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The Role of Process and Participation in the Development of Effective International Environmental Agreements: A Study of the Global Treaty on Persistent Organic Pollutants (POPs)

*Peter L. Lallas**

I. INTRODUCTION

The number of treaties in the environmental field has grown markedly in the past thirty years,¹ as people and societies have become increasingly aware of, and concerned about, the health of the global environment. Studies of these treaties have considered a number of questions relevant to their effectiveness. Some offer an in-depth review of key factors and personalities leading to finalization of a treaty, in essence setting forth its storyline.² Others identify important tendencies and difficulties present in negotiating treaties, such as the tendency to slide toward a lowest common denominator or to face long time lags before implementation.³ Others emphasize a regime-oriented, problem-solving approach, and focus upon how key elements in a particular treaty regime generate — or fail to generate — incentives to change behavior in response to global environmental problems.⁴ Some

* The statements or views expressed in this paper are those of the author in his personal capacity.

1. See, e.g., BROWN WEISS, SZASZ MAGRAW, *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* (Aspen Law and Business 1998).

2. See, e.g., RICHARD BENEDICK, *OZONE DIPLOMACY*, (Harvard University Press 1991) (the story of the Montreal Protocol).

3. See, e.g., PETER SAND, *International Cooperation: the Environmental Experience*, in *PRESERVING THE GLOBAL ENVIRONMENT: THE CHALLENGE OF SHARED LEADERSHIP* (Jessica Tuchman Matthews ed., 1989).

4. See, e.g., ORAN YOUNG, *Hitting the Mark: Why Are Some International Environmental Agreements More Successful than Others?* 41 *ENVIRONMENT*, 8, Oct. 1999.

highlight questions of compliance and implementation, looking into other fields of public international law as potential models,⁵ while others focus upon the role of international institutions.⁶

Questions relating to the process of treaty-making, including who participates in that process, certainly are not absent from these studies. In recent years, however, these questions are emerging more prominently as a focal point of analysis.⁷ One explanation for this, perhaps, is that the growing level of experience in the field now presents a stronger basis to examine process and participation themes. In addition, because the subject matter itself yields “substantive” issues that are both important and complex – e.g., what normative standards should apply to address transboundary pollution – matters of “process” might sometimes have received less consideration.

Yet another explanation is worth considering. Public international law, and foreign policy more generally, have well-established histories and traditions about institutions and process. There are conventional understandings and experiences with the process of diplomacy, how nations interact with each other and what the (limited) role is for international organizations and the public in this context. In the traditional model, international law is a law of nations. Governments, not individuals — nor non-governmental organizations — have rights and are subject to obligations (e.g., under a treaty) in this model; they are the actors on this stage. Countries and regions have developed long-standing working relationships within this basic framework, and have created international organizations to facilitate and support their efforts.

Today, some of these traditions and understandings are being challenged. One of the most dominant claims from the street protestors in the “battle in Seattle” in November 1999 (that accompanied the meeting of World Trade Organization (WTO)

5. See, e.g., CHAYES & CHAYES, *THE NEW SOVEREIGNTY* (Harvard University Press 1995); ESTY, *Greening the GATT*, INSTITUTE FOR INTERNATIONAL ECONOMICS, (1994) (asking whether environmental treaties could benefit from dispute settlement procedures similar to those used in the context of world trade rules).

6. See, e.g., HAAS ET AL., *INSTITUTIONS FOR THE EARTH* (MIT Press 1993).

7. See, e.g., UNEP Environmental Law Programme Background Papers, Montevideo III Ten-Year Work Programme (2001-2010) (highlighting issues of process and participation); EDITH BROWN WEISS, *NEW ISSUES IN INTERNATIONAL ENVIRONMENTAL LAW* (highlighting question of NGO and public participation in the field); HUNTER, SALZMAN, ZAELE, *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* (Foundation Press, 1998) and BROWN WEISS, ET. AL., *supra* note 1 (new textbooks devoting substantial attention to these questions).

ministers in Seattle, Washington) was that the international trading system was making decisions that affect people's lives without allowing members of the public an opportunity to see and participate in the decision-making process. Many images have been displayed either of national government representatives or "faceless" international officials making decisions in secrecy and without accountability, including decisions that yield *inaction* on important matters. Similar concerns have been voiced over the years with regard to activities of other international organizations, such as the World Bank. Policymakers now devote significant attention to the nature and scope of public participation in the international policy process.

Significant questions also exist about the extent to which all governments, especially those representing smaller countries, can participate effectively in international initiatives. These questions involve not just the formal rules of participation but resource constraints and other practical realities as well. Just as the issue of capacity among countries is relevant to the development of norms in international environmental treaties,⁸ so too is it relevant to the question of how countries participate in treaty initiatives.

These questions of process and participation are central to understanding the development of a new treaty receiving priority attention in the environment field, the global treaty on persistent organic pollutants (POPs). The negotiation of this treaty, completed in December 2000 in Johannesburg, South Africa, has emerged as a center-stage activity on the global environmental agenda. The POPs treaty is designed to severely restrict and/or eliminate the production and use of a number of particularly dangerous pesticides and industrial chemicals, to take strong action against certain by-product contaminants of industrial and other activities, and to ensure the safe and proper disposal or destruction of such substances upon becoming wastes. Nations have agreed to focus initially upon a list of twelve substances of immediate concern, including DDT, PCBs, and dioxins⁹ and have

8. See, e.g., the Rio Declaration, Principle 7 (noting the "common but differentiated" responsibilities of countries to address global environmental problems, due in part to differentiated capacities), adopted at the United Nations Conference on Environment and Development, Rio de Janeiro, June 1992 (also referred to as the Rio Earth Summit).

9. These substances include eight pesticides, two industrial chemicals and two by-products of industrial processes. They are, respectively, aldrin, dieldrin, DDT, chlordane, heptachlor, toxaphene, mirex, endrin, PCBs, hexachlorobenzene, dioxins

included within the treaty a set of criteria and a process for adding new POPs to the regime at a later date.

Experience to date indicates that a number of factors have been relevant to the outcome and (in the eyes of many) success of the POPs treaty negotiations. While several of these will be touched upon below,¹⁰ the central focus of this paper relates to how aspects of process and participation have influenced the development of the treaty and will affect its implementation.

The discussion is divided into several parts. Part II begins with a review of events and considerations leading to the negotiation of the POPs treaty (the "pre-negotiating phase"). These include the evolution of public concern over POPs at national and international levels, the scientific foundation for these concerns, and the actions leading to a mandate to negotiate. Part III follows with a detailed description of the structure and process of the negotiations themselves, including how meetings were conducted, who participated in them, and the types of contributions of various participants in the negotiating sessions.

Part IV then identifies and analyzes key aspects of this overall treaty process, and raises several issues for consideration. The discussion focuses upon: the significant role of non-governmental participants and of international organizations in the treaty process; practical issues and imbalances relating to participation by governments in this process, and steps that can be taken to address these issues; and the importance of certain key (and sometimes seemingly mundane) decisions regarding the scope, nature, timing and format of the actual negotiations. Part V closes with a brief comparison of how the basic rules of participation work in another field of international law, the international trading system.

An underlying consideration of this discussion is that the ground rules, and the practical realities, relevant to issues such as public and government participation in treaty negotiations not

and furans. See POPs treaty negotiated text, document UNEP/POPs/5/7, available on the POPs treaty internet homepage <<http://irptc.unep.ch/pops>>.

10. See Parts II (Background to the Treaty Process) and III (The Negotiating Stage). In each of these sections, the paper identifies briefly some key issues and decision-points facing participants in the process. Several are familiar from other treaty negotiations, e.g., defining the scope of the treaty, how to address special issues facing developing countries (e.g., relating to funding and technical assistance, whether to "differentiate" obligations, etc.), identification of "principles" to guide the process, selecting the appropriate mix of policy "tools," etc.; all have a certain "cast" to them in light of the particular set of concerns raised by POPs.

only are changing, but are perhaps not well known to many outside the negotiating circles. These (evolving) rules and realities yield many benefits, but also raise important questions.

For example, members of the public representing a wide variety of non-governmental organizations (NGOs), indigenous communities, industry and other interests were directly involved in the POPs treaty negotiating process, and played a significant and often catalyzing role in the events leading up to this process. Part IV identifies several “functions” or “roles” played by these participants in the process, and notes the many benefits to the treaty process of this high degree of public involvement.

At the same time, several questions are considered. For example, according to what procedures and criteria do members of the public become involved in international negotiating sessions? Are there sufficient opportunities to become involved in the process or, conversely, are there any limitations that are or should be imposed on such participation? Is participation “balanced” among competing interests and constituencies? Is there a difference, for example, between participation by non-profit organizations and business or other entities with a commercial stake in the outcome of the process? Or by participants from industrialized versus developing economies? How are negotiating outcomes affected?

Similar issues arise with respect to public involvement at the implementation stage. These issues are of particular importance given concerns that exist as to whether international agreements are well implemented and enforced.¹¹ It is argued below that enhancing the public role in implementation offers significant opportunities to strengthen implementation of treaties. The potential contributions of international organizations to facilitate and advance work relating to a treaty also are considered.¹² These approaches, however, raise their own set of issues and questions – which, at their core, involve who after all it is that sets and carries out the international environmental agenda.

11. See, e.g., “Strengthening the Implementation of Environmental Agreements,” GAO Report, August 1992; Brown Weiss et al, *supra* note 1 (discussing issues of compliance).

12. See, e.g., Daniel Magraw, *NAFTA’s Repercussions: Is Green Trade Possible*, Environment, March 1994 (noting that the Secretariat of the North American Agreement for Environmental Cooperation will “have strong elements of independence. . .”); Sand, *supra* note 3 (noting the potential value of conferring decision-making authority upon technical bodies under a treaty, with reference to the Montreal Protocol as an example).

The discussion of these questions of process and participation is framed within the larger context of an ongoing evolution of the basic ground rules over who participates in the making and implementation of international law. In past years, for example, members of the public – and not just states — have begun to obtain rights and obligations in certain fields of international law, notably in the human rights field¹³ and under international investment agreements.¹⁴

As illustrated by the POPs treaty process, the field of international *environmental* law is in some respects situated at or near the forefront of this evolution, at least with respect to how treaties in this field are negotiated. Many of the basic principles on environment and development adopted by the international community at the 1992 Rio Earth Summit (the Summit), and important sections of the Summit's agenda for the 21st century (Agenda 21), focus upon the need to promote public participation in the policy making process.¹⁵ Rules of procedure for individual treaty negotiations in the environmental field often authorize members of the public, business, and non-profit organizations to become directly involved in meetings and discussions to develop and implement treaties.¹⁶ Increasingly (though slowly), there is also some tendency for greater public involvement in the process of implementing these treaties, and there is a growing set of experiences of how this actually occurs.¹⁷

The internet is also having its effect. It has given the public and policymakers access to information not even remotely available ten years ago. It and other factors have facilitated the creation of new “networks” of organizations, individuals and experts devoted to finding new ways to do work in the field – whether in conjunction with or wholly apart from work by government officials.¹⁸ This new capability helps bring to the international set-

13. Louis Sohn, *The New International Law: Protection of the Rights of Individuals Rather than States*, 32 AM. U. L. REV. 1 (1982). See also, Footnote 175, *infra* (involvement of non-governmental representatives in work under the International Labor Organization).

14. See, e.g., Howard Mann & Konrad von Moltke, “NAFTA's Chapter 11 and the Environment – Addressing the Impacts of the Investor-State Process on the Environment,” International Institute of Sustainable Development, June 1999.

15. See Rio Declaration, Principles 10, 20-22.

16. See discussion in Parts III and IV, below.

17. See discussion in Part V, below.

18. The Environmental Law Alliance Worldwide, or E-Law, is one example. Based in Eugene, Oregon, this organization is a network or affiliation of experts, NGOs and individuals throughout the world — constantly changing — devoted to

ting the possibility of decentralized, grass-roots style communication and action that has been such an important part of environmental policy in the domestic context.

As noted in Part V, however, the degree of public participation in the treaty process varies significantly between different fields of international law. Indeed, while there has been a high degree of openness to the public in the environmental field, there is strong and continuing opposition among many governments to greater public involvement in international meetings under the World Trade Organization, whether at the negotiating or implementation stages. The discussion below will consider some of the reasons offered for this opposition, and some possible lessons that might be drawn from work in each field for the other.

A central thesis is that these questions of process and participation play a major role in what treaties eventually look like and whether or not they will be implemented in a manner that makes a difference on the ground. A corollary theme is that these questions should be examined at each stage of the treaty process, including well before the first negotiating session convenes, and that these early stages are as critical as any in determining the fate – and “success” — of the treaty that emerges.

II.

DANGEROUS CHEMICALS ON THE MOVE:

BACKGROUND CONSIDERATIONS LEADING TO THE POPs

TREATY NEGOTIATIONS

The decision of the international community to initiate negotiations for a global, legally binding treaty on POPs is on the right-hand side of a long time-line of events. This section and section III (the negotiating phase) identify and describe some important points on this time-line, and provide the foundation for a more in-depth discussion of key aspects of process and participation relevant to this chain of events in sections IV and V which follow.

responding to environmental problems through an activist use of laws. Communication and sharing of expertise and experience electronically is a key to the effort. See <www.elaw.org>.

a. *A History of Concern about Toxic Chemicals at the Local and National Level*

The health and environmental problems associated with toxic chemicals and pesticides have long been a concern to societies around the world. Rachel Carson sounded an early warning in the United States in 1962, with her cautionary story of a countryside gone quiet due to an invisible poison (pesticides).¹⁹ Countless episodes of contamination since that time have reinforced these concerns, ranging from the accumulation of toxic substances in the Great Lakes aquatic system to pesticide poisonings in Central America,²⁰ to the accidental release of a deadly toxic cloud in Bhopal, India in 1986. The discovery that chemicals once considered safe and put into wide circulation, such as polychlorinated biphenyls (PCBs) and chlorofluorocarbons (CFCs), have turned out to be anything but safe, has also reinforced these concerns.²¹ Within the United States, specific problems of toxic contamination have played an important role over the years in the passage of several major environmental laws.²²

There are various types of toxic substances that pose concerns to health and the environment, and are the subject of domestic regulatory regimes. One leading example is pesticides. Pesticides as a category of products are *designed* to be poisonous. While the target of pesticides is intended to be narrow, and application techniques continue to improve, it is inevitable that pesticides applied into the environment will come into contact with organisms other than those targeted.²³ Studies over the years indicate that

19. RACHEL CARSON, *SILENT SPRING* (Houghton Mifflin 1962).

20. See *World Resources Report 1994-1995*, at 115 (noting, inter alia, that in the 1970's, approximately 1,500 male workers on banana plantations in Costa Rica became sterile after repeated contacts with the pesticide dibromochloropropane).

21. After years of production and use, the United States generally banned the production of PCBs in the late 1970's in light of increasing evidence of their adverse effects on human health and the environment. See Toxic Substances Control Act, 15 U.S.C.A. § 2605(e); www.epa.gov. A similar story applies to CFCs, considered for years to be a safe and benign substance, but which are now scheduled to be eliminated due to their effects on the upper atmosphere ozone layer under the Montreal Protocol. See e.g., BENEDICK, *supra* note 2.

22. See, e.g., GRAD, *TREATISE ON ENVIRONMENTAL LAW* 1 (Matthew Bender, 1990) (impact of disasters over time on development of pollution laws), Part 4A.01 (effect of "Love Canal" and other toxic incidents on passage of Superfund law).

23. As noted in World Resources Institute Report 1994-1995, *supra* note 20, at 113, ("[O]nly a handful [of pesticides] restrict their toxic effects to the target pest. Most make their presence felt across a broad spectrum, doing widespread incidental damage to wildlife, plant life, and soil and water organisms.") (citing to studies).

among the families of pesticides that pose especially high health and environmental concerns include organophosphates (e.g., parathion, diazinon), organochlorines (e.g., chlordane, DDT), carbamates, herbicides (e.g., paraquat), and fungicides derived from metallic salts.²⁴ Over the years, the U.S. has banned or severely restricted more than 40 pesticides through its domestic regulatory process.²⁵

Many other non-pesticide chemicals or substances have also been subject to extensive review and regulatory action over the years at the national level. Studies indicate that a number of chemicals and metals, in addition to pesticides, are linked to different types of adverse effects on health and the environment. Examples include: lead, mercury and other heavy metals;²⁶ chemicals and substances such as PCBs, dioxins and furans, chlorinated solvents, volatile organic compounds, asbestos, and chlorofluorocarbons; biological contaminants, such as coliform; among many others.²⁷ These and other substances are the sub-

The major impact of the use of DDT and other organochlorines in the 1960's on predatory bird populations in North America, including bald eagle and peregrine falcons, provides one well-known example.

24. *Id.* See also *World Resources Institute Report 1998-1999* (describing uses and health problems posed by various pesticides, noting both acute – or immediate – and chronic effects). See also U.S. Environmental Protection Homepage at www.epa.gov (reviewing data on various agricultural chemicals); WORLD HEALTH ORGANIZATION, *Public Health Impact of Pesticides Used in Agriculture*, 87-88 (WHO, Geneva, 1990); *infra* notes 35-43 (endocrine disruption).

25. See, e.g., Guide to Environmental Issues, U.S. EPA, September 1996, at www.epa.gov. List of Pesticides Banned and Severely Restricted in the U.S and Information sheets on Endocrine Disruptors. Substances on the former list include cadmium compounds, carbofuran, kepone, endrin, mirex, mevinphos, and vinyl chloride. Substances listed separately in the information sheets on endocrine disruptors include PCBs, DDT, dieldrin, chlordane, aldrin and toxaphene.

26. Lead is toxic to the nervous system, with children being particularly susceptible. Long-term exposure to lead in low-concentrations can adversely affect the mental development in young children and the fetus. See e.g., Dr. Peter Toft, *Chemicals in Drinking Water*, THE WORLD HEALTH ORGANIZATION MAGAZINE 14; Office of Environmental Analysis and Sustainable Development *Heavy Metals and Persistent Organic Pollutants*, U.S. Department of Energy (March 2, 1995) (identifying lead, cadmium, PCBs and dioxin as probable human carcinogens, referring to other studies). See also, *Legacy of Lead: America's Continuing Epidemic of Childhood Poisoning*, Environmental Defense Fund (Washington, D.C., 1990).

27. See, e.g., www.epa.gov (summarizing data on these and other substances); *World Resources Report 1998-1999*, and *World Resources Report 1994-1995* (referring to a "toxification" of the environment due to the presence of such substances); Eighth Biennial Report On Great Lakes Water Quality, International Joint Commission, 1996, at 8-11.

jects of a variety of prevention and control measures at the national level, both in the U.S. and in other countries.²⁸

Scientists and policymakers have used techniques of risk assessment as one important tool to help understand and characterize risks associated with these substances.²⁹ Within the U.S., risk assessments are carried out under various laws, and chemical-specific risk assessments have been performed for a number of substances, including dioxins, lead, mercury, PCBs and others.³⁰ Various international organizations also have produced extensive risk assessment information on specific substances.³¹

As part of this growing body of analysis, scientists and experts have identified many different routes by which humans and the environment are exposed to toxics. These include, for example, workplace exposure (including farmworkers using pesticides), dietary exposure (consumption of foods that contain residues of toxic substances)³² and contact with contaminants released into the air, water or soil, including but not limited to accident situa-

28. Many U.S. regulatory measures are summarized on the U.S. EPA Internet Homepage at www.epa.gov. The situation in developing countries is discussed *infra* Part II(B).

29. In the U.S., the National Center for Environmental Assessment in the U.S. has developed a number of guidelines for risk assessment methodologies, both for human and ecological risk. See, e.g., U.S. Environmental Protection Agency Internet Homepage at (health risk assessments). Several steps are involved in the analysis: hazard identification (i.e., identifying the health or environmental problem caused by the pollutant); dose-response assessment (i.e., identifying what health problems occur at different exposures); exposure assessment (i.e., how and to what extent are people or the environment exposed to the pollutant); and risk characterization (i.e., what additional risk is posed to health or the environment). See also, *Risk Assessment for Toxic Air Pollutants: A Citizen's Guide*, U.S. EPA (March 1991).

30. *Risk Assessment for Toxic Air Pollutants: A Citizen's Guide*, U.S. EPA (March 1991).

31. See, e.g., OECD Health and Safety Programme (formerly OECD Chemicals Programme) at www.oecd.org/env/health/index.htm; UNEP Chemicals Program at www.oecd.org/env/health/index.htm.irptc.unep.ch (linking to various UN initiatives on chemicals).

32. The regulation of pesticide residues in foods is a major element of the U.S. regulatory structure relating to toxics. See, e.g., the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C.A. Secs. 136—136y, and summaries of this structure on the EPA Internet homepage. Recent analyses of two major toxic substances, mercury/methylmercury and dioxins, indicate that food consumption (e.g., contaminated fish, etc.) accounts for a very large percentage of overall human exposures in the U.S. See *Mercury Study Report to Congress: Overview* at www.epa.gov (stating that “[f]ish consumption dominates the pathway for human and wildlife exposure to methylmercury.”); *Dioxin: Summary of the Dioxin Reassessment Science* (June 12, 2000) (scheduled for public review with the possibility of revisions) (stating that “EPA estimates that most dioxin exposure occurs through the diet, with over 95% of dioxin intake for a typical person coming through dietary intake of animal fats”).

tions. In some cases, the determination of sources leading to exposure routes is complex — as indicated, for example, by recent work on mercury and dioxins.³³ Another important consideration is that some substances, such as dioxins and furans, are not intentionally produced but rather are an unwanted by-product of certain types of activities (in particular, those involving combustion).³⁴

In recent years, there has been a growing body of evidence that at least a certain subset of chemicals can be transported through the environment for long distances through mechanisms such as wind, water currents and migratory species, and that some of these are not only toxic but also have the tendency to bioaccumulate in living organisms. Studies now report elevated levels of certain chlorinated chemicals, such as PCBs and DDT, in the food supply and the breast milk of indigenous people in the high Arctic, and in wildlife and environmental settings far removed from any point of production, use or release of these substances.³⁵ Many, though not all, of these substances are per-

33. See *Mercury Study Report to Congress: Overview*, *supra* note 32. (Studies on Mercury and Dioxin). The mercury study, for example, notes a variety of sources of mercury releases into the environment, including waste and fuel combustion, release from existing mercury reservoirs, and direct water discharges. Computer simulations are used to analyze long-range transport patterns.

34. For information on current scientific investigation on dioxins and related compounds, see, e.g., *Information Sheets of the U.S. Environmental Protection Agency* (June 12, 2000) (including “Summary of the Dioxin Reassessment Science” and others).

35. See, e.g., THEO COLBURN ET AL., *OUR STOLEN FUTURE* (1996) (reviewing a wide variety of data and research on this topic, and describing mechanisms for environmental transport); Heidi Fiedler, “PCBs: Uses and Environmental Releases,” published in the Proceedings of the Subregional Awareness Raising Workshop on POP’s, Cartagena, Colombia, January 1998 (noting reports on the presence of various POP’s in remote areas such as the Arctic and Antarctic, including in marine organisms such as pinniped milk and seal blubber and in sea and lake sediments). See also *Arctic Pollution Issues: A State of the Arctic Environment Report, Arctic Monitoring and Assessment Project (AMAP)*, published on the AMAP Internet Homepage, at <http://www.amap.no/assess/soaer-cn.htm>. AMAP is an intergovernmental monitoring and assessment program involving eight circumpolar nations. The project monitors levels of pollutants and assesses their effects in the various “compartments” of the Arctic environment, including atmosphere, terrestrial environment and freshwater environment. The Report finds, among other things, that: “. . . long-range transport and biomagnification of some substances in Arctic food webs have led to contaminant levels in people that can be 10 to 20 times higher than in most temperate regions. Indigenous people who rely on traditional diets are likely to be more exposed to several toxic substances than the majority of people elsewhere in the world” at <http://www.amap.no/assess/soaer12.htm>. The Report detects a number of POP’s in the Arctic environment, including heptachlor, lindane, PCBs, DDT and others, and in a variety of terrestrial and freshwater wildlife (e.g.,

sistent and organic – hence the identification of POPs (persistent organic pollutants) as a subset of chemicals of concern.³⁶

An important element of these studies is the extension of analysis to risks other than cancer. Historically, risk analysis in the area of chemicals tended to focus upon whether a substance caused cancer. The authors of *Our Stolen Future* write: “For the past three decades, the words ‘toxic chemical’ have become almost synonymous with cancer not only in the public mind but in the minds of scientists and regulators as well. . . .”³⁷ New studies, however, present evidence of an entirely different type of impact, such as disruption of endocrine systems, with possible connections to harms to reproductive systems, immune system deficiencies and other serious problems for humans and wildlife.³⁸ These

Canadian waterfowl, eagle, osprey and falcons, red fox, wolves, seals, walrus, toothed whales, and polar bears). The report identifies a number of adverse effects in wildlife linked to POP’s, including eggshell thinning and lowered reproductive capacity among birds of prey, and notes that the polar bear, as a top predator in the marine food web, accumulate significant amounts of many organic contaminants and “could be the species most exposed to contamination in the Arctic environment.” at <http://www.amap.no/assess/soaer6.htm>.

36. Mercury is an example of an inorganic substance that otherwise presents important parallel issues. Interestingly, while mercury itself will cycle back and forth between the atmosphere and surface waters or land (e.g., through wet deposition followed by re-emission as a gas or bound to airborne particles), it does not tend to bioaccumulate (e.g., in fish tissue). Methylmercury, however, which is a transformed product from mercury, will bioaccumulate. See *Mercury Study Report to Congress: Overview*, at *supra* note 32.

37. COLBURN, *supra* note 35, at 19. Regulatory authorities have, nevertheless, identified other types of potential effects in the past. See, e.g., *Risk Assessment for Toxic Air Pollutants*, *supra* note 29 (listing developmental problems in children, nervous system damage, birth defects and miscarriages, and others in addition to cancer).

38. The *AMAP Report*, identifies a variety of health concerns related to the presence of POP’s, including those relating to child development, reproductive impacts and effects on the immune system. The Report notes that “[s]everal of these effects may be mediated through the hormone-disrupting properties of some contaminants” see <http://www.amap.no/assess/soaer12.htm>. As indicated in *supra* note 35, the Report also identifies a variety of impacts on wildlife. See also COLBURN, *supra* note 35 (summarizing a number of studies suggesting evidence of a variety of adverse effects); Thomas Weise and William Kelce, *An Introduction to Chemical Estrogens*, CHEMISTRY AND INDUSTRY (Aug. 1997) (reviewing potential developmental and reproductive effects of endocrine disrupting chemicals; noting various adverse effects from the synthetic drug DES); Bruce Rodan et al., *International Action on Persistent Organic Pollutants (POP’s): Developing Screening Criteria Through Science and Policy Input*, in Proceedings of the Subregional Awareness Raising Workshop on POP’s in Cartagena, Colombia, January 1998 (identifying both cancer and non-cancer risks from various POP’s to Inuit adults); see also http://irptc.unep.ch/pops/POPs_Inc/precedings/cartegena/CRIRODAN.html; U.S. EPA Internet Homepage at <http://www.epa.gov/scipoly/ocspendo/whatis.htm> (providing information about the endocrine system and why certain chemicals can affect it; noting that many organochlorine

studies present a number of other troubling findings and possibilities: that some or many endocrine-disrupting chemicals can bioaccumulate in human or animal tissue,³⁹ and can be transmitted from mother to child (either during fetal development or through breast milk);⁴⁰ that some or many of these chemicals are persistent and can and do migrate hundreds or thousands of miles to affect persons or ecosystems far away from the industrialized world;⁴¹ that in certain key stages of development (e.g., prenatal) an extremely small exposure might cause severe and perhaps irreversible harms in people and wildlife;⁴² and that the effects of these substances might be multiplied when they act in combination with each other.⁴³ Ongoing research also suggests that there are other mechanisms, in addition to endocrine disrupt-

compounds, such as PCBs, DDT and other chlorinated pesticides, have endocrine activity and are "suspected of disrupting the endocrine system, resulting in harmful effects like reproductive and developmental defects and certain cancers); WORLD RESOURCES 1998-1999 *supra* note 23; *Assault on the Male*, a British Broadcasting Company (BBC) documentary (surveying evidence of the negative effects on reproductive systems of certain pesticides and chemicals).

39. RODAN, *supra* note 38; COLBURN, *supra* note 35; WEISE, *supra* note 38 (describing the capacity of organochlorine pollutants to persist in a manner that is magnified at higher trophic levels).

40. The *AMAP Report*, *supra* note 38, notes that "[M]any contaminants are present in our bodies, and a pregnant or nursing woman will transfer some of these to her child. . ." It also states that human mother's milk at Broughton Island in the Northwest Territories "contains enough PCBs to cause concern about effects on human health". See also COLBURN, *supra* note 35 (reviewing studies and data); RODAN, *supra* note 38 (noting particular concern with respect to breast feeding infants "who experience high, short-term dose rates at critical developmental times due to lipophilic POP's accumulating in breast milk" and citing to other studies on this topic; *World Resources Institute Report 1994-1995*, *supra* note 20 at 115 (noting that "[W]here pesticide use has been heavy, contamination, especially from organochlorines such as DDT, is found in breast milk at alarmingly high levels."); WEISE, *supra* note 38 (recounting the discovery many years ago that when pregnant mothers took the synthetic drug, DES, serious post-natal health effects could occur for the child, including problems with reproductive systems and vaginal cancer).

41. See *supra* note 35, and discussion below.

42. See, e.g., COLBURN, *supra*, note 35, chs. 3 & 7 (referring to studies by Fred vom Saal and others indicating that at certain critical stages of pre-natal development there is an extraordinarily high degree of sensitivity to certain types of external inputs).

43. See, e.g., WEISE, *supra* note 38 (citing to studies that indicated mixtures of environmental oestrogens may create a magnified, synergistic effect; but noting other studies using the same mixture of chemicals found additive, but not synergistic, effects). See also COLBURN, *supra* note 35.

tion, by which certain persistent and bioaccumulative substances may affect health and the environment.⁴⁴

An important characteristic of such substances is the manner in which they are transported through the environment. In many cases, persistent toxic substances tend to move in a "hopping" fashion (the so-called "grasshopper effect"), due to variations in climate and temperature.⁴⁵ In particular, many POPs tend to volatilize into gas/vapor in warmer temperatures, and de-volatilize at cooler temperatures. This causes them, in effect, to hop from the surface to the atmosphere (as gases) under certain conditions, where they are transported by wind currents, and return to the surface under other conditions. While the exact fate and transport of individual substances depends on their specific properties (e.g., water solubility, affinity for certain particles), the overall effect of this, given prevailing air currents and temperature variations among regions, is a tendency for POPs to end their migration and accumulate at highest levels in polar regions where it is cold.⁴⁶ This puts these regions "downwind" of the POPs contamination flow and disproportionately affected.

Much of the research in these areas remains in its early stages and is, in some cases, being sharply contested.⁴⁷ The AMAP Report, for its part, confronts directly the issue of information gaps and uncertainty with regard to human health issues. After noting direct linkages between POPs contamination and adverse effects in wildlife, the Report goes on to say:

44. The preliminary studies relating to dioxin, *supra* nn. 32-34, for example, indicate that dioxin can alter the basic development and growth of cells in ways that could lead to main types of adverse health effects

45. *See, e.g.*, FIEDLER, *supra* note 35. Dr. Fiedler notes that "many chlorinated organics and other stable compounds are distributed at a global scale through atmospheric transport. A general tendency in these transport patterns is that different substances are evaporated and spread to the atmosphere at latitudes with warmer climates and then condense and fall-out closer to the poles (global condensation)." *See also* AMAP Report, *supra* nn. 35 & 38 (describing this process, and noting that air currents "are the most important transport routes by which organic contaminants reach the Arctic.").

46. *Id.* Dr. Fiedler goes on to indicate that as a consequence of this tendency in transport patterns, "areas close to the North and the South pole receive a disproportionate share of this fall-out. An indication of this phenomenon is that several chlorinated pesticides, long banned in Sweden, are found — although at relatively low levels — in environmental compartments of the country. Examples of the substances are chlordane, toxaphene, and hexachlorobenzene."

47. *See, e.g.*, WEISE, *supra* note 38 (referring to different results from similar studies on the issue of synergistic effects). Scientists, organizations, and news reports have questioned some of the findings contained in this line of research.

[t]here are no illnesses yet reported in the Arctic [in people] for which contaminants are known to be a direct cause. However, a lack of readily visible illness does not mean that the exposure of indigenous peoples in the Arctic is without medical consequence. Moreover, the exposure situation is highly complex as many stressors interact with one another. . . , it is difficult scientifically to prove the connection between contaminants and disease in small population groups, even when such connections are known to exist from studies of larger groups. For these reasons, high levels of contaminants in blood and tissue or subtle biochemical changes in the body should be taken as significant health warnings. . .⁴⁸

The U.S. Environmental Protection Agency (EPA) has stated, among other things, that:

. . . compelling evidence has accumulated that endocrine systems of certain fish and wildlife have been affected by chemical contamination, resulting in developmental abnormalities and reproductive impairment. However, the relationship of human diseases of the endocrine system and exposure to environmental contaminants is poorly understood and scientifically controversial.⁴⁹

In 1996, the U.S. Congress passed into law certain provisions on endocrine disruption in the Food Quality Protection Act (FQPA) and amended the Safe Drinking Water Act (SDWA) of 1996.⁵⁰ A number of steps are being taken to implement these provisions and deepen scientific understanding of the endocrine disruption issue.⁵¹ Scientists and regulators have also taken other actions in recent years to strengthen traditional forms of analysis regarding risks from toxic substances.⁵²

There also has been increased attention to the potential effects of toxic substances upon sensitive groups or populations within

48. *AMAP Report, supra* note 38, ch. 12: Pollution and Human Health. As noted above, the AMAP report identifies specific linkages between POP's contamination and wildlife.

49. U.S. EPA Internet Homepage <http://www.epa.gov/scipoly/oscpendo/standards/htm> (endocrine disruption screening homepage).

50. *See* Food Quality Protection Act (FQPA), 7 U.S.C. § 136 (1996), P.L. 104-170 (amending FIFRA, *supra*), and the amended Safe Drinking Water Act of 1996, P.L. 104-182 (amending the Safe Drinking Water Act, 42 U.S.C. § § 300f to 300j-26).

51. *Id.*

52. The U.S. EPA, at <http://www.epa.gov/cumulativeexposure/>, for example, states: "Many of EPA's exposure analyses and risk assessments focus on a single pollutant, a single source or category of emissions, or a single environmental medium (such as air or water). In reality, people tend to be exposed through multiple pathways to numerous pollutants originating from a variety of sources." In response, the EPA initiated the Cumulative Exposure Project in 1994, with a goal "to examine the cumulative impacts of multiple pollutants and to determine the important contributors to cumulative exposure."

societies. For example, studies over the years have indicated that children may be especially vulnerable to harm from pesticides and certain other substances, such as lead, mercury and PCBs,⁵³ and also indicate that the elderly may be at particularly high risk of adverse health effects from the use of pesticides.⁵⁴ The FQPA has led to the use of new approaches in the assessment of the potential effects of pesticides to take into account special situations of particular groups, such as children.⁵⁵ The AMAP assessments also devote significant attention to especially sensitive subgroups or populations.⁵⁶

Many important and difficult issues are raised in the process of identifying potential risks and effects of toxic substances. One of these is how to address scientific uncertainty in the process, which relates to the larger international debate over the use of a precautionary approach in environmental policymaking.⁵⁷ In this regard, concern has been expressed that at least some methods that might be used to assess risk, e.g., requiring identification of exposure sources and pathways, or proof of causation between disease and individual contaminants, may prove difficult to meet in the case of POPs substances, where long-range transport and interaction among substances may inevitably bring a certain degree of uncertainty but not otherwise indicate that no action is warranted.⁵⁸

Everyday life in the United States and other countries, of course, finds chemicals in countless production processes and products, and thousands of new chemicals continue to be produced each year.⁵⁹ Developing countries, in turn, have dramati-

53. *Id.* "Pesticides and Food—Why children may be especially sensitive to pesticides" (noting that children may be exposed more heavily to certain pesticides because they eat different foods than adults, and they may be more susceptible to toxics than adults because they are growing and developing and may, in some cases, have less natural protection built into their bodies than adults); Foundation for Advancement in Science and Education, *Lead, Pesticides and Children*, FASE Reports, Vol. 10, No. 1, 4-5 (1992).

54. *Id.* (citing Robert Repetto, *Policy Implications of Possible Effects of Pesticides on the Immune System*, paper presented at the Conference on Pesticides and Health, Bellagio, Italy, April 1992) (on file with author).

55. U.S. EPA Internet Homepage at <http://www.epa.gov/oppfeadl/fqpa-iss.htm>.

56. *AMAP Report*, *supra* note 35.

57. *See, e.g.*, Principle 15 of the Rio Declaration, *supra* note 8, and discussion below.

58. The *AMAP Report*, *supra* note 35, for example, highlights the difficulty of proving causation of disease with respect to specific POP's.

59. *World Resources Institute Report 1998-1999*, and *World Resources Institute Report 1994-1995*, *supra* note 20. *See also infra* Part II(B).

cally expanded their uses of chemicals and pesticides in recent years.⁶⁰ Uses are many and varied, even among substances with known risks. Many countries still use DDT, for example, as one tool in the fight against disease vectors that cause malaria.⁶¹

The potential uses – and usefulness – of many chemical products is an important consideration in the context of domestic environmental law and policy. Certain U.S. laws, for example, contain provisions that require policymakers to weigh the benefits of a chemical (e.g., to agriculture, consumers, the regulated sector) against the risks or costs posed by such chemical (e.g., to health and the environment).⁶² One key question is whether there exist less harmful alternative products or production methods to meet societal needs, and not simply (or necessarily) what actions are needed to eliminate all potential adverse effects of a particular substance or activity. On the basis of these considerations, a regulatory decision might be made to control or restrict uses of a particular pesticide or chemical, for example, rather than prohibit its production or use altogether.

This aspect of regulatory decision making has been at the center of a deep tension that has characterized the international work on POPs, between those favoring stringent regulation and elimination where feasible and warranted, and those favoring elimination without such qualifications, on the argument that POPs are so inherently dangerous that the international community should simply find the way toward their complete elimination.

b. *Special Problems in Developing Countries*

Many developing countries may face especially high risks from POPs and other toxic chemicals. For example, a U.S. AID-sponsored study by Winrock International Environmental Alliance (the Winrock study) concludes, with respect to pesticide use, that most African nations lack pesticide control statutes.⁶³ There is an absence of effective regulatory implementation and enforcement

60. *Id.*

61. This particular use of DDT has been a major point of discussion in the POPs treaty, and will be considered further below.

62. See, e.g., TSCA § 5(f) (on protection against “unreasonable risk”), *supra* note 21; FIFRA, *supra* note 32; subject to modifications under the FQPA, *supra* note 50.

63. *Pesticides and the Agrichemical Industry in Sub-Saharan Africa*, Prepared for U.S. AID, Bureau for Africa, Prepared by Environmental and Natural Resources Policy and Training (EPAT) Project, Winrock International Environmental Alliance, July 1994, at iv (Executive Summary) (on file with author).

in many nations of sub-Saharan Africa, and a general lack of regulatory structure in others.⁶⁴ Among the 10 countries of the Southern Africa Development Community, only Tanzania, Mozambique and Zimbabwe have pesticide regulation schemes.⁶⁵ In most West African nations, there exists neither comprehensive legislation nor registration and control schemes.⁶⁶

Separate reports on conditions in the Philippines observe that developing countries in general have less stringent regulatory controls, if any at all, and less effective enforcement of existing laws than is likely to be present in developed countries.⁶⁷ Some important progress has occurred in reducing the use and risks from pesticides, and in preserving gains in agricultural productivity, with the introduction of integrated pest management techniques (IPM).⁶⁸ However, at a basic level, many developing countries have not implemented systems to generate and analyze the information needed to assess the relative dangers of a particular pesticide or chemical. As noted by UNEP:

It is not just a question of numbers. In most cases the problem is of information: how to get it, how to spread it, and how to make sure it is used properly. The greatest obstacle to our safe use and disposal of chemicals is ignorance.⁶⁹

These difficulties also are shown in the results of a survey of developing countries conducted by FAO in the late 1980's, relating to the implementation on the International Code of Conduct on the Distribution and the Use of Pesticides.⁷⁰

Concerns over lack of effective regulatory structure in developing countries were raised in hearings before the U.S. Congress in 1994 on U.S. pesticide exports. Dr. Lynn Goldman, former

64. *Id.* at 1.

65. *Id.* at iv.

66. *Id.*

67. See, e.g., *Philippines Case Study: A Developing Country's Perspective on POPs*, submitted by the Philippines at the June 1996 meeting in Manila of the International Forum on Chemical Safety (IFCS) (identifying law and regulation problems) (on file with author).

68. *Id.* at 4; see also *World Resources Institute Report 1994-1995* (reporting on promising results of IPM in Indonesia). IPM draws upon traditional pest control techniques (e.g., crop rotation, using trap or decoy crops to draw pests away) and uses natural biological factors.

69. Director of the United Nations Environment Programme (UNEP) International Register of Potentially Toxic Chemicals (IRPTC), quoted in IRPTC (UNEP, 1990).

70. See 55 Fed. Reg. 29, 4957 (1990) (citing survey results). Among other things, 63% (57 out of 91) of developing countries reporting indicated that they did not have in place internal systems to process information on pesticides prior to import.

Assistant Administrator for Pesticides, Pollution Prevention, and Toxic Substances at EPA testified on the issue of regulatory standards in such countries:

. . . it would be a misnomer to speak of it as a health standard. In our technical assistance work. . . many cases they do not have the capacity to develop a health standard, and they come to us with questions that are of an extremely basic nature, such as do you still use DDT in the United States. . . There is a considerable amount of misinformation or lack of information in developing countries because there is not a great capacity to perform some of the science work that you need to perform to make a health-based determination about a pesticide.⁷¹

A number of problems arise due to unsafe handling and storage practices and improper packaging and labeling.⁷² In many cases, workers handling pesticides fail to wear adequately protective clothes,⁷³ and may not be aware of safeguards to avoid harm.⁷⁴ In addition, many developing countries predominantly use insecticides, including some older types, that tend to be more acutely toxic, rather than herbicides that have lower immediate toxicity.⁷⁵ As a result of these and other factors, developing countries face especially serious risk of adverse impact from the presence and use of dangerous chemicals.

c. *Transboundary Dimensions of the Toxics Problem*

As noted above, many countries have in common serious local toxic contamination problems. While this, in itself, may be seen as sufficient to justify international action, such as technical cooperation and capacity building,⁷⁶ policymakers and societies have become more aware that toxic problems also are trans-

71. Hearing at p. 19; See also Comment, *Hazardous exports to the Third World: The Need to Abolish the Double Standard*, 12 COL. J. ENVTL. L. 71, 77-78 (1987).

72. Halter, *Regulating Information Exchange and International Trade in Pesticides and Other Toxic Substances to Meet the Needs of Developing Countries*, 12 COL. J. ENVTL. L. 1, 4-5 (1987).

73. *Id.*

74. *Id.*

75. *World Resources Institute Report 1998-1999* at 41.

76. See, e.g., HUNTER, *supra* note 7 at 1-10 (separating "global" problems from "regional and local" problems, including water and air pollution, while noting that these can also give rise to significant transboundary impacts in the case of shared air or watersheds).

boundary in nature, and can have implications for environmental systems well beyond local or national levels.⁷⁷

For example, it is apparent that toxic substances released in one country may find their way into shared air or watersheds, creating transboundary environmental impacts in neighboring countries (e.g., the Great Lakes, the Rhine River in Europe). In addition, some chemicals have effects on a global scale (e.g., the effect of CFCs on the ozone layer), or affect parts of the environment considered to be of "common concern" to all, such as biodiversity.⁷⁸

There is also continuing concern about the implications of trade in these substances, in particular the export of substances that have been banned or severely restricted in one country to other countries, especially when the receiving country lacks strong regulatory controls. One aspect of this issue relates to the harms caused by these substances in the countries where they are received and used.⁷⁹ Another is the so-called "circle-of-poison" concern, i.e., the phenomenon where domestically prohibited or restricted pesticides which are exported can return to the exporting country in the form of dangerous residues on food items grown in other countries and imported for domestic consumption.⁸⁰

The importance of these issues is underlined by the sheer volume of trade in pesticides and chemicals in recent years. Pesticide sales increased steadily in the decades following 1960,⁸¹ and

77. See, e.g., HUNTER, *supra* note 7 (highlighting four basic types of global environmental problems: climate change; ozone depletion; species extinction and loss of biodiversity; and pollution from toxic chemicals and hazardous wastes); BROWN, WEISS, *supra* note 1; NATIONAL ACADEMY OF SCIENCES, ONE EARTH, ONE FUTURE (1990) (identifying components of the global environmental system). Political jurisdiction also plays a role in issue categorization. For example, it is recognized that countries have a shared or common interest in areas beyond the jurisdiction of any country, such as the high seas or Antarctica (the global commons). BROWN, WEISS, *supra* note 1 at 528-531. Biological diversity is recognized as a matter of "common concern" among nations. See, e.g., Convention Biological Diversity, preamble at www.biodiv.org.

78. With respect to CFCs, see BENEDICK, *supra* note 2. The potential adverse effects of toxic substances on biological diversity (e.g., by affecting wildlife populations) provides another basis to group this as a "global" issue, as indicated above.

79. See, e.g., *U.S. Pesticide Exports and the Circle of Poison: Hearing Before the Subcomm. On Economic Policy, Trade and Environment of the House Comm. On Foreign Affairs*, 103rd Cong. 40 (2d Sess. 1994) (statement of EPA Administrator Carol M. Browner).

80. See, e.g., DAVID WEIR & MARK SCHAPIRO, *THE CIRCLE OF POISON: PESTICIDES AND PEOPLE IN A HUNGRY WORLD* (1981).

81. See Winrock Study, *supra* note 63.

there has been an especially high increase in imports in some regions.⁸² In 1992, developing countries accounted for approximately 31 percent of pesticide imports,⁸³ and in 1995, world pesticide use was 2.6 million metric tons of active ingredients, valued at \$38 billion.⁸⁴

Finally, the growing body of evidence regarding the *long-range* environmental transport capabilities of POPs has highlighted the fact that toxic chemicals do not heed political boundaries, and may reach far beyond their points of origin or use. In combination with evidence on persistence and toxicity, this information has created an even stronger basis for contemplating international action in this field,⁸⁵ and has helped to serve notice that national regimes, even the most stringent, cannot in isolation address the growing international dimensions of these issues.

d. The Emergence of a Global Environmental Agenda to Address Risks from Chemicals

Building on these understandings, and an important historical foundation of international cooperation on chemicals at the technical level,⁸⁶ the international community recently has launched a variety of new activities and negotiations in the field of dangerous chemicals.

The 1992 United Nations Conference on Environment and Development (the Rio Earth Summit), in particular, marked a major step forward in cooperative work in this field.⁸⁷ At the Rio Earth Summit, the international community joined together not only to conclude negotiation of two major international agree-

82. *Id.*

83. *Id.*

84. *World Resources Institute Report*, *supra* note 75.

85. The remarks of UNEP Executive Director Klaus Toepfer at the opening session of the POPs treaty negotiations highlight this particular basis for international action. *See infra* note 137.

86. Regulatory authorities have engaged in technical cooperation in the field of toxic chemicals for many years, including within the Organisation for Economic Co-operation and Development (OECD) in Paris (e.g., to identify and assess hazards and risks of chemicals, and in some cases to negotiate specific legal or policy commitments to address such risks) and under the auspices of several UN entities (developing a data base of information on characteristics and risks of many chemicals). *See e.g.*, *supra* note 31 (providing citations).

87. The Rio Earth Summit marked the twentieth anniversary of the Stockholm Conference on the Human Environment, often regarded as a beginning point of the modern era of international environmental law and policy, and a benchmark for law and policy in the field. For further discussion of both the Stockholm and Rio Conferences, *see, e.g.*, HUNTER, *supra* note 7; BROWN WEISS., *supra* note 1.

ments,⁸⁸ but also to develop a set of principles on environment and development (the Rio Declaration) and a detailed blueprint for action to achieve sustainable development in the 21st century (Agenda 21).⁸⁹

Chapter 19 of Agenda 21 is devoted specifically to the Sound Management of Chemicals. In it, the international community acknowledged both the importance of and the problems posed by chemicals in modern society. The opening two sentences of Chapter 19 of Agenda 21 set the context for further work:

A substantial use of chemicals is essential to meet the social and economic goals of the world community and today's best practice demonstrates that they can be used widely in a cost-effective manner and with a high degree of safety. However, a great deal remains to be done to ensure the environmentally sound management of toxic chemicals, within the principles of sustainable development and improved quality of life for humankind. . .⁹⁰

The third and fourth programme areas of Chapter 19 of Agenda 21 have proven particularly important in helping to define the global agenda for action to achieve these basic goals. Among other things, the third programme area calls for further action to promote Prior Informed Consent (PIC) procedures relating to trade in certain chemicals (foreshadowing the recently concluded negotiation of a global treaty on PIC).⁹¹ The fourth programme area calls for activities that could include "the phasing out or banning of toxic chemicals that pose an unreasonable or otherwise unmanageable risk to the environment or human health and those that are toxic, persistent and bio-accumulative and whose use cannot be adequately controlled."⁹²

88. The Framework Convention on Climate Change and the Convention on Biological Diversity both were negotiated in the lead-up to the Rio Summit, and opened for signature at Rio.

89. Agenda 21 is in some ways the most remarkable document of the Summit. While long (it consists of some forty chapters covering a wide range of topics relevant to environment and development), and not easy to read through, it provides a detailed statement of objectives and offers a benchmark and blueprint for future initiatives.

90. *Id.*

91. See Global Treaty on Prior Informed Consent, opened for signature in Rotterdam, the Netherlands, 1998 (the "PIC" treaty).

92. Agenda 21, ¶ 19.49(c). See also Agenda 21 at ¶¶ 19.49(a), (c), providing additional guidance in this area.

e. *The Emergence of a Special Focus on POPs (and PIC)*

In the years since Agenda 21, work on POPs and PIC has emerged as a top priority of the international community in this field. With respect to POPs, a number of initiatives have been undertaken both at the multilateral and regional level.

For example, in 1994, governments issued a decision at the third meeting of the UN Commission on Sustainable Development⁹³ which endorsed continued action on chemicals, including in particular lead and other dangerous toxic substances.⁹⁴ In late 1995, UNEP sponsored a conference in Washington on land-based sources of Marine Pollution. At this meeting, countries adopted a Global Programme of Action for the Protection of the Marine Environment, which, among other things, called for international action to reduce and/or eliminate the production, use or release of POPs.⁹⁵

Countries also began to initiate action on POPs at the regional level. Most prominently, the parties to the UN ECE agreement on Long Range Transboundary Air Pollution (LRTAP) agreed to negotiate a new protocol on POPs (and a separate protocol on heavy metals).⁹⁶ This negotiation recently concluded with an agreement that sets forth detailed obligations to reduce and, in some cases, eliminate the production, use and/or release of 16 POPs, including the 12 POPs identified in the global POPs negotiations.⁹⁷ The negotiators also developed a set of criteria for adding new substances to the regime in the future, and a base set of scientific data and other information relevant to work on POPs in other settings. Accordingly, the LRTAP POPs protocol is a

93. The United Nations Commission on Sustainable Development was created at the Rio Earth Summit pursuant to Chapter 39 of Agenda 21, and charged, *inter alia*, with the task of promoting the implementation of Agenda. Given the breadth of Agenda 21, this has proven no simple task. *See, e.g.*, HUNTER, *supra* note 7, at 399-402.

94. Among other things, the Commission noted that efforts to control the risks of chemicals to human health and the environment "have not kept pace with the widespread and growing use of chemicals in all sectors worldwide."

95. Washington Conference on Land Based Sources of Marine Pollution, Oct.-Nov. 1995, Global Programme of Action, Paragraph 88.

96. The UN ECE has over fifty member countries, including the countries of Europe, Eastern Europe, Russia, Japan, the U.S. and others.

97. *See* 1979 CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION AND ITS 1998 PROTOCOLS ON PERSISTENT ORGANIC POLLUTANTS [POPs] AND HEAVY METALS, UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE [ECE], U.N. Sales No. E.99.II.E.21 (June 1998). The four substances beyond those identified initially in the global POPs treaty are chlordecone, hexabromobiphenyl, HCH (including lindane) and PAHs.

directly relevant potential model for the global treaty on POPs. However, this negotiation did not involve many regions of the world, such as the great majority of developing countries that participated in the global POPs negotiations. This difference in participation is a critical distinguishing element between the two processes.

There has also been work on POPs in the North American regional context. Pursuant to certain provisions of the U.S.-Canada Great Lakes Water Quality Agreement, as modified in 1987, the United States and Canada have developed a series of initiatives and commitments to take action against persistent toxic substances in the Great Lakes ecosystem. These include a Binational Strategy for the Virtual Elimination of Toxic Substances from the Great Lakes Ecosystem.⁹⁸ Persistent toxics now stand at or near the top of the bilateral agenda in the Great Lakes area.⁹⁹

In addition, in 1995, Canada, Mexico and the U.S. agreed to a Resolution on the Sound Management of Chemicals under the North American Agreement on Environmental Cooperation. This Resolution called for the development of Regional Action Plans to address problems posed by persistent toxic substances, and for the development of criteria for selecting substances for future action. To date, action plans have been developed for DDT, chlordane, PCBs and (in two phases) mercury. The Parties also are examining other methods to achieve sound management of chemicals, such as strengthening implementation capacity, clustering chemicals for analysis, monitoring and modeling, and innovative technologies.¹⁰⁰ Other regional work on POPs includes a series of initiatives in the North Sea and other regions of Europe.¹⁰¹

The negotiation of a legally binding instrument on PIC also has an important relationship to the ongoing work on POPs in these

98. U.S.-Canada Binational Strategy for the Virtual Elimination of Toxic Substances, April 7, 1997. See also Peter Lallas, *Canada-United States Binational Strategy for the Virtual Elimination of Toxic Substances in the Great Lakes*, 32 INT'L LAW 515 (1998).

99. See, e.g., Botts & Muldoon, *The Great Lakes Water Quality Agreement: Its Past Successes and Uncertain Future*, (Nov. 1996), sponsored by Institute on International Environmental Governance, Dartmouth College.

100. See, e.g. the Internet homepage of CEC at <http://www.cec.org> (describing chemicals program).

101. See, e.g., John Buccini *POP's Recent Developments in the IFCS*, in the Proceedings from the UNEP Cartagena workshop, at <http://irptc.unep.ch/pops>.

various fora. Building upon existing UNEP voluntary guidelines on prior informed consent, and taking into consideration work on domestically prohibited goods (or "DPG") under the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO),¹⁰² the PIC instrument provides a legal regime to ensure that export of certain identified chemicals (listed on the PIC list in accordance with specified procedures and criteria) will not occur without notice to and the prior informed consent of the importing country.¹⁰³

Both exporting and importing countries have responsibilities under the PIC treaty. Exporter obligations include export notification requirements as well as the basic requirement not to export PIC substances absent prior informed consent from the importer (as provided for under the treaty).¹⁰⁴ In addition, the treaty contains provisions for the sharing of information about risks and management techniques through, *inter alia*, the development of risk guidance information and risk decision documents, available to all parties, regarding PIC substances.¹⁰⁵ This information is intended to be of particular benefit to those countries that do not have the capacity to develop such information individually.

In relation to POPs, then, the PIC is important in part because it governs certain aspects of international trade in dangerous chemicals, including many POPs. At the same time, PIC is important for what it does not do. In particular, the PIC treaty does not address whether restrictions should be imposed upon the production or use of dangerous chemicals, including POPs. Moreover, while the PIC creates a system that could halt trade among specific countries (e.g., where a country does not consent to import), it does not impose more generally a ban on export or trade of chemicals based on a policy determination that any such trade is inappropriate. These issues were left for another venue.

As momentum for work on POPs continued to grow, the international community took another important step to strengthen the institutional basis for additional work on POPs at the multi-

102. Led by certain African countries in particular, members of the GATT and then the WTO, have for many years considered the issue whether to develop a legal instrument to control export of DPGs. In the early 1990's, a draft text was circulated; however, it did not gain consensus. See *Inside U.S. Trade — Special Report*, (August 16, 1991) (reproducing draft text of July 2, 1991).

103. See, e.g., PIC TREATY, Arts. 10, 11 & 13, *supra* note 91.

104. *Id.*, Arts. 11 & 13.

105. *Id.*, Arts. 5–9.

lateral level. In 1994, the Intergovernmental Forum for Chemical Safety (IFCS) was created at the International Conference on Chemical Safety in Stockholm, Sweden.¹⁰⁶ A major function of the IFCS is to serve as a forum for dialogue among high-level environmental policy makers from national governments as well as interested members of the public. The IFCS has been used as a venue to generate ideas, seek consensus on priorities, and build momentum for action in specific areas relating to the international chemicals agenda. Indeed, it was to play a critical role in the next key step in the path toward the negotiation of a global treaty on POPs, the development of a negotiating mandate.

f. *The Mandate to Negotiate a POPs Treaty*

As a matter of process, government representatives needed a mandate from their political leadership prior to embarking upon negotiation of a POPs treaty. Moreover, in order to provide a basis for joint action toward a possible global treaty, there was a need to establish a process to bring governments — and others — together to work toward that end.

The annual meetings of the UNEP Governing Council offered a forum to develop a mandate. UNEP has played an important coordinating and catalyzing role in the development of several treaties in the environmental field.¹⁰⁷ UNEP also had begun to develop an expanded program on chemicals, building on earlier work within UN organizations. Given the important public health issues at stake in possible POPs negotiations, including those relating to the use of DDT in the fight against malaria, a need was also seen to engage and coordinate with the General Assembly of the World Health Organization. Prior to this, however, countries determined that there was a need for additional preparatory work to strengthen the foundation to develop a mandate, and to define an appropriate scope and purpose for possible negotiations. In particular, further discussions were needed to deepen the understanding of POPs on issues relating

106. See <http://www.int/ifcs> (WHO website containing documentation on IFCS, including the Resolution establishing it and setting forth its terms of reference in April 1994).

107. See, e.g., BENEDICK, *supra* note 2 (role of UNEP in creation of the Montreal Protocol); BROWN WEISS, *supra* note 1 at 228-29; HUNTER, *supra* note 1 at 395; Mostafa Tolba, former Executive Director of UNEP, Informal Diplomacy, interview available at <http://www.ourplanet.com>

to science, socio-economic considerations, the existence of alternative substances to meet specific needs, and other points.

As a major step toward this goal, the international community convened a week-long meeting of the IFCS in Manila in June 1996.¹⁰⁸ This meeting was designed to bring together technical experts to consider each of the issues noted above, and on this basis to make a recommendation to the UNEP Governing Council concerning a possible negotiation of a global treaty on POPs. A number of scientific and technical studies regarding POPs were presented during the course of the meetings.¹⁰⁹ On the basis of this information, and following several days of negotiations, the IFCS experts issued two final reports in June/July 1996. These reports presented a set of findings and recommendations regarding POPs and the possible negotiation of a new global treaty on POPs.¹¹⁰ While the reports did not seek to resolve all issues, they did achieve consensus on a number of key points.

Most significantly, the IFCS determined that a sufficient basis existed to recommend the development of a legally binding global treaty on POPs. The final report recommended that the UNEP Governing Council establish an International Negotiating Committee (INC) to negotiate such an instrument.¹¹¹ Second, IFCS participants recommended that the treaty focus initially upon a list of 12 substances of immediate concern, and include a set of science-based criteria and a process for adding new POPs to the regime at a later date. As part of this debate, participants made a conscious decision to keep the treaty focused on POPs rather than develop a broader treaty on the sound management of all chemicals (beginning with POPs). The final report requested that the first meeting of the International Negotiation Committee (INC) establish an expert group to carry out the work of developing criteria and a process for adding POPs, for consideration by the INC.¹¹²

Third, the IFCS provided specific guidance on the basic aim of a treaty and the types of measures that should be taken to achieve this aim. The final report recommended that “. . . immediate international action should be initiated to protect human

108. The decision to hold this meeting is reflected both in Decision 18/32 of the UNEP Governing Council of May 1995 and in a meeting of the Intersessional Group of the IFCS on March 1996.

109. See, e.g., the UNEP chemicals/POPs program, at <http://irptc.unep.ch/pops>.

110. *Id.*

111. *Id.*

112. *Id.*

health and the environment through measures which will reduce and/or eliminate (as further elaborated in paragraphs 46, 47 and 48) the emissions and discharges of the 12 POPs . . . and, where appropriate, eliminate production and subsequently the remaining use of those POPs that are intentionally produced.” In heavily negotiated text, paragraphs 46-48 provided that, other than for the small number of remaining recognized uses, there should be a rapid phase-out of the intentionally produced pesticides and subsequent remaining uses, a phase-out over time of the industrial chemicals, with a transition to their complete elimination, a series of actions against unwanted by-products and realistic action to destroy obsolete stocks and remediate environmental reservoirs.¹¹³

Several elements of this mandate are worth highlighting. One is its reflection, in part, of a Montreal Protocol-like approach to the intentionally produced POPs: i.e., by focusing on the phase-

113. The actual text reads as follows:

46. For the listed POP pesticides and industrial chemicals that are or have been intentionally produced: other than for the small number of remaining recognized uses, these POPs pose unreasonable and otherwise unmanageable risks to human health and the environment such that:

(a) For the listed POP pesticides, measures should be taken to rapidly phase out remaining production and subsequent remaining use as alternatives are made available for the small number of remaining recognized uses; and

(b) For the listed POP industrial chemicals there is a need to phase out, over time, polychlorinated biphenyls and hexachlorobenzene on a global scale and, in the transition to complete elimination of use, there is a need for managing remaining use, storage and disposal.

47. For POPs that are generated as unwanted by-products, currently available measures that can achieve a realistic and meaningful level of release reduction and/or source elimination should be pursued expeditiously, and this should be done by actions that are feasible and practical and additional measures should be explored and implemented.

48. Realistic action should be taken to destroy obsolete stocks of the listed POPs and remediate environmental reservoirs. Manufacturers and exporting and importing countries should work together to solve the problem on a priority basis, taking into account the following considerations:

(a) Destruction technologies are available that may be appropriate and practical in some cases;

(b) In many regions, particularly in the developing countries, society still lacks appropriate and

adequate destruction facilities and the costs associated with providing them may be greater than what the region can afford without technical and other assistance;

(c) In many cases, full remediation of environmental reservoirs may not be technically or economically feasible or practical;

(d) Better information on the amount of obsolete stocks is required (footnotes omitted).

available at <http://irptc.unep.ch/pops/indxhtmls/manwgrp.html>.

out of production and use, as well as by acknowledging the existence of certain recognized uses (the Montreal Protocol contemplates "essential uses"). This basic approach also is reflected in the LRTAP POPs Protocol. Another important element of the text is its use, in a slightly adjusted form, of language from Chapter 19 of Agenda 21 (see para. 48 chapeau on unreasonable and otherwise unmanageable risks). A third characteristic is the separate treatment of by-products and issues relating to obsolete stocks and environmental reservoirs, with an emphasis on action that is realistic and feasible. A final important point is that several key recommendations focus specifically on the initial 12 listed POPs, and leave to the side (potentially more difficult) questions about how to address substances added at a later time. The negotiating dynamic surrounding the development of this text is described in Part IV.

On the basis of these results, the international community gathered at a meeting of the UNEP Governing Council in February 1997 to consider the establishment of a legal mandate to negotiate a legally binding global treaty on POPs. During the course of these meetings, the Governing Council endorsed the final report issued by the IFCS, created a new International Negotiating Committee for the purpose of negotiating a global POPs treaty, and instructed participants to work through the INC to finalize a treaty by the fifth meeting of the INC no later than the year 2000.¹¹⁴

g. *The UNEP Awareness Workshops*

In preparation for the start of treaty negotiations, and also pursuant to provisions of the UNEP Governing Council Decision 19/13, UNEP sponsored a series of regional meetings and workshops to help build awareness and technical understanding of POPs related issues in different regions in the world. A total of eight workshops were held: St. Petersburg, Russia, July 1997 (for countries of the New Independent States region); Bangkok, Thailand, November 1997 (Asia and Pacific region); Bamako, Mali, December 1997; Cartagena, Colombia, January 1998 (Central America and Caribbean); Lusaka, Zambia, March 1998; Iguazu,

114. See UNEP Governing Council Decision 19/13, February 1997, available at <http://irptc.unep.ch/pops>.

Argentina, April 1998; Ljubljana, Slovenia, May 1998 and Abu Dhabi, United Arab Emirates, June 1998.¹¹⁵

During the workshops, experts and officials presented various types of information relevant to work on POPs, including a description of the international process to date and a review of various scientific and technical issues raised by POPs. The workshops also offered a venue for nations to identify potential issues and concerns regarding POPs and the pending POPs treaty process, including those relating to social, technical and economic aspects.¹¹⁶

h. *Issues and questions on POPs arising from these discussions*

The work on POPs in these various settings helped to identify a number of important substantive issues in the movement toward negotiation of a global treaty. The "elimination" issue (noted previously), for example, rose quickly to the surface during the Manila meeting. The key operative text of the Manila meeting on control measures, quoted above, reflects an important attempt to navigate through this issue and provide guidance to negotiators on core elements of the treaty. Nevertheless, the issue remained a high profile subject throughout the treaty discussions.

Important questions also arose as to whether work on POPs was a priority agenda item for many countries, in particular many developing countries. While chemical contamination is a major problem for many developing countries, there is some question as to whether a short-list of POPs substances reflects the greatest concern (e.g., by not including other substances which could be acutely toxic to workers but not otherwise be sufficiently persistent to be a POP).¹¹⁷ The fact that POPs tended to migrate to colder climates through the "grasshopper" effect, described above, highlights this question: in effect, it is the countries in the colder latitudes that frequently appear to be "downwind" of the POPs transboundary movement pattern.

115. See UNEP Governing Council Decision 19/13, February 1997, available at <http://irptc.unep.ch/pops>.

116. *Id.*

117. See, e.g., *World Resources Report 1998-1999* available at <http://www.wri.org/wri/wr-98-99> (noting that developing countries tend predominantly to use acutely toxic insecticides). See also, *Philippine Case Study*, *supra* note 67 (emphasizing hazards of POPs, but stating that the Philippines considers the short list inadequate, and noting in particular problems with pesticides such as endosulfan).

An important counterpoint to this is that the POPs also can have strong negative effects locally – indeed, it is on this basis that they have been subject to stringent regulatory action by many national authorities. Accordingly, it has been emphasized that action on POPs will address serious local problems as well as problems related to transboundary movement (and related properties of persistence and bioaccumulation). Even so, there continue to be issues of priority over potentially competing resources: e.g., work on poor water quality, etc. These and related issues are an important backdrop to the discussion of funding and technical assistance for developing countries under consideration in the current negotiations.

Another important set of issues that surfaced in the Manila meeting involves the identification of guiding principles for the negotiations. One issue common in international meetings is whether and how to highlight the need to use precaution in response to scientific uncertainty (e.g., in the analysis of data relevant to the addition of new substances to the treaty) and whether to refer explicitly to a “precautionary principle.”¹¹⁸ A second important issue involves how to address special needs and circumstances faced by developing countries, including resource and capacity needs to implement commitments under the treaty, and whether to highlight language on “common but differentiated responsibilities” among developed and developing countries as a means to inform this debate.¹¹⁹

In sum, the many events noted above generated a strong head of steam for additional, multilateral action on POPs. Many policymakers became convinced that the moment was ripe to move to a legally binding global treaty to achieve this objective, and many other voices advocated a similar view. But a number of difficult issues had already made their way to the table as negotiations got underway, and a treaty text, of course, remained to be developed.

118. This issue has become one of the most contentious in international environmental policy. Principle 15 of the Rio Declaration, *available at* <http://www.unep.org>, provides perhaps the most widely recognized statement on the precaution, but slightly varying language has been included (often after difficult debate) in many other international instruments as well. *See*, e.g. discussion of this issue in BROWN WEISS, and HUNTER, *supra* note 1.

119. *See* Rio Declaration, Principle 7, *available at* <http://www.unep.org> (on common but differentiated responsibilities).

III.

THE NEGOTIATING STAGE OF THE POPs
TREATY PROCESSa. *Meetings of the International Negotiation Committee (INC)*

With its mandate established, the international community launched negotiation of a legally binding global treaty on POPs with the first session of the International Negotiating Committee (INC) in Montreal, Canada in July 1998. The INC met subsequently in Nairobi, Kenya in January 1999; in Geneva, Switzerland in September 1999; in Bonn, Germany in April 2000; and at its fifth and final session in Johannesburg, South Africa in December 2000, at which time the negotiators agreed to an "unbracketed" final treaty text. At the time of this writing, this text is now being translated into the official UN languages, and will be presented to nations for signature at a diplomatic conference scheduled for May 2001 in Stockholm, Sweden. The POPs treaty is expected to be known as the Stockholm Convention on Persistent Organic Pollutants, after its host.

b. *Who is Participating – An Overview*

The INC sessions are large gatherings, generally several hundred strong. Participants include representatives of governments, NGOs of many kinds, indigenous communities, and international organizations.

Many governments are participating in the sessions. At INC-1 in Montreal, 93 countries participated with a total of about 200 delegates. At INC-2 in Nairobi, 103 countries participated with a total of approximately 250 delegates. At INC-3 in Geneva, 115 countries participated with a total of some 260 delegates.¹²⁰ The size of delegations ranged from one or two (the majority) to ten or more (e.g., for the United States). As discussed further below, the INC process has taken several steps to promote participation, especially by developing countries.

There has also been high participation in the INC process by representatives of the public, including non-governmental environmental organizations, industry organizations, public health organizations, development-oriented organizations, and indigenous community representatives. At INC-1, for example, there

120. See *Final Reports* of each of the listed INC sessions available at <http://irptc.unep.ch/pops>.

were some 55 organizations and a total of about 90 participants.¹²¹ At INC-5, there were some 88 organizations and 140 participants.

Specific organizations attending the INC meetings have included: the Indigenous Environmental Network, the International POPs Elimination Network, Greenpeace International, Africa Fighting Malaria, Physicians for Social Responsibility, the World Chlorine Council, the Chemical Manufacturers Association (now the American Chemistry Council), the Mexican Action Network on Pesticides and their Elimination, the World Wildlife Fund, the Inuit Circumpolar Conference, the Council of Yukon First Nations, the Mexican Action Network on Pesticides and their Elimination, Commonwealth Women's Voice for the Earth, the Kenya Association of Physicians and Medical Workers, and many others. The number of NGOs located in developing (or non-OECD) countries at INC-1 was about 10 out of 45, with an additional 6 representing indigenous communities. At INC-5, the numbers rose to some 34 out of 88, with an additional 6 (approximately) representing indigenous communities.

In addition, a variety of international and intergovernmental organizations have been represented at the meetings. International organizations have included: the World Health Organization (WHO); the United Nations Institute for Training and Research (UNITAR); the Food and Agriculture Organization of the United Nations (FAO); the World Bank; the Global Environment Facility; the World Trade Organization; and others.¹²² The role of UNEP, as secretariat of the INC, is discussed in more detail below.

c. THE STRUCTURE OF THE INC: THE PLENARY AND ITS SUBSIDIARY BODIES

Each session of the INC has lasted approximately one week, and consisted of a series of meetings, subgroups and events in continuous interaction with one another. At the base (or top) of this structure is the plenary, that is the assembly of all participants as a whole, including government representatives, and representatives of the public, non-governmental and international organizations (observers).

121. *Id.*

122. *Id.*

Early in INC-1, government participants selected both a chair and bureau of the plenary, and then developed the basic Rules of Procedure for operation both of the plenary and related sub-groups during the negotiations. The Rules of Procedure cover a broad range of items relevant to the meetings of the INC, including composition of the bureau (geographically distributed), interpretation and translation services, and participation by non-governmental entities (discussed further below).¹²³ The plenary has then met at the beginning of each INC to commence negotiations, and at various times during the course of each session to address matters appropriate to the body as a whole.

The plenary has established standing working groups and *ad hoc* contact groups or negotiating groups on specific issues, including an expert group on to develop procedures and criteria to add new chemicals to the treaty (known as the "Criteria Expert Group," or CEG) at INC-1. The plenary designated a small contact group to develop the "terms of reference" for the CEG in carrying out its task, which addressed the composition of the CEG, the number of meetings, language interpretation needs, participation by non-governmental entities, and other elements.¹²⁴ The plenary selected two co-chairs for the CEG meetings, a representative from the Gambia and a representative from Germany.¹²⁵ The CEG finished its work in two meetings (one less than anticipated) held intersessionally (i.e., in between INC meetings): one in Bangkok, Thailand, a second in Vienna, Austria, and presented its results to the INC plenary body.

In addition to the CEG, the plenary decided at INC-1 to create a second standing working group, the Implementation Aspects Group (IAG). A key function of the IAG, as indicated in the Final Report of INC-1, was to consider and develop proposals on issues involving funding, technical assistance, technology transfer, and certain other key items related to implementation of the agreement. The IAG has remained a standing group throughout the negotiations, and has met during the INC sessions (rather

123. The Rules of Procedure provide that the INC shall select from among States a Bureau composed of one Chair and four Vice-Chairs. Rule 8:1. They further provide that the Committee shall have due regard to the principle of equitable geographical representation in their selection, and that each of the five regional groups (discussed below) shall be represented. Rule 8:2. Other important elements of the Rules of Procedure are reviewed below, available at <http://irptc.unep.ch/pops>.

124. The terms of reference available at <http://irptc.unep.ch/pops>.

125. See *Report of the INC on the Work of its First Session*, UNEP/POPS/INC.1.7, available at <http://irptc.unep.ch/pops>.

than intersessionally). Given both the importance and difficult nature of negotiations in this group, the plenary in INC-4 agreed in addition to convene a “friends of the chair” group of selected countries representing varying regions and interests to meet in advance of INC-5 to seek further progress on the key issue of funding.¹²⁶

At later sessions, the INC created other sub-groups, often referred to as “contact groups” or “negotiating groups,” to address particular issues under negotiation. These included: a contact group on Articles D.1 and D.2 (now Articles 3 and 4) of the treaty (i.e., the obligations relating to production and use of the intentionally-produced POPs); a contact group on Article D.3 (now Article 5) of the treaty (i.e., the obligations relating to the release of unintended by-products, including dioxins and furans); a contact group on Article D.4 (now Article 6) of the treaty (i.e., the obligations relating to the handling, transport and disposal/destruction of POPs, and the remediation of environmental reservoirs); and a legal drafting group, with the function to provide legal and drafting analysis to the plenary upon its request.¹²⁷

d. REGIONAL AND OTHER GROUPS OF PARTICIPATING GOVERNMENTS

An important element of the INC sessions has been regular meetings of regional groups. In close parallel to the designation of regions under the United Nations, and following practice in the negotiation of other treaties, countries participating in the POPs treaty met within specific sub-groups of countries as a means to coordinate views and enhance their participation. The Rules of Procedure identify five regional groups for representation on the bureau: the Africa group; the Asia group; the Latin America and Caribbean group; the Central and Eastern Europe group; and the Western Europe and Others group (WEOG, which combines the European Union (EU) countries and countries that participate in the “JUSSCANNZ” group, such as the U.S., noted below).¹²⁸

126. See *Report of the INC on the Work of its Fourth Session*, UNEP/POPS/INC.4/5, available at <http://irptc.unep.ch/pops>.

127. Details of the work of these various bodies, including their final reports (where applicable), may be found in the final reports of the various INC meetings on the POPs internet homepage, *supra* note 124.

128. See, e.g., Rule 8:2, referring to the “five regional groups.” See *Final Reports of the INC Sessions* and the description of key terms used in the negotiations, including those referring to the regional groupings, located on the

Other important groupings of countries include the Group of 77 and China (the umbrella group for developing countries); EU countries; and JUSSCANNZ countries. This latter group consists of the non-EU industrialized countries, including Japan, the U.S., Switzerland, Canada, Australia, Norway, New Zealand (hence the acronym), Korea, and certain other countries that may attend. The JUSSCANNZ group has developed the practice of meeting and exchanging views in a variety of fora, and will in some cases make statements or proposals as a group in negotiating sessions. A typical negotiating day at the POPs INC starts with regional group or sub-group meetings in the morning, in advance of plenary or other working group sessions, with other meetings scheduled as needed.

e. Participation of Non-governmental Entities

The participation of representatives of NGOs has been another important element of the INC sessions. Indeed, at the close of INC-5 in Johannesburg, the chair of the negotiations, John Buccini, identified it as one of the hallmarks of the entire process. These NGO representatives have participated in the formal meetings themselves, and have organized or sponsored a number of related events and activities.

The participation of NGOs in meetings of the plenary and its subsidiary bodies is governed by the Rules of Procedure developed for the INC which are drawn up within the framework of applicable rules of the United Nations. In this regard, the United Nations Economic and Social Council (ECOSOC) has adopted Resolution 1996/3, pursuant to Article 71 of the Charter of the United Nations, on the consultative relationship between the UN and NGOs.¹²⁹

Part I of Resolution 1996/3 establishes certain requirements for NGOs to gain consultative status with ECOSOC and its subsidiary bodies. These include: that the organization shall be concerned with matters within the competence of ECOSOC, and that the organization have "aims and purposes" in conformity with the "spirit, purpose and principles" of the Charter of the United Nations.¹³⁰

129. ECOSOC Res. 1996/31, U.N. ESCOR (1996).

130. *Id.*, paras. & 2. Paragraph 3 adds that the organization "shall undertake to support the work of the United Nations."

Part VII of the Resolution addresses participation by NGOs in international conferences convened by the United Nations. Paragraph 42 provides that NGOs having consultative status with ECOSOC “. . . shall, as a rule be accredited for participation.” For other NGOs, paragraphs 43 and 44 establish a process to apply to the Secretariat for accreditation, including information indicating the competence of the organization and the relevance of its activities to the work of the conference.¹³¹ Under paragraph 45, the evaluation of relevance shall be made “based on [the NGO’s] background and involvement in the subject areas of the conference.” Paragraph 47 states that where the Secretariat believes that competence and relevance are established, it shall recommend accreditation. In other cases, applicants have an opportunity to respond and furnish additional information if necessary. An NGO granted accreditation may attend all future sessions of the conference.

Within this broader context, the POPs INC Rules of Procedure contain a number of provisions relevant to participation by NGOs. Rule 52 provides that plenary meetings shall be held in public unless the meeting decides otherwise, and all decisions taken at a private meeting shall be announced at an early public meeting. Rule 53 states that meetings of subsidiary organs, “other than any drafting group that may be set up. . .” shall be held in public unless the organ concerned decides otherwise. Rule 54 states that “[o]bservers may participate in the work of the meeting in accordance with the established practice in the United Nations General Assembly.”¹³² Rule 55 goes on to say:

Relevant NGOs participating in the meeting as observers may make their contributions to the negotiation process, as appropriate, on the understanding that these organizations shall not have any negotiating role during the process, taking into account decisions [adopted in preparation for the Rio Earth Summit] concerning the participation on NGOs.¹³³

131. *Id.*, paras. 43-44. The application must also include other types of information, e.g., purposes, annual reports with financial statements and a list of financial sources, a list of members, and a copy of the constitution or by-laws of the organization. *See* para. 44.

132. *See, e.g.*, ECOSOC Res. 1996/31, *supra* note 129.

133. Similarly, ECOSOC Resolution 1996/31, *supra* note 129, states: “In recognition of the intergovernmental nature of the conference and its preparatory process, active participation of NGOs therein, while welcome, does not entail a negotiating role”. *See* para. 50.

Consistent with these rules, representatives of NGOs have participated in the meetings both of the plenary body and of most subsidiary bodies during each INC session. An exception to this has been the legal drafting group, in keeping with Rule 53 as noted above; also, NGOs generally do not participate in the bilateral or regional group meetings of government delegations (e.g., JUSSCANNZ). Many representatives from a variety of organizations were recognized by the chairs of meetings and made interventions, particularly during the plenary sessions, on a variety of issues. Part IV, below, will review in more detail some examples of this participation, and some issues that have arisen — e.g., maintaining the distinction between participation (allowed) and entering into a “negotiating role” (not allowed) under the relevant rules.

In addition, in some cases government delegations have invited representatives from outside the government to join their official delegations.¹³⁴ These representatives participate in the INC process as official members of those delegations.

NGO participants have also sponsored a number of informational meetings on various topics on the edges of the meetings, with all participants welcome to join. Examples include panel discussions on endocrine disruption, panel discussions on national efforts to phase out DDT and simultaneously eliminate malaria in specific countries, and presentation of documentary films, including on POPs contamination issues facing indigenous communities.

Additionally, NGOs have sponsored longer meetings for some or all participants in the INC. For example, in advance of INC-2 in Nairobi, a group of NGOs sponsored a two day workshop on various issues relating to POPs, including technical information regarding dioxins. In addition, NGOs have made available a wide variety of information and documents during the sessions, including technical documents and position papers

Some NGOs have also carried out demonstration or protest activities during or in parallel to the meetings. At the entrance to INC-1, for example (repeated at INC-5), a number of NGOs dressed in costumes to underline the impacts of POPs on mothers and children as delegates entered the meetings. Inside

134. For example, the government of Canada has invited representatives of First Nations, or indigenous communities, to join its delegation at INC meetings. See, e.g., Provisional List of Participants to INC-5 (Canadian delegation), located on POPs Internet Homepage *supra* note 124.

the meeting, representatives of some indigenous communities offered delegates some of their traditional food – whale blubber – along with information about the extent to which this and other of their basic foods have been contaminated by POPs. During INC-4, a number of information documents were distributed that were sharply critical of the positions taken by some delegations.

During the INC sessions, NGOs also carried out internal coordination meetings, parallel in many respects to coordination meetings among regional groupings of governments. Such meetings present an opportunity to share perspectives and create networks of interested individuals and experts in an international context.

f. *Technical and Organizational Support*

The INC sessions were held under the organizational auspices of UNEP, in coordination with other relevant organizations. UNEP has served as secretariat of the INC. In this role, it provided (seemingly tirelessly, and impressively) logistical and operational support for the INC meetings.

In line with the Rules of Procedure, UNEP has: convened the meetings (once venue and date had been chosen by the INC, in consultation with the Secretariat); made arrangements for the meetings, including advance preparation and distribution of documents and preparation of meeting facilities; obtained and provided interpretation and translation services; coordinated necessary funding efforts; maintained, organized and circulated the documents of the meeting; prepared numerous technical and informational background papers for consideration during the meeting, generally on the basis of a request or instruction from plenary; and performed a variety of secretariat-related tasks, including coordination of events, maintaining a record of the meeting in plenary, and supporting the work of standing and ad hoc groups.¹³⁵

The breadth and depth of this work can be seen, in part, by a look through the POPs internet homepage. The work on documentation is particularly noteworthy. Each of the POPs INC sessions has generated a variety of documents. These include information documents (“INF” documents), conference room papers (“CRPs”) or “non-papers” submitted by governments,

135. The R. of Proc., *supra* note 123, contain a series of provisions regarding the role of the Secretariat. See R. 13–17.

and draft text or report documents with limited distribution ("L" documents). Among many other things, these documents include the unified treaty negotiating text and appendices as it evolves, which is available to all participants and is published on the internet homepage. A great majority of the INF documents have been prepared by UNEP. Many of these are lengthy analytical documents, and have provided invaluable information to participants in the process.

Other international organizations have also made important contributions to the work of the INC. Representatives of the Food and Agriculture Organization (FAO), for example, provided detailed information on its program to facilitate the safe destruction of POPs and other chemicals located in a number of developing countries.¹³⁶ Representatives of the World Health Organization (WHO) participated in a number of meetings involving public health issues, including the DDT/malaria issue, and the WHO is actively reviewing its own internal approach to this latter issue. The Global Environment Facility (GEF) – identified for a role in the interim funding provisions of the treaty – fielded representatives to the meetings, including its Chairman and CEO at INC-5, and provided information to participants about its funding activities and capabilities.

UNEP staff have also worked to coordinate voluntary funding contributions to pay for the costs associated with the meetings not otherwise covered by existing budgets, and have recognized the many countries that have made contributions. Information on these efforts and contributions is contained on the internet homepage, under the heading "the POPs club."

UNEP also has helped to coordinate or facilitate the involvement of NGOs and international organizations in the treaty process. For example, space is made available to display documents and information, and to hold meetings. In addition, UNEP has carried out "training" for such participants prior to INC meetings, for example, the rules governing their participation during the meetings, as a means to promote a more efficient and orderly process.

UNEP has also weighed in on the importance of action on POPs as a means to encourage the process and catalyze action. At the opening of the first INC session in Montreal, for example,

136. See POPs Internet homepage, *supra* note 109, including Alemayehu Wodageneh, *Identification and Management of Obsolete Pesticides*.

the Executive Director of UNEP, Mr. Klaus Topfer, presented a strong call for action by participants, citing to the many significant adverse impacts of POPs for humans and wildlife.¹³⁷

g. *Transparency of Documentation*

Consistent with the basic rules of procedure for operating the INC sessions, virtually all documents submitted or produced during the sessions (not including documents internal to individual delegations) are made available without restriction to participants in the meeting, including non-governmental participants, and are made more broadly available through publication on the internet. Accordingly, by logging on to the POPs homepage, it is possible not only to see the current negotiating text, including brackets,¹³⁸ but also to view written proposals (designated as conference room papers) submitted by governments during the process, as well as many related documents and papers.

h. *Parallel Meetings and Activities, including the Domestic Process*

The process of negotiation and diplomacy on POPs also encompasses a wide range of meetings and discussion outside the formal meetings of the INC, including separately arranged bilateral or regional meetings, discussions on the sidelines of other international meetings, and direct communication among participants in the negotiations. There has also been continuing technical cooperation on POPs, building upon existing efforts.

At the domestic level in the U.S., the State Department chairs and coordinates an interagency working group (IWG) on POPs within the U.S. Administration to identify and analyze issues, and to develop U.S. positions for negotiations. Many agencies are involved in this process, including EPA, the Commerce De-

137. "The need for [action to prepare the legally binding instrument and establish an expert group on criteria] [is] clear. Toxic, persistent, easily transported over long distances, and found throughout every region of the world, POPs represented a truly global threat. The adverse impacts of POPs on wildlife had been well-documented, including birth defects, reproductive problems, and immune system dysfunction severe enough to be implicated in large population declines. For humans, evidence indicated that long-term exposure to even low levels of POPs were a cause of birth defects, fertility problems, greater susceptibility to disease, developmental disorder in children and certain cancers, including breast and prostate cancer. *Report of the INC on the Work of its First Session*, UNEP/POPS/INC.1.7, *supra* note 125, at 3.

138. Brackets are used in international negotiations to indicate those portions of text that are not yet agreed to by negotiators/delegations.

partment, the Treasury Department, Health and Human Services, USTR, USDA, AID and others. Because the POPs process involves the negotiation of an "international agreement," specific State Department regulations and procedures apply to this process.¹³⁹ As part of the process, there have been a number of meetings and consultations with Congress. The State Department and the IWG also have organized a number of informational sessions with members of the public on the status of, and issues relevant to, the POPs process, and the U.S. delegation to INC meetings has had a number of briefings with non-governmental and indigenous community representatives present at INC meetings during the course of those meetings.

i. *Some Key Elements of the Negotiated Treaty Text*

The final negotiated treaty text is available for review on the POPs internet homepage. While it is beyond the scope of this paper to review this text in detail, several elements may be highlighted.

Article 3-6 of the text contains key core obligations of the treaty, in several sub-parts. These subparts call for prohibition and/or elimination of production and use of specified substances (Article 3.1(a) and Annex A), reduction of production and use of specified substances (Article 3.1(b) and Annex B), actions to prevent, reduce and or control release of by-product contaminants (Article 5 and Annex C), and actions to ensure the environmentally sound management of POPs once they become wastes (Article 6). Another key provision, Article 8, contains criteria and procedures for adding new POPs in the future, with additional information in Annexes D and E. Articles 12, 13 and 14 address, respectively, technical assistance and financing. Other provisions address national action plans; information exchange; public information, awareness and education; research, development and monitoring; reporting; non-compliance; institutional matters (e.g., the conference of the parties, the secretariat); and a variety of legal and other items typical in the "back-

139. See 22 CFR § 181 (2000), Coordination and Reporting of International Agreements. In general, and subject to the provisions of these regulations, a "Circular-175 Memorandum" must be prepared and approved at a high level within the State Department prior to a decision to negotiate or to sign an "international agreement," containing certain specified information and accompanied by a Legal Memorandum

half” of international treaties (provisions for amendments, entry into force, etc.).

One noteworthy achievement of the treaty has been to create a structure that recognizes specific differentiated needs of individual countries, in particular developing countries, with respect to the core element of scheduling substances for elimination. A newly developed “Register” under the treaty is established to identify “country-specific exemptions” from the obligations of Annexes A and/or B relating to the intentionally produced POPs covered by the treaty. These allow individual countries to take a country-specific, use-specific exemption for an individual substance, without requiring that it be taken by all countries. This approach also creates an individualized (by country) basis to focus technical cooperation, e.g., identify alternative products or methods, to address this need. At INC-5, a specific process for the review and expiration (or extension) of these country-specific exemptions was agreed upon, and is reflected in Article 4.

The treaty also contains relatively detailed provisions to address special issues relating the existing uses of PCBs, and the use of DDT for vector control.¹⁴⁰ DDT is the only one of the ten intentionally-produced substances listed in Annex B of the treaty (where an “acceptable purpose” is identified), as opposed to Annex A (often referred to as the “elimination” annex). At INC-5, negotiators agreed upon a separate Register to identify parties still needing to use DDT for vector/malaria control purposes, in accordance with WHO guidelines, and outlined a number of provisions to promote alternative methods to combat malaria, recognizing the enormous and continuing toll in human lives and misery of this disease.

The issue of how to reflect a precautionary approach or principle (depending on who was presenting the argument) in the treaty text was heavily negotiated. The treaty contains references either to precaution or to the taking of action in the face of scientific uncertainty in the preamble, the objective, Article 8 (criteria and process for adding new substances), and Annex C. The obligations on by-products (Article 5) and wastes (Article 6) were also the result of long hours spent in contact groups sessions, with negotiators successfully resolving many difficult issues.

140. In this latter regard, negotiators at INC-4 worked on the basis of a proposal from South Africa, which had been in consultation with a number of participants.

The issue of funding also was heavily negotiated, and indeed was not resolved until the very final morning hours of the last night of negotiations, alongside the provisions for technical assistance. The basic text on funding is found in Articles 13 and 14 of the treaty; technical assistance is in Article 12.

IV.

OBSERVATIONS ABOUT THE ROLE OF PROCESS AND PARTICIPATION IN THESE EVENTS

This section will highlight some general themes relevant to the role of process and participation in the development and implementation of treaties, with particular reference to the POPs treaty process. As noted previously, the treaty process is defined to include the pre-negotiating stage (see Part II), the negotiating stage (see Part III), and the implementation stage (treated separately below).

The discussion will consider, in particular: the role of non-governmental participants; practical issues relating to participation by governments, especially from smaller countries; the role played by international organizations; and the importance of basic decisions regarding the nature, scope and timing of the treaty negotiation. In the course of the discussion, several questions and issues will be raised for consideration.

a. *The Role of Non-governmental Organizations*

Existing studies identify different roles that NGOs have played in international environmental law.¹⁴¹ These studies are based upon a review of a variety of international environmental law initiatives, ranging from climate change to trade in endangered species to the Rio Earth Summit.

Tarlock, for example, has identified the following roles performed by NGOs in this field: infusion of alternative perspectives into narrow mission programs; articulation of universal

141. See, e.g., Dan Tarlock, *The Role of NGOs in the Development of International Environmental Law*, 68 CHI.-KENT L. REV. 61 (1992) (around the time of the Rio Earth Summit); HUNTER, *supra* note 1, at 422-42 (the Role of Non-State Actors); BROWN WEISS, *supra* note 1, at 33-34, App. II, Pt. B; Edith Brown Weiss, *New Directions in International Environmental Law*, Address before the United Nations Congress on Public International Law (March 15, 1995); PHILIP SHABECOFF, *A NEW NAME FOR PEACE: INTERNATIONAL ENVIRONMENTALISM, SUSTAINABLE DEVELOPMENT AND DEMOCRACY* (1996); GARRETH PORTER & JANET WELSH BROWN, *GLOBAL ENVIRONMENTAL POLITICS* (1991).

perspectives; direct participation in enforcement; and direct participation in resources allocation.¹⁴²

A more recent analysis by Hunter and colleagues distinguishes NGOs from corporations. For the NGOs, it provides the following illustrative list: direct participation in international negotiations;¹⁴³ shuttle diplomacy, and the power to convene; promoting accountability of international institutions; international oversight of domestic law (referring to citizen petitions under the North American Agreement on Environmental Cooperation); expanded role in compliance and implementation; sounding the alarm, bringing science to the attention of policymakers; and sharing environmental law and information.¹⁴⁴ For corporations, the role is complicated, “. . .for they are often linked both to the cause and potential solution of global environmental problems,” and “[c]orporate influence in international environmental affairs is substantial. . .[w]ell-funded lobby groups. . .shape both public debate and treaty negotiations on issues ranging from global warming to eco-labeling to forest management.”¹⁴⁵

The analysis adds that, “. . .from a narrow perspective corporate interests are no different than any other ‘special interest’, including environmental interests. They are trying to influence the political process.” The authors note, however, that there are significant differences in terms of who benefits from such “lobbying” efforts, and also with regard to access to decision makers and resources.¹⁴⁶

A review of trends in international law by Brown Weiss highlights the expanding role of nonstate actors. Among other things, Professor Brown Weiss notes that

“. . . participation by nonstate actors in the international legal system enhances accountability, because it can give a voice to citizens who would otherwise be unrepresented, ensure that actions taken meet local needs, counter effects of high-level governmental cor-

142. TARLOCK, *supra* note 141.

143. The emphasis here is on the fact that in some cases NGOs have begun to participate directly in negotiations “as part of official delegations”, and in some case as formal representatives of governments (noting examples). HUNTER, *supra* note 1, at 427.

144. HUNTER, *supra* note 1, at 427-35. The analysis divides U.S. NGOs that participate in international issues into three categories (large membership organizations, organizations dedicated primarily to global and transnational issues, and those that operate as part of global networks).

145. *Id.*

146. *Id.* at 435.

ruption, and therefore produce outcomes that maximize human welfare efficiently. . . ."¹⁴⁷

The discussion also highlights important issues that arise in this regard, including the need for nongovernmental organizations "to be held accountable for their actions. . ." and the question of how to structure participation in a constructive manner.

At the international level, the 1992 Rio Earth Summit highlights the importance of public participation in the field of environment and development, as do many other international declarations and instruments in recent years. For its part, the ECOSOC Resolution on NGOs also gives an indication of the contributions that can be made by NGOs. In its preamble, for example, it "[a]cknowledg[es] the breadth of NGOs' expertise and the capacity of NGOs to support the work of the United Nations."¹⁴⁸

In many ways, the POPs experience offers an illustration of these various roles in operation in the treaty-drafting process. The discussion below provides a modified and combined listing of several of these roles, with examples of their application in the context of POPs.

1. Generating Awareness and Sounding the Alarm

There is little doubt that the continued work and activities of the public, in particular members of NGOs, have played a critical role over the years in building awareness of, and stimulating action on, the health and environmental problems posed by toxic chemicals. From Rachel Carson to David Weir to Theo Colburn, from their colleagues and from representatives of indigenous communities, new information and new types of stories have been made available that help to define a set of problems needing attention and action. At the national level, public involvement in the law and policy process (e.g., through citizen-based legal actions, participation in rulemaking, and other means) under various environmental and administrative procedure laws, has catalyzed action not only with respect to a particular law at issue, but for other laws subject to the possibility of such actions.¹⁴⁹

147. Edith Brown Weiss, *The Changing Structure of International Law*, reprinted in BROWN WEISS, *supra* note 1.

148. ECOSOC Res. 1996/31, *supra* note 129 (preamble).

149. See, e.g., MICHAEL AXLINE, ENVIRONMENTAL CITIZEN SUITS (1992).

The publication of *Our Stolen Future* is an important and informative example. This widely distributed book is certainly well known to many participants in the POPs process. To some, this book has opened up an entirely new view of the impact of toxic substances in the environment by providing information about contamination of breast milk; accumulated toxic loads in polar bears; narwhals, alligators, fish in the Great Lakes, and many other species; and the biochemical nature of many chemicals. The publication helped to generate a new level of interest in and discussion about the potential problems of POPs, and of ways to address such problems.

At the same time, many questions have been raised about aspects of this and other recent studies and findings on POPs. On the basis of certain additional or "counter" studies, some have suggested that too much has been read into too few studies, and into a field of scientific study that remains relatively new and is characterized by complex questions and data uncertainties.¹⁵⁰

The need for a solid technical and scientific basis for work in environmental policy should not be understated. As Nespor notes in this Symposium, for example, public action driven by sensational news stories, rather than on the basis of a deliberate and careful assessment, can lead to faulty prioritizing of international environmental activity.

In the case of POPs, though, the publication of *Our Stolen Future* (and other studies) is important not only for the information (and story) that it provides, but also for building awareness of the many significant but less publicized studies relating to POPs by scientists in the field, and for its role in stimulating further work. There are now a number of new studies in this area, such as the AMAP studies and many others noted above, and new structures have been created to continue this work.¹⁵¹ Many of these studies strongly reinforce the view that POPs pose serious concerns, and consensus on this point is especially strong for the initial 12 POPs under current consideration. Several of the studies have been presented directly to participants in the INC sessions for

150. See, e.g., Judy F. Stringer & Michael P. Roberts, *Endocrine Disruptors: Sensationalism or Science?*, CHEMICAL WK., May 6, 1996, at 29. (noting studies that highlight lack of data or uncertainty on key issues, and arguments by some in industry that some hazards have been exaggerated).

151. See, e.g., *supra* nn. 35-38

consideration.¹⁵² Some of them build upon work carried out over years by domestic regulatory agencies, as well as upon key elements of research and discovery identified in *Our Stolen Future* and in other studies undertaken outside government.

In sum, NGOs and the public more generally have certainly played a role in “sounding the alarm” on POPs, and creating a higher level of awareness among the public and policymakers. The many examples of this include *Our Stolen Future*, the information provided by representatives of indigenous communities about the contamination problems they face, and NGO’s constant work over the years on issue of toxics substances.

2. Providing Additional Perspective, Expertise, and Voice

As described above, representatives of accredited NGOs and other organizations have been direct participants in the POPs treaty process. Though subject to certain limitations, they generally have been actively involved throughout the many steps of the POPs process time line. In this capacity, they have had many opportunities to engage in the debate over issues, and provide a voice to important issues of concern to them and their organizations — reflecting a variety of important interests and goals.

One important example of this is the participation by representatives of a number of indigenous communities and tribes. Representatives from these communities have participated in each of the INC meetings, and made a number of interventions from the floor during plenary. In many cases, these interventions described the levels of POPs contamination that these communities are now finding in their most basic and traditional food supplies, and in their bodies. Others have provided, for example, a sharper view of the connection between DDT, public health and malaria in individual countries and communities.

In this and many other ways, non-governmental participants have helped to make issues more concrete by relating them to actual conditions and situations in places and communities around the world. They have also given voice to concerns that might not otherwise be highlighted or even heard, reflecting an

152. One example is the study by Dr. Rodan and colleagues, *supra* note 38, which presents an empirical analysis of persistence and bioaccumulation of a variety of substances, and also incorporates toxicity and long-range transport data.

often-observed role played by NGOs at local and national levels.¹⁵³

More generally, participating NGOs have provided information, expertise and perspective to the meetings that would otherwise not be present. The listing of NGO materials on the POPs homepage offers an illustration of the variety of informational materials made available to the INC sessions, as well as the varying types of expertise and perspective, whether it be on malaria control, POPs destruction technologies, contamination issues in indigenous communities, prevention strategies, the need for exemptions, or other items. The ability to have a more in-depth dialogue on the practical aspects of implementation faced by individual countries, communities and the regulated industry is another result of this participation.

The line between participation and negotiation also deserves further mention. As noted above, the Rules of Procedure for the INC meetings permit NGOs to participate, but not enter into negotiations, during meetings of INC bodies. This distinction has been put to the test in some of the sessions, including during a contact group meeting on Article D.3 (now Article 5) at INC-3, where one debate over language proposals led to requests for clarification from the chair regarding rules of procedure. While this particular situation was resolved, it reflected some of the complexities of maintaining distinctions regarding participation in the multi-faceted INC process.

3. Helping to Build Consensus and/or Highlight Problems

Public participation in the policymaking process has the potential to help build consensus among diverse stakeholders on how to approach particular issues or, conversely, to highlight places where controversy exists and support will be absent. An interest-

153. It is a familiar element of U.S. environmental law that NGOs, for example, may act as "spokespersons" for things (trees, wild places) that are not by their nature able to achieve "standing" on their own behalf. *See, e.g.*, Christopher Stone, *Should Trees Have Standing? Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450 (1972); AXLINE, *supra*, note 149. An interesting discussion of the application of this point to international settings is contained in STEPHEN TOULMIN, *THE U.N. AND JAPAN IN AN AGE OF GLOBALIZATION: THE ROLE OF TRANSNATIONAL NGOS IN GLOBAL AFFAIRS* (1994) (addressing whether/how NGOs operating at the international level can represent something different than just another "local political interest," for example, by their efforts to work on behalf of the poor, persons that are tortured, threatened species, and other concerns; and noting that such groups – e.g., Oxfam and Amnesty International – are advocates on behalf of groups or interests that may not necessarily find a spokesperson among governments).

ing example of this in the POPs process occurred in the development of the IFCS policy conclusions and recommendations in Manila in 1996, which led to the POPs negotiating mandate. The final report of the IFCS expert meeting in Manila contained specific recommendations regarding the goal of an eventual POPs treaty, and the types of control measures to achieve that goal.¹⁵⁴ This particular element of the report was especially difficult to negotiate, because it went to the very core elements of the POPs international agenda and, in particular, brought the elimination issue squarely in front of the participants.

While the negotiation of this text occurred partly in plenary sessions, a number of side conversations among many participants operated as informal negotiations that helped shape the text. During the process, representatives of governments, environmental and industry-affiliated organizations and others, weighed in on particular issues, and a number of differences emerged. In some cases, suggestions were brought forward on the basis of discussions with technical experts, especially with regard to elements of the text on destruction technologies and facilities.

In the end, a final text was developed that appealed to many perspectives, and appeared to have broad support among the environmental and industry organizations involved in the discussions. As noted above, some parts of the text had a genesis in other instruments that have enjoyed broad support, including the Montreal Protocol and Agenda 21. The provisions of the text allowed for certain recognized uses (seen as essential by some), but in the context of efforts to phase out such uses. The resolution on PCBs contained some similar elements. The text on by-products, obsolete stocks and environmental reservoirs combines ambitious statements calling for action with a recognition that actions should be realistic and feasible, and provides important guidance on issues such as the use of destruction technologies.

Finally, the limitation of the text to the initial 12 substances may have made it possible to gain broad consensus on some of the most ambitious elements of this text by leaving out some difficult and unresolved questions about new substances. It was considered that this approach would enable negotiators to "go deep" (in terms of analysis and response actions) on a shorter list of substances rather than to "go wide" (but shallow) on a larger

154. *See supra* note 113.

list, while providing separately for a means to add new substances later. From an environmental perspective, there was still much to be gained by having strong commitments on these initial substances – they are highly dangerous, and strong action to phase them out and prevent any possibility of further expansion is of great significance. From an economic/industry perspective, it might be noted that several of these initial 12 are older substances that already are heavily regulated in many countries and, in some cases, no longer protected by patents — suggesting its own set of economic interests, particularly for industries already subject to (or perhaps anticipating) stringent controls at the national level.¹⁵⁵

A second example involved the debate among participants relating to DDT and malaria. During the course of the INC meetings, representatives of various NGOs intervened on this key issue. At early meetings of the INC, at least some participants, including NGO representatives, recommended that a target date be set for the phase-out of DDT, but in the context of a larger set of actions to ensure that this did not set back efforts to combat malaria. This issue, however, eventually led to a number of different views from representatives involved in public health issues, who argued that a date for phase-out – even if several years out – should not be set because it could not be pre-determined whether DDT would no longer be needed to combat malaria.¹⁵⁶

As this debate continued to unfold, at least some of those who originally recommended a specific phase-out date decided to withdraw that recommendation and work instead to lay the foundation to fight back malaria and phase down the use of DDT simultaneously. A number of directly affected countries, of course, including many countries in Africa, became directly involved in this issue – and have worked many hours to develop an appropriate solution. The final negotiated text, building upon a draft proposal submitted by South Africa and debated during

155. As noted above, many of the initial 12 substances already are subject to stringent regulation in many countries. *The World Resources Institute Report 1998-1999*, at 42, notes that many older pesticides are now no longer under patent protection, making them less costly than new alternative products. See also BENEDICK, *supra* note 2 (analyzing the importance of competitiveness issues in the Montreal Protocol negotiation).

156. The World Health Organization, which is actively involved in efforts to move away from a reliance on the use of DDT in the context of a broader effort to roll back malaria, recognizes the option of using DDT in indoor spraying to combat malaria. See WHO Internet homepage at www.who.org (including information on roll-back malaria campaign).

INC-4 and INC-5, contains a lengthy set of provisions to address this issue. It does not include a specific phase-out date for DDT.

One point reflected by these examples is that broad public participation is likely to yield competing perspectives in a policy process, leading to a more informed debate on the issues. It does, however, suggest the inherent difficulties in trying to characterize the nature or even the direction of input from non-governmental representatives. This is especially so if such representatives are defined broadly to include not-for-profit NGOs and interested business/industry.

4. Promoting greater accountability at all stages of the process

Public participation in a treaty process tends to increase the visibility of that process, and can thereby inject an increased measure of accountability upon those involved. In addition, broad participation means that a broader set of persons and organizations are looking through proposals and text as they are developed and presented, with a correspondingly higher level of scrutiny. Professor Brown Weiss, as noted above, identifies important ways in which nongovernment participants promote accountability by governments.

In the POPs context, for example, the involvement of representatives of indigenous communities has highlighted the importance of the issues that they face due to POPs. The involvement of the public health community brought greater attention on issues such as the relationship between DDT and malaria. The involvement of environmental NGOs has helped bring a spotlight to issues of central importance in the negotiation, including the extent to which POPs will be eliminated and the importance of prevention. The involvement of industry representatives has spotlighted issues of concern to businesses that the POPs treaty will affect.

5. Benefits of Broad Participation, and Questions Raised

The many aspects of participation by representatives of NGOs and indigenous communities and tribes have brought significant benefits to the POPs process. As noted above, these representatives have provided expertise and perspective that would not otherwise have been available to the process. They have played a critical role in generating awareness of the dangers of POPs, and putting a spotlight on efforts (or the absence of efforts) to take

effective action in response to these dangers. In some cases for example, with respect to native peoples in the North or members of the public health community in African communities, the participation and intervention helped give a much stronger sense of reality and urgency to the issues at hand.

Furthermore, the direct involvement of these organizations in the treaty process helps achieve a higher level of public participation in policy actions that affect societies, a widely recognized objective in its own right.¹⁵⁷ As noted above, many international instruments highlight the importance of public participation in the field, and it is enshrined in many national laws.

At the same time, and as indicated by the Symposium discussion, a number of important questions are raised. Who is or is not able to participate in these meetings? On whose behalf are these organizations speaking? Might they reflect points of view not shared by people who are not able to attend the meetings?

This issue can be considered at many levels. One aspect involves the criteria by which organizations are accredited for participation in the meetings. The two basic criteria for granting NGOs accreditation under ECOSOC rules are broadly stated (competence and relevance). Assuming these are not applied in a restrictive manner, this approach would generally appear to avoid the creation of a "policy filter" to judge one organization versus another, and enable broad opportunities for interested organizations to participate.

A second, more practical, aspect involves which organizations are likely to have the capacity not only to complete an application process for accreditation, but also to prepare for, travel to, and attend meetings. There are often significant disparities of resources among different organizations, particularly between industry-based organizations and non-profit organizations. There also are inevitably differences in resources between NGOs from some countries as compared to others. As noted above, NGOs from industrialized countries participating in the POPs process outnumber those from developing countries by significant numbers (although a substantial number of NGOs from non-industrialized countries and indigenous communities did participate, as noted above).

In this light, it might be argued that enabling NGOs to participate directly in international treaty meetings could create a "lob-

157. See, e.g., the Rio Declaration, *supra* note 11; Agenda 21, ch. 8.

bying” atmosphere and/or reinforce a negotiating context that will favor those best able to participate and present their case in such settings (whether on science, policy or other matters). Given likely resource situations, this might, for example, favor industry-based organizations over non-profit organizations, or NGOs from one set of countries over another. Indeed, such concerns have been voiced quite publicly in connection with certain recent international meetings¹⁵⁸ (though this appears not to have the subject of much controversy, at least among participants, in the POPs process).

Under this view, some might argue that a better and more equitable approach would be to limit direct participation to elected government officials and their representatives, who are charged with acting in a representational capacity on behalf of their countries through the domestic political process. As a complement to this, public outreach and participation would occur at the domestic level and, as appropriate, in parallel with international meetings, to ensure that interested members of the public have a full opportunity to present their views and influence the policy positions of their government representatives who attend these meetings. The debate between these competing visions of process and participation is sometimes referred to as a “participatory” approach versus a “representational” approach.

In addition, there has been debate as to whether direct participation by NGOs in international meetings might prove unmanageable and prevent or disrupt the orderly functioning of meetings. In this connection, Brown Weiss notes the importance of how to structure NGO participation in proceedings, and the risk to those “. . . who have contributed so much to developing and implementing international law in fields such as human rights and the environment. . .” of presenting unlimited demands for transparency (among other items).¹⁵⁹ Others have argued,

158. See, e.g., Capdevila, Gustavo, *Civil Society Groups Spark Power Battle in the WTO*, IPS News Reports, Nov. 24, 2000 (noting a comment from one developing country that “[t]he only NGOs that can obtain access to the WTO are those that have the resources to maintain a delegation in Geneva, and almost all such groups are” from the industrialized North.”); *Elusive Global Watchdogs: Business Joins Bureaucrats in ‘Private’ Talks*, the International Herald Tribune, Jan. 10-11, 1998 (commenting on involvement of industry in transatlantic policy dialogues with government officials); Jadish Bhagwati, *Did Clinton Take a Dive in Seattle*, the Washington Post, Dec. 7, 1999 (commenting on the influence of certain domestic constituencies and short-term political agendas in the debate surrounding the WTO Seattle Ministerial Meeting in December 1999).

159. See BROWN WEISS, *supra* note 147.

from a different perspective, that confidentiality is a needed part of a negotiating process; that it will, for example, foster a more frank exchange of views than might occur in a bright public spotlight. Modern-day foreign policy, it might be noted, carries on a long tradition of utilizing quiet diplomacy in a variety of settings and fields.

A number of responses may be offered with respect to these issues. First, experience with the POPs negotiation indicates that it is quite possible to structure a set of rules to ensure that meetings will be conducted properly. For example, the Rules of Procedure for the POPs INC sessions have enabled the chairs of the meeting to recognize governments and non-governmental participants in an orderly manner, and the distinction between participation and negotiation (though wobbly at times) generally has been recognized and respected. The secretariat, too, has played an instrumental role in this effort, through its efforts to make space and facilities available to NGOs, through its training on rules governing participation, and more generally in its management of the logistics of the sessions.

Second, while NGO participation might, in some cases, increase the tone and pitch of dialogue during INC sessions, and present different forms of information, participants in the process should be and are capable of judging views and information presented. This is not to discount the notion that participation can have an influence over the process. On the contrary, as suggested by the POPs experience, participation provides many opportunities to highlight issues and promote particular views. Rather, it is to argue that, given certain steps to achieve an orderly process, the mixing of ideas is both manageable and beneficial.

Third, the POPs experience, for one, has demonstrated that it is quite possible to carry out frank negotiations and effective diplomacy while still retaining a high level of transparency and openness in the overall process. Many difficult discussions have been carried out during the INC meetings, with or without public observers. Moreover, there remain numerous opportunities for smaller meetings and separate discussions both for government and non-governmental participants, including the meetings of regional groupings noted above, and negotiators remain in control of whether and how to disclose and present their positions. This is not to say that transparency and openness to non-government participants will not affect both the dialogue and dynamics of

meetings — as noted above, broad participation has a number of potential influences on a treaty process. These factors, however, need not prevent the difficult discussions that necessarily take place in such a negotiating context.

Fourth, there are enormous benefits to a broad approach to participation, and fostering public access and transparency is a positive end in itself. Moreover, almost any process that provides for public involvement — whether international negotiations, national rulemakings, or local zoning hearings — faces the reality that different parts of the public have different capacities to involve themselves.

Yet, experience indicates that the disparities in capacity to participate in an international process (where costs and distances are high) raise serious concerns. The reality is that some organizations are much more able than others to participate in international meetings. The POPs experience suggests some partial responses. For example, the extensive use of the internet as a means to make information about the meeting more available to those not able to attend (and who have access to internet connections); the scheduling of meetings, including workshops, in locations more accessible to countries and organizations lacking capacity to attend meetings in more distant sites; and networking efforts among and within NGOs themselves — in parallel, in some ways, to the efforts of smaller countries to pool resources to enhance participation. Nevertheless, this question creates an important structural concern that needs particular attention in further work in the field.¹⁶⁰

b. *Practical Issues Relating to Participation by Governments*

Smaller countries, in particular developing countries, face a number of practical difficulties in achieving effective participation in treaty initiatives. Many of these relate to a lack of funding and/or technical capacity to participate effectively in these meetings. This issue is of central importance to the treaty process on a variety of levels: from an equity perspective; from an operational perspective; and from the point of view of achieving a more integrated and effective policy process that reflects the interests of its participants and will foster meaningful follow-up action.

The importance of this issue is highlighted in a recent paper prepared by UNEP as part of the Montevideo Environmental

160. See also pt. V — discussion in context of trade rules.

Law Program on the development and periodic review of environmental law for the first decade of the twenty-first century.¹⁶¹ The first item of this document is entitled "Enhancing the Capacity of States to Participate Effectively in the Development and Implementation of Environmental Law." Under this item, the paper notes that UNEP, using "extrabudgetary resources," provides financial assistance to enable officials from developing countries and countries with economies in transition to participate in intergovernmental negotiating meetings that are developing international legal instruments. As examples, the paper refers to assistance provided for participation in the negotiation of the PIC instrument, and the negotiation of the POPs treaty.

Several of these practical problems have been present in the POPs treaty process. For example, many developing countries faced significant resource constraints in fielding delegations to the INC. Even when they were able to attend, they often had no more than one or two representatives. Given that the INC consisted of a larger number of meetings and working groups, some of which met simultaneously (or over lunch and during evenings), it becomes especially difficult for such delegations to keep track of the various meetings. The same is true with respect to the large amount of documentation produced during the meetings. Having a small delegation also places direct limits on the ability to include a range of expertise within the delegation, for example, to address technical issues in areas such as control of industrial by-products.

Similar problems have been present during key meetings leading up to the POPs negotiations. Moreover, a lack of funding for travel and logistical arrangements also limits the ability of countries to arrange pre-meeting consultations or attend related technical or policy meetings that would be of value in preparing for the POPs INC negotiations.

It should be recognized that actual differences in participation relate not simply to financial capacity, but also to the level of interest and priority attached by governments to a particular process. As noted above, some important questions have been raised about the extent to which the issue of POPs is of equal priority to different countries and regions around the world. It is also important to note, as indicated in Part III, that there has been a quite large number of countries participating in the INC process

161. See note 7, *supra* (UNEP/Env.Law/4/3, 1 September 2000).

representing many regions and countries throughout the world. Nevertheless, significant differences exist in the nature and scope of participation by governments that appear to transcend the "level of interest" variable and are instead related more closely with differences in capacity to participate.

During the course of the POPs treaty process, the international community has taken a number of steps to try to address these issues and to achieve the level of participation that has occurred to date. First, funding is provided to cover travel expenses for a number of delegates to the meetings, as noted in the UNEP report described above. Second, the UNEP regional workshops were an attempt to create a more accessible venue for countries to learn about and become involved in the process. Third, a number of participating countries in the POPs process have donated significant amounts of money to assist in the arrangement of meetings, through a mechanism known as the "POPs club."¹⁶²

In addition, several organizational decisions have been taken to address logistical difficulties faced by small delegations. For example, there are continuing efforts to keep to a minimum the number of contact groups meeting at once, or in overlap with the plenary, and to promote geographic balance in the selection of chairs to these groups. Moreover, the results of contact groups were presented back to plenary to provide an opportunity for all—including those not able to participate in the smaller groups—to review and, as appropriate, further negotiate the text. In light of the large number of difficult issues to resolve to conclude a treaty of this magnitude, however, there are still instances where meetings are held simultaneously.

Another step along these lines is to schedule the negotiating meetings themselves in locations designed to facilitate access for developing countries. In the case of POPs, two of five INC sessions were held in Africa (Nairobi and Johannesburg), and one of the two meetings of the Criteria Experts Group was in Thailand. Interestingly, the number of African countries attending the INC sessions in Africa did not differ substantially from the numbers at INC-3 (in Geneva) or INC-4 (Bonn), perhaps due to other efforts to facilitate involvement noted above. There were,

162. *See supra* note 109.

however, important differences in the size of delegations fielded by individual countries.¹⁶³

Also, as noted above, the use of regional group meetings during the INC sessions provides a possible avenue for small countries to, in effect, pool resources with neighbors in their region in covering the events of the meeting. For example, among members of a larger group it might be more feasible to keep abreast of the various daily activities and issues of potential interest. Regional groups can also help in the development of negotiating positions. For example, African countries have coordinated extensively on the issue of DDT and malaria during the INC sessions. Nevertheless, it is not necessarily the case that countries within a region will have the same views on specific issues, resulting in some limits on the ability of a regional group to act in a representational capacity for individual countries. In addition, it has been noted that even larger groups (e.g., the G-77 and China) face resource constraints in following meetings.¹⁶⁴

As the above discussion suggests, one of the most important practical things that can be done to strengthen the basis of treaty regimes is to continue with and enhance these and other types of efforts, so as to promote a broader and more balanced participation by all interested governments in treaty initiatives.

c. *The Role of International Organizations*

The role of various international organizations, both within and outside the treaty process, also has been considered in other studies,¹⁶⁵ and described in some detail above. The POPs experience offers a number of lessons.

First, the POPs treaty has its genesis in a number of places, including in particular the work performed by or under the auspices of different international organizations. Some of these initiatives enhanced the technical basis for the POPs work (e.g., the IFCS meetings, the UNEP-sponsored workshops, the scientific work carried out in the context of various bilateral or regional initiatives); others enhanced or defined the policy or political ba-

163. *Id.* Documentation on List of Participants for each of the INC sessions.

164. Khor, Martin, *Globalization and the South*, Third World Network, 1993, at 15-16 (noting that even developing country groupings, such as the G-77 and the Non-Aligned Movement, "are not adequately staffed and are unable to keep track adequately of events and developments, or to formulate longer-term policies and strategies.").

165. See, e.g., MARC LEVY ET AL, INSTITUTIONS FOR THE EARTH, 1993; BROWN WEISS, *supra* note 1.

sis (e.g., the UN CSD meeting, the UNEP Governing Council meeting). In short, an important lesson from the POPs effort is that it is of great value to develop a strong foundation for work upon entry into a negotiation, and prior action in appropriate international fora or organizations plays a critical role in this regard.

The creation of the IFCS offers an informative illustration about the roles played by varying international organizations and fora in the lead-up to the treaty negotiation. The IFCS was designed as a new venue to foster increased dialogue among technical experts on chemical safety issues, both from within and outside governments. It offered an opportunity to build consensus on work needs, and to bring together technical capacity to help carry out this work. Both of these functions were critical to the POPs process and enabled it to serve as the forum for the pivotal meeting in Manila in which the basic findings and recommendations were developed leading to the mandate to negotiate the POPs treaty.¹⁶⁶

Second, the importance of solid organizational and logistical support for the POPs treaty cannot be emphasized enough. As described above, UNEP in particular has played an enormously important role in facilitating progress on the POPs agenda and in enabling the meetings to happen in a productive fashion. Given the complexity of issues, and the large number of participants in the process, this has been essential to progress in this work.

Third, international organizations can play a catalyzing role in a treaty process, for example by highlighting important considerations and supplying needed information to participants.

Fourth, decisions regarding the format, structure and time of the meetings play a major role in moving the process forward. The role of the chair, the bureau, and the chairs of subgroups, in coordination with the secretariat, is of particular importance.

166. The 1994 meeting of the UN Commission on Sustainable Development – which played a different type of role in the lead-up to the POPs treaty process – is another informative example. As noted above, the CSD is charged with follow-up work on Agenda 21 and in many respects serves as a “policy” forum where governments gather to negotiate decisions and other documents to this end. During the 1994 session, the U.S. delegation and others worked to develop consensus on language to address lead and toxic chemicals in the decision on Chemicals, in the hopes of building this into a higher priority item on the international agenda. Many non-governmental participants in the meeting highlighted a similar set of issues. While the actual effect of such “soft law” text has been debated, the meeting at least helped to generate some attention and dialogue on these issues at a policy level.

Logistics matter in these processes, and affect who is able to participate and how problems are worked through.

d. *Some Basic Decisions about Scope, Nature, Timing and Format of the Negotiations*

Finally, the evolution of the POPs treaty has been influenced by a number of individual decisions regarding scope, nature, timing, and the format of the negotiations. One example of this, noted briefly in Part III, involved the scope of the treaty to be negotiated. A major issue before the IFCS participants in Manila in June 1996, and again at the meetings of the UNEP Governing Council, was whether the treaty should be designed broadly on the sound management of all chemicals, or should focus more narrowly on POPs as a specific subset. Put in treaty terms, the former approach would have resulted in a “framework” treaty under which a full range of international chemicals issues (e.g., the various elements identified in Agenda 21, and perhaps the PIC process as well) could have been tackled.

The participants made a conscious decision in favor of the more narrow approach, to focus specifically on POPs and to start with the initial list of 12 substances. One consideration was a consensus that strong action is needed to combat harms caused by such substances, reinforced by the emerging scientific information regarding such substances (on issues such as propensity for transport and bioaccumulation). As noted in Part III, above, this approach of “going deep” rather than wide responded to the interests of varying sets of participants, though for different reasons. In the view of some, this choice was key to maintaining forward momentum for the treaty.

A second example was the decision to set a specific time-frame for completion of the negotiation – by the year 2000 – and to specify that this would be accomplished through five international negotiating sessions.¹⁶⁷ This instruction regarding timing has provided a basic guiding framework for negotiators, and has helped impose the discipline needed to move toward completion.

More generally, the many steps carried out in the pre-negotiating process, including construction of strong technical basis and specific legal mandate for the negotiations, and reaching out to different regions of the world, have provided a strong foundation

167. See UNEP Governing Council Mandate, *supra* note 114.

that will keep the overall treaty process on a course toward successful conclusion.

Finally, and as noted above, a number of decisions have been made regarding the format of the negotiations themselves to address issues of participation, including decisions regarding smaller delegations. Collectively, these decisions can be expected to have a significant impact on the extent to which the treaty is reflective of, and is accepted by, the international community as a whole.

e. Looking Ahead: Some Process and Participation Themes at the Implementation Stage

A key consideration in the negotiation of treaties, such as the POPs treaty, is what tools are available to ensure compliance with and implementation of the treaty. There remain many questions about the extent to which international treaties are effectively implemented, including environmental treaties.¹⁶⁸

One aspect of this is to take into account factors likely to affect implementation in the design of the basic obligations and provisions of the treaty. Possible solutions include the way an obligation is formulated (e.g., increased clarity can promote implementation); the use of varying policy tools most appropriate to the issues at hand (e.g., basic requirements or standards, monitoring and reporting provisions, incentive-based measures, and national or regional action plans); and the use of tools to promote cooperation and address special issues facing developing countries (e.g., technical cooperation programs; clearing-house mechanisms; funding provisions; and differentiation of obligations as appropriate).

A second aspect relates to the specific provisions in the treaty relating to non-compliance, and the corresponding institutional framework of the treaty to support these provisions. These may include, for example, consultation and dispute settlement provisions and a non-compliance process (NCP) designed to identify and facilitate compliance by Parties.

It is beyond the scope of this paper to consider these various elements of treaties in any detail. However, one point of particular relevance to public participation is the potential importance of participation by the public in the implementation mechanisms under a treaty.

168. See, e.g., GAO Report, *supra* note 17.

Work in the international environmental field is highlighting the critical role that can be played by the public in treaty implementation. One example of this is through participation in the various activities that take place under a treaty once a treaty is already in force. Treaties create both an institutional regime and a process for continued work to implement the treaty. There are now a growing set of examples and experiences where NGOs have become actively engaged in this work and helped to influence its direction.¹⁶⁹

A second example is where NGOs are granted specific legal status to bring actions or otherwise make submissions alleging non-compliance with a treaty. The public submission process under the North American Agreement on Environmental Cooperation, noted above, provides a leading example of this in the environmental field. A number of submissions have been submitted under the agreement involving allegations that a Party to this agreement is failing to effectively enforce its environmental laws in accordance with the obligations of the agreement.¹⁷⁰ A variation of this approach would be to provide for specific rights of participation to the public in a non-compliance procedure created under an international agreement.¹⁷¹

In some respects, these evolving mechanisms for public involvement in the compliance process have begun to reflect rights possessed by citizens under certain national environmental laws, for example, the right of private citizens to file legal actions against the federal government to compel enforcement. Many studies over the years have noted the significance of such actions in promoting implementation of domestic laws, at least in the U.S.,¹⁷² and their importance in creating accountability upon those charged with enforcing such laws.

While international treaties provide a different setting and context, it could be that the conceptual basis for this approach at

169. See e.g., HUNTER, *supra* at 429-430.

170. See www.cec.org.

171. With the Montreal Protocol again providing a leading example, many international environmental agreements are now establishing what are known as "non-compliance procedures," or NCPs, to promote compliance and implementation. In general, these will create an Implementation Committee (or similar body) which has the authority to look into questions of non-compliance under the agreement, and will often (at least as a first option) seek to facilitate technical assistance or other positive measures to help achieve compliance. See, e.g., G. Handl, *Compliance Control Mechanisms and International Environmental Obligations*, 5 TUL. J. INT. & COMP. LAW 29 (1997)

172. See, e.g., AXLINE, *supra* note 149.

the domestic level has both lessons and applications at the international level. Just as in the domestic context, it might be that countries will consider that national interests are served by provisions that give the public a more solid platform to ask for accountability at the international level, that there is benefit not only in having others respond to such actions but to answer to them oneself. The discussion of the investor-state dispute settlement process in the context of international investment agreements in Part V, below, presents another, and even stronger, illustration of how giving members of the public legal rights under a treaty can promote implementation of that treaty.

V.

IMPLICATIONS FOR OTHER POLICY FIELDS, AND VICE-VERSA

The discussion in the preceding sections highlights a number of characteristics relevant to the POPs treaty process and — by reference to other studies — international environmental law more generally. An important question, then, is how these characteristics of process compare with international work in other settings, and what lessons might be drawn in this regard.

There has been an important evolution in the basic ground rules of process and participation in international law in the past several decades, including with respect to the traditional doctrine that States, and not individuals, are the subjects of international law. In 1982, for example, Professor Louie Sohn described a “silent revolution” in international human rights law in the 1940’s, where “. . . States have had to concede to ordinary human beings the status of subjects of international law, to concede that individuals are no longer mere objects, mere pawns in the hands of States.¹⁷³ Professor Sohn refers to a “third generation of rights” as of particular importance in this regard, including individual interests in human rights but also the growing recognition of the rights of individuals to a healthful and safe environment.¹⁷⁴ Other studies have noted, for example, the strong level of in-

173. Sohn, *supra* note 9 (referring in particular to the fact that the Nuremberg war crimes tribunal made clear that those who committed atrocities against civilian populations were not entitled to invoke as a defense either that they merely followed the orders of their superiors or that they acted for the State, and added that “international law was not concerned solely with the actions of sovereign states, but ‘impose[d] duties and liabilities upon individuals as well as States’”).

174. *Id.* (citing various national and international documents on this point).

volvement of the public in certain other parts of international law, such as in the work of the International Labor Organization.¹⁷⁵ The role of the public in negotiating certain types of treaties, including the POPs treaty, and in some cases in participating in the implementation process, is an important illustration of this broader historical trend.

It is beyond the scope of this paper to review these historical developments across the landscape of international policy and foreign affairs. Instead, the discussion will focus on some points of comparison between the POPs (environmental) treaty process and that of the international trade system, and offer a few observations for further debate.

The basic rules of procedure that applied to the POPs treaty negotiations, including the ECOSOC resolution on consultation with NGOs, do not apply to the WTO. Rather, the WTO has its own set of rules pursuant to the various agreements of the Uruguay Round,¹⁷⁶ as well as established practices. Under these rules and practices, formal meetings under the WTO, including those of the Committee on Trade and Environment as well as dispute settlement proceedings, are not open to members of the public. The WTO explains the rules as follows:

The WTO is an intergovernmental organization, and only the governments of Members take part in its activities and decisions. However, other intergovernmental organizations can be granted observer status to attend the meetings of WTO bodies, and the General Council may make arrangements for consultation and cooperation with non-governmental organizations concerned with WTO-related matters.¹⁷⁷

Similarly, and in sharp contrast to the situation with respect to environmental treaty negotiations such as the POPs process, members of the public are not able to gain status as observers in meetings to negotiate new agreements under the WTO; indeed, the public had virtually no ability to participate directly in the multi-year Uruguay Round negotiations and negotiating documents and proposals (unless leaked) in general were not made publicly available. Similar restrictions have applied in the negoti-

175. J. STARKE, *INTRODUCTION TO INTERNATIONAL LAW* 658-61 (1989) (describing charter-based involvement of labor and management representatives in the ILO).

176. See *Final Agreements of the Uruguay Round of Multilateral Trade Negotiations*, concluded in April 1994, contained on the WTO Internet homepage at www.wto.org.

177. See www.wto.org, Module 1: FAQs (2).

ation of regional free trade agreements.¹⁷⁸ In addition, and until some significant recent steps to prepare minutes or written summaries of meetings and post a wider range of documents on the internet, most official documents under the WTO were treated as restricted, and not available to the public absent the completion of a fairly time-consuming de-restriction process.¹⁷⁹

During the 1990's, the U.S. Administration, for one, argued on a number of occasions that the WTO system should revise its rules to be more transparent and achieve greater public participation,¹⁸⁰ and presented certain proposals to this end in the lead-up to the Seattle Ministerial meeting in 1999. The ongoing evolution of international trade rules in recent years has heightened the importance of this issue. It is increasingly recognized that the adoption of the many new agreements of the Uruguay Round in 1994 significantly expanded the scope of international trade rules, so that they now contain new kinds of obligations on matters (e.g., the necessity of national and local health, safety and environmental regulations) that affect people's lives in many ways.¹⁸¹ This recognition itself, perhaps, suggests a need to expand beyond a limited State-to-State vision of international relations, to a more participatory model of policymaking, so that those many members of the public who have a stake in the process have the possibility to be more involved in and informed about decisions that are made.

However, there has been strong resistance to significant movement in this direction on the part of many countries. The passage

178. The negotiating groups of the proposed Free Trade Area of the Americas (FTAA), for example, do not allow public observers and have in general not released negotiating documentation. The process has created a Committee of Government Representatives to provide a link between the public and the negotiators, though its effectiveness in this regard has been the subject of significant debate. See, generally, FTAA Internet homepage at www.ftaa.alca.org.

179. In recent years, the WTO has used its internet home page to post a variety of important documents relevant to work under WTO agreements, including minutes and reports of Committee meetings and, as one example, papers and proposals submitted by governments in the lead-up to the Seattle Ministerial. See www.wto.org, Documents on-line.

180. See, e.g., Remarks of President Clinton before the 50th Anniversary Meeting of the GATT/WTO, Geneva (May 1998).

181. For example, certain WTO agreements contain obligations - or disciplines - upon the types of regulations nations may adopt in the area of health, safety and the environment. See, e.g., WTO Agreements on Technical Barriers to Trade and Sanitary and Phytosanitary Measures. See also, Esty, *supra* note 5; LALLAS & ZIEGLER, INTERNATIONAL ECONOMICS, TRADE AND ENVIRONMENT, IN INTERNATIONAL OCCUPATIONAL AND ENVIRONMENTAL MEDICINE, (Herzstein et al, eds.).

noted above, for example, stresses simply the “intergovernmental” nature of the WTO process. Some suggest that opening the process to the public would likely lead to imbalanced involvement that would favor certain groups (e.g., private-sector representatives, lawyers, etc.) and NGOs from certain countries, where NGOs have higher resources.¹⁸² It has also been argued that negotiations on trade and economic matters of high sensitivity often require confidentiality to function effectively, in order to facilitate a frank exchange of views or to prevent manipulation of outcomes by “special interests.”¹⁸³ It is also suggested that some discussions might move to less formal settings (side-meetings), creating additional difficulties for participation by smaller countries.

As the debate moves forward on these issues, it is worth noting possible lessons that might be drawn from the experience in negotiating and implementing treaties in the environmental area.¹⁸⁴ This experience demonstrates that at least some of the concerns raised in the trade context — e.g., that public involvement would disrupt meetings or constrain debate — can be addressed while still permitting an active public involvement. The experience also suggests many benefits to be gained from such participation. At the same time, it indicates a need to address certain important issues — such as the potential for imbalances in participation due to differential capacity. In this sense, the POPs treaty experience may provide some important lessons for work in the field of international trade.

Interestingly, though, in a different respect it is the international economic field, and not the environmental field, which sets the benchmark for public involvement (or at least partial public involvement) in a treaty process at the level of implementation. In particular, a number of bilateral investment treaties, and the chapter on Investment of the North American Free Trade Agreement (NAFTA), have created what is known as an “Investor-State” dispute process.¹⁸⁵ Under this process, private investors

182. See e.g., *supra* note 158.

183. See e.g., Esty, *supra* note 5 at 210-211 (reviewing arguments both for and against confidentiality in trade negotiations).

184. It is interesting to note that some commentators with experience in international environmental law and policy have referred to certain other elements of the GATT/WTO system (e.g., the focus on a few “cardinal principles” and its rules of “mutual forbearance” as possible models for an improved international environmental regime. See, e.g., Esty, *supra* note 5 at 73-98.

185. See Mann & von Moltke, *supra* note 10

are endowed with the right to bring a government Party to the NAFTA before a legally binding arbitration process where it alleges that the Party has violated the agreement to the detriment of that investor. In the past three years, investors have brought a number of claims (in some cases successfully) against NAFTA Parties under this process. The procedure, however, is available only to investors as defined under the agreement, and not to other members of the public, and has become the subject of a major debate about how NAFTA Chapter 11 interacts with, for example, national and subnational laws to protect health, safety, and the environment.¹⁸⁶

It can be argued with some force that this mechanism presents one of the strongest models available in international law for public involvement (albeit only one subpart of the public) in the process of implementing international obligations. Even more than the public submission process in the North American Agreement on Environmental Cooperation, noted in Part IV, the Investor-State process provides an analogue to private rights of action available under national laws (in this case, the rights of property owners to bring legal action to protect their property rights against certain types of government action). And yet, this type of mechanism is available only to one subset of the public and has no direct analogue in the international environmental field. The reasons for this are worth exploring, as are the potential gains of expanding this type of mechanism to other members of the public in support of the implementation of other types of treaty obligations beyond the protection of specific economic interests.

VI.

CONCLUSION

The road to negotiating and implementing a treaty can be a long one, with many steps and choices of direction along the way. This paper suggests that the way of navigating this journey – the process – and who is part of the journey – the participants – is of fundamental importance in determining how the journey might end.

Several themes of process and participation are highlighted, with reference in particular to experiences gained with POPs. First is the idea that each stage of the treaty process is important,

186. *Id.*

including not least the background and pre-negotiating stages. As suggested by the POPs experience, the development of an appropriate technical and institutional structure, and a focused legal mandate with a specific time-frame to complete negotiations based on a broad outreach to different regions and interested members of societies, has been of great value in keeping the treaty process on course.

Second, the analysis suggests that the structures and dynamics of participation by representatives of non-governmental organizations, indigenous communities, regulated industries, and other interested members of the public are of great interest as a policy matter and of enormous importance to the nature and direction of the treaty process. The discussion provides some description of the nature of the involvement of these participants in the POPs treaty process, and on this basis draws out both some observations and questions for consideration. The potential value of greater public participation at the stage of implementation is highlighted. At the same time, the discussion highlights important issues regarding public participation in the international context, including in particular the problem of “imbalances” in participation linked to differences in capacity and resources, for example as between NGOs from one set of countries versus another, or between for-profit and not-for-profit entities.

Third, the analysis highlights the difficulties in achieving effective participation facing smaller countries, and the importance of this problem for the treaty process. The POPs treaty experience indicates some important potential means to address this problem, but difficulties persist and work is needed.

Fourth, the analysis reviews the essential (and varying) roles played by international organizations in the treaty process. The POPs treaty experience again suggests some important considerations in this regard, including the question of how different types of institutions and fora can promote not only a negotiation itself but can set the stage for the negotiation.

Finally, the analysis takes a brief look across different fields of international law, with a focus in particular on the possibilities for and implications of broader public participation in the policymaking process of the international trading system. The discussion suggests that the approach to public participation in the environmental treaty process, as reflected in the POPs experience, has important potential lessons for and applications in this latter setting. It also notes, conversely, that the environmental

field should take notice of the procedural rights given to members of the public (in that case, limited to investors) to bring legal action against governments under international investment treaties. By analogy to the role of the public in domestic legal systems, the possible movement toward this type of right in environmental treaties (with appropriate modifications and not restricted to a single set of stakeholders) — holds the potential to provide a significant means to enhance treaty implementation. Doing so, however, would have profound implications on what is, in fact, a core question of this paper — that is: who, after all, should participate in the development of, and have rights and obligations under, international law.