⁸ The Great Pacific Garbage Patch is the largest of many such gyres of plastic waste—larger than France. Plastic debris in the ocean is a hazard to marine life. Harrowing images of birds, turtles, and other sea life killed or crippled by plastics have helped galvanize an activist movement. It is even possible that microplastics are invading the species lowest on the food chain with unknown consequences over time. Plastics themselves can last up to 600 years in the environment. They are made from fossil fuels. Despite their utility, our long love affair with plastics may be coming to an end. Activism has focused on single-use consumer plastics, such as grocery bags and straws. The movement for banning plastic bags has a longer history, starting in the early 2000s, with momentum moving from the Global South to the North and back again.⁸⁹ Bag bans or fees are often legislated across jurisdictions. The movement to restrict single-use plastic straws gained global momentum beginning in 2016. Kids' organizations as well as some of the largest NGOs in the field started to push for voluntary measures and lobbied governments and corporations to restrict their use and availability. The highest global forums have taken up plastics, both waste and production, and what to do about them. The EU and the UN, through the SDGs, are looking at ways to reduce plastic waste and wean ourselves and our economies off its use. Oceans organizations, such as the Oceans Conservancy, and circular economy organizations such as GAIA, Zero Waste Europe, and the Ellen MacArthur Foundation, propose a global plastics governance regime.⁹⁰ The antiplastics movement has been astounding in its rapid development and global reach. The focus on consumer plastics maintains its visibility, but that is only the tip of the iceberg. Getting to the root of discarded plastics means changing substantial parts of the manufacturing economy. The companies that make plastics, including chemicals corporations, and those that use plastics in their manufacturing process are starting to sit up and pay attention. They may oppose such shifts, or they may accommodate them. This may become a political battle if a backlash begins.

(FSC), which has a twelve-point certification system for timber production, and the Marine Stewardship Council, which issues certifications of fisheries according to whether the stocks are sustainably harvested.⁹¹ As of May 2018 nearly 200 million hectares of forest cover were under FSC certification, out of roughly 4 billion hectares of forest worldwide. Such programs have expanded to cover biofuels, palm oil (contentiously), and conflict minerals.

These initiatives are designed to fill a governance vacuum and to have the nimbleness that comes from bypassing cumbersome interstate politics. They do, however, face many of the same challenges traditional regimes face.

For example, participation is voluntary and lacks direct enforcement mechanisms, which often means the worst actors simply choose not to participate.⁹² Nonetheless, such initiatives are an important new arena for global environmental governance, allowing nonstate actors considerably more agency in shaping and directing the management of critical resources.

IGOS AND NGOS IN GLOBAL ENVIRONMENTAL GOVERNANCE: CURRENT AND FUTURE DIRECTIONS

IGOs and NGOs have been critical in shaping global environmental governance as we know it and in globalizing environment and sustainable development concerns. As organizations representing nation-states and civil society, respectively, they have proliferated in recent decades and now perform governance functions at and across multiple scales. They have created new spaces of political action and enabled the emergence of transnational as well as global politics. The previous discussion has demonstrated how IGOs and NGOs have taken on roles as *agitators*, *entrepreneurs*, and *architects* in instigating, creating, and implementing global environmental governance. One common theme has been how their respective influences have varied over time and across issue areas.⁹³ This final section considers some of the dilemmas these organizations face as they move forward, within their own sectors, in their relationships with each other, and in their relationships with nation-states.

The first challenge they face is capacity. As NGOs and IGOs take on more governance functions—as in, for example, the implementation of global funding initiatives—they will find themselves stretched. With personnel, financial, and other resources already tight for all but the most well-financed organizations, this will be a difficult challenge to meet.

A second challenge for these organizations is to maintain—or acquire—legitimacy in the eyes of wider audiences. This is a challenge for representative organizations, which derive their power and authority from those they represent. In the case of IGOs, such power is delegated by nation-states. If states see IGOs reaching beyond their mandates in ways that affect the states' interests, they are able to pull the plug—on an IGO's funding, its activities, or even its existence. NGOs, on the other hand, choose to represent certain sectors of civil society, yet the sources of their legitimacy are not always clear. NGOs aim to open the democratic spaces in global governance, but whether they themselves can claim they represent more than particular immediate constituencies (members, board members, funders) is an empirical question, not a given.

Third, interorganizational differences and conflicts in each sector create their own sets of issues. As the NGO community broadens, and as NGOs work together across borders, issues of how Northern and Southern NGOs work together equitably start to come to the fore, as does the relationship between “insider” and “outsider” NGOs, as highlighted at the UNFCCC negotiations in Copenhagen in 2009. Likewise, the distinction between advocacy and operational roles, similar to the distinction between mainstream and radical organizations that has long been part of the field, has implications for how environmental NGOs situate themselves, whether inside or outside the implementation process. The proliferation of IGOs and their broadening functions have generated potential for overlap and conflict, in that very different IGOs may have responsibility for, and even conflicting rules regarding, the same issue area—such as climate change or genetic resources.⁹⁴ This chapter has already highlighted these issues of horizontal linkages and interplay management. They will only become more important as this system moves forward.

Both IGOs and NGOs have changing and evolving relationships with each other and with nation-states. NGOs are moving more and more into traditional intergovernmental spheres of governance and are taking on (sometimes informally, sometimes formally) some of the functions of negotiating, monitoring, and implementing global environmental commitments. They are working closely with IGOs, but so far there has been little formal clarification of their roles. How this will change, and whether NGOs can become recognized more formally at all stages of the policy process, remains to be seen. Likewise, the role of IGOs and state-led governance regimes in interacting with or fostering nonstate governance initiatives has potential to expand, as relevant actors recognize complementarities between the two sorts of governance systems.

This leads to a final consideration: how the roles and influence of IGOs and NGOs evolve with changing currents in the global political system. As, for instance, the United States pulls back from a position of leadership, China is in the ascendancy as a global superpower, not only in economic terms but also as a leader in climate governance.

Although some argue that IGOs and NGOs are (or should be) taking a larger role in the global system, it is not clear that states are ceding control in this arena, at least not uniformly (a factor that explains some of the variation in influence across issue areas cited earlier).⁹⁵ States maintain critical functions in the international system, such as the ability to enforce international rules or to fund large-scale scientific research, and have a degree of legitimacy that is not yet accorded to IGOs or NGOs.⁹⁶ As Susan Park notes, NGOs are still blocked by states, whose decision-making role remains

primary in international negotiations, as we saw in the UNFCCC example earlier, where NGOs were literally excluded from negotiating sessions.⁹⁷

One thing is certain: the need for IGOs and NGOs to maintain their roles as architects, agitators, and entrepreneurs in global environmental and sustainability politics is going to remain as states' wills and capacities wax and wane and as increasingly complex and dedicated actions are needed to address environmental crises.

NOTES

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