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Report to Congressional Requesters

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INTERNATIONAL ENVIRONMENT

International Agreements Are Not Well Monitored

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January 27, 1992

The Honorable Quentin N. Burdick
Chairman, Committee on Environment and
Public Works
United States Senate

The Honorable Daniel Patrick Moynihan
United States Senate

In response to your request of March 22, 1990, this report reviews reporting by countries on their compliance with eight major international environmental agreements and identifies measures that have been proposed to strengthen monitoring and implementation.

Copies of this report are being sent to the Administrator of the Environmental Protection Agency, the Secretary of State, and other interested parties.

This work was performed under the direction of Richard L. Hembra, Director, Environmental Protection Issues, who may be reached at (202) 275-6111. Other major contributors to this report are listed in appendix IV.

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Executive Summary

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Purpose

In the last 20 years, nations have signed an increasing number of agreements to address an array of environmental concerns. While the development of these agreements in itself is noteworthy, their effectiveness depends on implementation by the parties. The agreements generally call for the parties to annually report on implementation. Concerned about how well these reporting obligations are being met, the Chairman of the Senate Committee on Environment and Public Works and Senator Daniel Patrick Moynihan, a Member of the Committee, asked GAO to determine (1) if the agreements are specific enough to allow implementation to be measured and if parties are reporting required information and (2) if the administrative bodies for the agreements monitor implementation. GAO also identified proposed measures for strengthening monitoring and implementation.

Background

Since 1972, when over 130 nations took part in the United Nations Conference on the Human Environment, the number of international environmental agreements in which the United States participates or in which it has a significant interest has grown from fewer than 50 to 168. Among these, eight agreements, which GAO reviewed, address environmental problems of global or regional significance: the Montreal Protocol (ozone depletion), the Nitrogen Oxides (NOx) Protocol (acid rain, air pollution), the Basel Convention (hazardous waste disposal), the London Dumping Convention (marine pollution), the International Convention for the Prevention of Pollution from Ships (MARPOL), the Convention on International Trade in Endangered Species (CITES), the International Whaling Convention, and the International Tropical Timber Agreement (deforestation).

Developing an international environmental agreement involves achieving a voluntary commitment among many nations with various levels of industrial development, technical capabilities, resources, and concern about the environmental problem. Parties implement an agreement domestically by establishing the necessary legislation, regulations, and administrative systems. To administer the agreement, parties create a secretariat, which they fund and to which they are to report periodically. Because no supranational enforcement body exists, peer or public pressure—based in part on the information parties report about implementation—is generally the primary mechanism for enforcing multilateral agreements. While there may be informal sources of information on implementation available, reports submitted by the parties to the secretariats are the only formal source of information available to all parties.

Results in Brief

Six of the eight environmental agreements GAO reviewed specify how implementation is to be measured and require parties to periodically provide information. However, not all parties report complete and timely information to secretariats, particularly developing countries for which reporting is part of a larger problem related to their financial and technical capability to comply. Moreover, although secretariat officials believe they are aware of any important implementation problems, they generally do not have the authority or resources to monitor implementation by verifying reported information or independently assessing countries' compliance. Even operating within the mandate they do have, some secretariats, according to their officials, have been funded insufficiently to allow them to carry out assigned duties or to assist parties in carrying out the agreements.

Recognizing the seriousness of environmental problems, a number of international environmental experts have proposed measures to strengthen international oversight as well as parties' capability to comply with agreements. For example, some have suggested that environmental agreements be modeled after other types of international agreements that provide for monitoring and review, such as those governing labor and human rights. Some agreements also include financing mechanisms to aid developing countries in complying. In any case, efforts to strengthen monitoring and countries' capability to comply will require both the approval and financial support of parties.

GAO's Analysis

Parties' Reporting Has Often Been Late and Incomplete

Of the eight agreements reviewed, six require parties to annually report information on implementation to the secretariats. One agreement—the Basel Convention—is not yet in force. For the remaining agreement—the International Tropical Timber Agreement—parties submit reports that are not used to measure implementation but do allow for an overall annual assessment of the world tropical timber economy, including environmental aspects. For the seven agreements in force, many reports are submitted late or incomplete, or are not submitted at all. Eighty percent or more of the parties to the Montreal Protocol, the NOx Protocol, and the International Whaling Convention had submitted required reports as of the secretariats' most recent reporting periods. However, close to half of the reports submitted to the Montreal Protocol secretariat were incomplete. For the other agreements—the London Dumping Convention,

MARPOL, CITES, and the International Tropical Timber Agreement—fewer than 50 percent of the parties reported. Although reports from developed countries were late or missing, reporting was particularly a problem among developing countries, which, in many instances, lack the infrastructure and resources to collect and report the required information or otherwise implement the agreements. In some instances when reporting has been poor, secretariats have been unable to target financial and technical assistance to those countries most in need, and the agreements' effectiveness has been called into question.

Secretariats Do Not Have Authority or Resources to Monitor Implementation

In general, secretariats have neither the authority nor the resources to monitor implementation. As established by the parties, the role of the secretariats generally is to help implement agreements by collecting and distributing information and providing some technical assistance. At various times, most of the secretariats have distributed lists of nonreporting parties in order to generate peer pressure to stimulate future compliance with reporting provisions. However, with the exception of the CITES secretariat, which has a somewhat broader role, the secretariats have not been given the authority to monitor the agreements through verifying the information parties report or independently assessing compliance.

The size of secretariats reflects their limited role. They are very small organizations, with staffs of 4 to 20 people and annual budgets of less than $1 million to $3 million in 1990. While these levels of resources are not always considered a problem, secretariat officials for three of the agreements—the London Dumping Convention, MARPOL, and CITES—believe funding is inadequate to allow them to fulfill aspects of their defined roles, such as providing technical assistance.

Measures Have Been Proposed to Strengthen Monitoring and Countries' Capacity to Comply With Agreements

Although secretariat officials believe they are aware of any major implementation problems, there is a growing sense within the international community that more systematic monitoring is warranted, given the seriousness of international environmental problems and the high costs of correcting or preventing them. Officials of international environmental organizations and others are now considering methods for strengthening monitoring, and the topic has been proposed for the agenda of the 1992 United Nations Conference on Environment and Development.

Some proposals have surfaced already. Some observers point out that organizations overseeing international agreements on labor, human rights, and trade offer possible models for monitoring compliance through visits to countries and sites, public hearings, and other verification and assessment procedures. In addition, observers suggest that nongovernmental organizations (public and private interest groups), which now play some part in monitoring or assessing the implementation of international environmental agreements, be given a more formal role.

Additional monitoring may not be readily accepted by some nations and will in any case have to be accompanied by efforts to improve nations' capacity to comply. In recognition that the inability to comply with agreements is a serious underlying problem in many instances, some efforts have already been made to assist developing countries. A recent example is the Global Environmental Facility—jointly run by the World Bank and two United Nations organizations—which provides funding to aid developing countries in addressing certain environmental problems.

Recommendations

GAO is making no recommendations in this report but plans to evaluate in a future review options for strengthening oversight of the implementation of international environmental agreements.

Agency Comments

The Department of State, the Environmental Protection Agency (EPA), and the secretariats to the agreements reviewed a draft of this report. EPA found the report to be an informative overview of the issues and raised a number of questions that, while important and perhaps the subject of GAO's further work, are nevertheless outside the scope of this review. The State Department believed the premise of the report is that incomplete reporting implies less than full compliance. GAO is not suggesting that incomplete reporting necessarily equates to less than full compliance but, rather, that the level of compliance is difficult to judge because of incomplete reporting. Further, as GAO points out, incomplete reporting by developing countries is part of a larger problem related to their financial and technical capability to comply. The remainder of the State Department's comments provided technical corrections and clarifications. These comments, along with those provided by the other reviewers, were incorporated into this report where appropriate. Comments provided by EPA and the State Department are reproduced in appendixes II and III.

Contents

Executive Summary		2
Chapter 1 Introduction		8
	Global Environmental Problems Have Increasingly Been Addressed by International Agreements	8
	Development and Implementation of Environmental Agreements Depend on Voluntary Participation of Nations	10
	Eight Agreements Address Major International Environmental Problems	13
	Objectives, Scope, and Methodology	17
Chapter 2 Compliance With International Environmental Agreements Is Not Well Monitored		20
	Most Environmental Agreements Reviewed Allow Implementation to Be Measured	20
	Parties' Reporting Has Often Been Late and Incomplete	23
	Secretariats Generally Do Not Verify or Assess Compliance	28
	Conclusions	32
Chapter 3 Measures Have Been Proposed to Strengthen Monitoring and Countries' Capacity to Implement Agreements		34
	Many Believe Oversight Deserves Greater Emphasis	34
	Mechanisms Used by Other International Agreements May Offer Models for Monitoring Implementation	36
	A More Formal Role for Nongovernmental Organizations Has Been Suggested	42
	Nations' Capability to Implement Agreements Could Be Strengthened	43
	Conclusions	44
	Agency Comments on This Report	45
Appendixes		
	Appendix I: Organizations Contacted by GAO	46
	Appendix II: Comments From the Environmental Protection Agency	49
	Appendix III: Comments From the U.S. Department of State	52
	Appendix IV: Major Contributors to This Report	60
Tables		
	Table 1.1: Major International Environmental Agreements	14

Table 2.1: Performance Standards in International Environmental Agreements 21
Table 2.2: Staffing and Funding for Secretariats of International Environmental Agreements, 1990 31
Table 3.1: Selected Mechanisms Used by International Organizations to Monitor Compliance 37

Figures

Figure 1.1: Number of International Environmental Agreements Involving the United States, 1949 Through 1989 10
Figure 1.2: Process for Developing and Implementing International Environmental Agreements 11
Figure 2.1: Reporting Status of International Environmental Agreements 24

Abbreviations

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EPA	Environmental Protection Agency
GAO	General Accounting Office
GATT	General Agreement on Tariffs and Trade
ILO	International Labor Organization
IMO	International Maritime Organization
MARPOL	International Convention for the Prevention of Pollution from Ships
NGO	nongovernmental organization
NOx	nitrogen oxides
UNEP	United Nations Environment Program

Introduction

In response to increased industrialization and populations, and the accompanying pollution, as well as better scientific information about the global and transboundary nature of environmental problems, nations have signed an increasing number of multilateral agreements to address an array of these problems.[1] While the development of these agreements in itself is a noteworthy accomplishment, their effectiveness in correcting problems depends on implementation by the parties. Moreover, because of the high costs often involved in compliance, uneven implementation may place those countries that carry out the agreements at a competitive disadvantage compared to countries that do not.

Global Environmental Problems Have Increasingly Been Addressed by International Agreements

The number and severity of environmental problems with global implications have increased significantly over recent years. Stratospheric ozone depletion, hazardous waste disposal, air and marine pollution, and the destruction of living natural resources pose environmental threats internationally:

- Stratospheric ozone depletion, caused by the catalytic reactions of chlorofluorocarbons and related chemicals in the upper atmosphere, could lead to a worldwide increase in the incidence of skin cancer, crop damage, and the destruction of marine life.
- Hazardous wastes produced by developed countries have been transported to and improperly disposed of in developing countries, potentially contaminating soil and water supplies and posing serious long-term health problems.
- The widespread dispersal of air pollutants, such as sulfur dioxide and nitrogen oxides (NOx), has produced acid rain and has led to the death of numerous lakes and forests in North America and Europe.
- Marine pollution from oil, chemicals, and garbage dumped into the oceans has killed marine life and degraded coastal areas worldwide.
- Many plant and animal species, valued for their uniqueness as well as their potential medical and chemical value, are threatened with extinction from deforestation.

Awareness of these kinds of global environmental problems has heightened over the last 20 years as industrialization and the stress caused by population growth have spread through the world, increasing pollution

[1] Throughout this report, several terms are used for international environmental agreements. While these terms are often used interchangeably, "treaty" has been defined as an international agreement concluded between two or more states in written form and governed by international law; "convention" tends to be used for a multilateral treaty; and "protocol" usually denotes a treaty amending, or supplementing, another treaty.

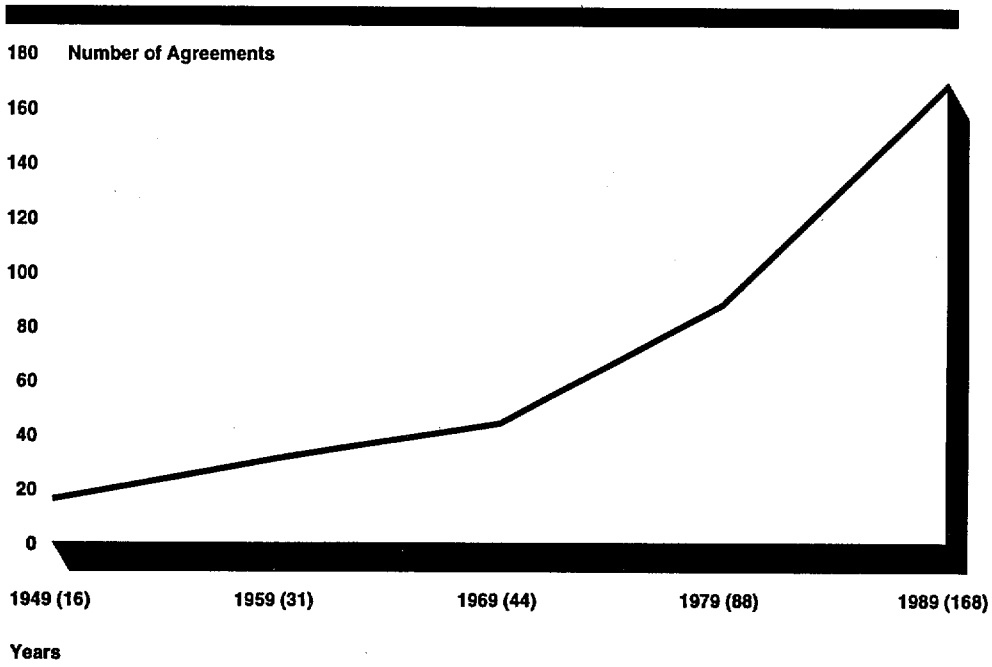
and environmental degradation. At the same time, more sophisticated monitoring techniques have yielded new and better information about the effects of industrial activities on the earth's atmosphere, oceans, and ecosystems.

In 1972, over 130 nations took part in the United Nations Conference on the Human Environment (referred to as the Stockholm Conference) in the recognition that solving many types of environmental problems would require concerted efforts worldwide. The conference resulted in the creation of the United Nations Environment Program (UNEP), charged with promoting international cooperation on environmental issues and coordinating environmental activities within the United Nations system.

Since the Stockholm Conference, the number of global, regional, and bilateral environmental agreements to which the United States is a party or in which it has a significant interest has increased steadily. As shown in figure 1.1, only 44 agreements had been signed as of 1969, but by the end of the 1970s, the number had doubled to 88, and by 1989, had reached 168.[2]

[2] International Agreements to Protect the Environment and Wildlife, U.S. International Trade Commission, Report to the Committee on Finance, United States Senate, on Investigation No. 332-287 Under Section 332 of the Tariff Act of 1930, Publication No. 2351 (Washington, D.C.: Jan. 1991), pp. G3-G13.

Figure 1.1: Number of International Environmental Agreements Involving the United States, 1949 Through 1989



Source: GAO's analysis of data from the U.S. International Trade Commission.

International efforts to address major environmental issues continue and are focused on the United Nations Conference on Environment and Development, to be held in Brazil in 1992. The conference's agenda includes a number of major issues, including addressing global climate change and protecting the diversity of plant and animal species. Nations are currently considering conventions on these issues, and conference officials hope that the agreements will be ready for signing in 1992.

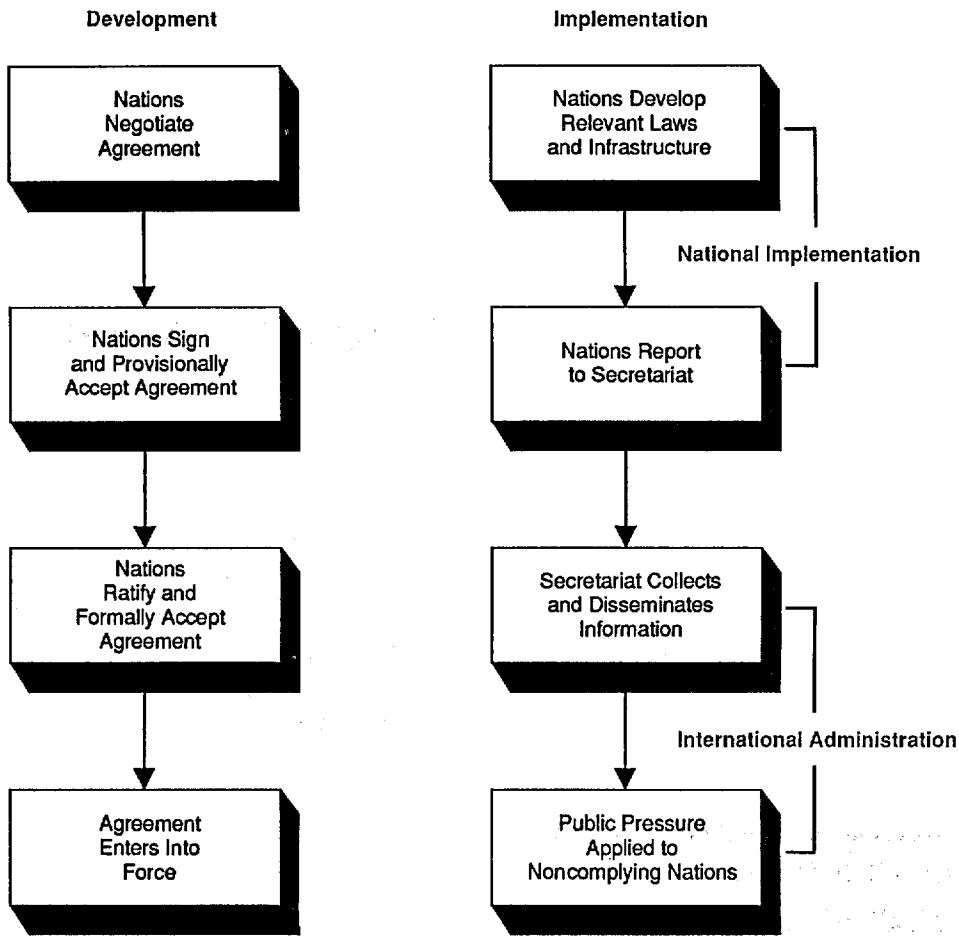
Development and Implementation of Environmental Agreements Depend on Voluntary Participation of Nations

As is the case with international agreements in general, a nation's ratification of an environmental agreement represents the nation's pledge to create the laws and systems necessary to meet the agreement's objectives. However, as is also typical of international agreements, there are generally no penalties imposed on parties failing to implement environmental agreements. Instead, the pressure of public opinion is the usual means for ensuring that parties meet their commitments.

Developing a multilateral environmental agreement generally involves achieving a broad consensus among many nations with various industrial development, technical capabilities, resources, and environmental consciousness or concern. The agreement to phase out the production of

ozone-depleting substances, for example, included over 60 nations in treaty negotiations. Thus, the development process can be very lengthy, proceeding in several stages.

Figure 1.2: Process for Developing and Implementing International Environmental Agreements



The process begins as nations negotiate the terms of the agreement and adopt the text, which generally includes (1) a statement of common concerns, (2) definitions of terms, (3) requirements for parties to institute regulatory mechanisms and report information on implementation, and (4) the designation of a secretariat to administer the agreement. Only after a specified number of nations have voluntarily accepted and ratified the agreement does it enter into force.

Each party is responsible for developing the laws, regulations, and infrastructure necessary to fulfill the provisions of the agreement. Typically, a designated national authority reports to the international secretariat on efforts to implement and comply with the treaty domestically. Using these domestic reports, the secretariat compiles comparative information on implementation and compliance and disseminates it among the parties. Public and private interest groups, typically referred to as nongovernmental organizations (NGO), may also independently collect and review information on nations' efforts.

The enforcement of compliance with international agreements generally depends on peer or public pressure on nations because no supranational body with the authority to enforce compliance exists. To some extent, this arrangement reflects nations' belief that if compliance mechanisms were more stringent, fewer nations would participate and treaty obligations would be weaker. Some environmental agreements include provisions allowing parties to use arbitration as a mechanism for resolving disputes. However, each nation involved in the dispute generally must voluntarily agree to participate in this process. The International Court of Justice, the judicial organ of the United Nations, is also available to settle disputes. However, each nation involved must grant the Court jurisdictional authority. While some environmental treaties have encouraged the use of the Court for settling disputes, parties generally have been reluctant to require its use.

The public dissemination of information about parties' progress in fulfilling treaty obligations plays a key role in the implementation of environmental agreements. Specifically, the information serves to assure each party that others are sharing the burden of implementation as agreed, which is particularly important in light of the high costs and the effects on international competitiveness that may result from implementing an agreement. When the information about implementation reveals that certain parties are not abiding by the treaty, this knowledge provides the basis for applying public pressure and encouraging compliance.

Eight Agreements Address Major International Environmental Problems

Among the 168 international environmental agreements to which the United States is a party or in which it has a significant interest, 8 generally have been singled out by environmental experts as addressing major global or regional environmental problems. As shown in table 1.1, these problems include stratospheric ozone depletion, hazardous wastes, air and water pollution, the loss of plant and animal species, and deforestation. Seven of these eight agreements were signed after the 1972 Stockholm Conference. With the exception of the Basel Convention, all are in force. At the time of our review, the number of parties to these agreements ranged from 16 to 112.

Table 1.1: Major International Environmental Agreements

Agreement[a]	Problem addressed	Secretariat and its location[b]	Year agreement entered into force	Number of parties ratifying[c]
Montreal Protocol on Substances that Deplete the Ozone Layer, 1987	ozone depletion	UNEP Nairobi, Kenya	1989	75
Protocol to the 1979 Convention on Long-range Transboundary Air Pollution Concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes, 1988 (NOx Protocol)	acid rain and air pollution	United Nations Economic Commission for Europe Geneva, Switzerland	1991	17
Basel Convention on the Control of the Transboundary Movements of Hazardous Wastes and Their Disposal, 1989	generation, transport, and disposal of hazardous wastes	UNEP Geneva, Switzerland	[d]	16
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Dumping Convention)	marine pollution caused primarily by ships' dumping at sea wastes generated on land	International Maritime Organization (IMO) London, England	1975	65
International Convention for the Prevention of Pollution from Ships, 1973 and amended in 1978 (MARPOL)	marine pollution caused by ships	IMO London, England	1983–88[e]	61, 46[f]
Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973 (CITES)	loss of species	UNEP Lausanne, Switzerland	1975	112
International Convention for the Regulation of Whaling, 1946	loss of species	Secretary to the International Whaling Commission Cambridge, England	1948	36
International Tropical Timber Agreement, 1983	deforestation[g]	International Tropical Timber Organization Yokohama, Japan	1985	48

[a]The dates in this column reflect when nations signed and provisionally accepted the agreements.

[b]UNEP and the International Maritime Organization (IMO) perform duties other than serving as secretariats to environmental agreements. As indicated in this column, UNEP relies on three subunits located in different places to function as secretariats for three agreements, while two separate subunits of IMO serve as secretariats for two agreements.

[c]Numbers in this column are as of dates that range from November 1990 to November 1991, depending on the agreement.

[d]As of November 1991, the Basel Convention had not entered into force.

[e]Annex I (pertaining to pollution by oil) of MARPOL entered into force in 1983, annex II (bulk liquid chemicals) in 1987, and annex V (garbage) in 1988. Annexes III (packaged hazardous substances) and IV (sewage) had not entered into force as of August 1991.

[f]As of November 1990, annexes I and II had been ratified by 61 nations, annex V by 46.

[g]While addressing an environmental problem, the International Tropical Timber Agreement is intended to address all relevant aspects of the tropical timber economy, including international trade and the management of tropical forests.

Montreal Protocol

The primary objective of the Montreal Protocol, negotiated within the framework of the 1985 Vienna Convention for the Protection of the Ozone Layer, is to limit and reduce the use of specific substances that deplete the ozone layer. Parties to the protocol agree to reduce their consumption[3] of the controlled substances—chlorofluorocarbons and halons—in accordance with agreed-upon deadlines and percentages. The protocol was signed in September 1987 and entered into force in January 1989. As of November 1991, 75 parties, including developed and developing countries, had ratified the protocol.[4]

NOx Protocol

The NOx Protocol was negotiated under the framework of the 1979 Convention on Long-range Transboundary Air Pollution, which obliges parties to limit and gradually reduce and prevent air pollution, including that generated in one country and dispersed to another. Parties to the protocol agree to adopt measures to control and reduce their annual NOx emissions so that by the end of 1994, emissions do not exceed an established baseline. The protocol was signed in October 1988. When it entered into force in February 1991, it had been ratified by 17 nations, some of them Eastern European; all parties are industrialized countries.

Basel Convention

The main objective of the Basel Convention is to control and manage the generation, transboundary movement, and disposal of hazardous wastes. The convention was designed to ensure that nations importing hazardous wastes understand the risks involved and have the necessary capability to dispose of the wastes. To this end, the convention requires that parties establish a system under which the prospective exporting nation must first obtain the permission of the importing nation, as well as every nation through which the shipments will be transported. In March 1989, 116 nations adopted the convention; however, as of November 1991, it had not been ratified by the number of countries needed for it to enter into force (20). According to a secretariat official, the convention could enter into force in early 1992.

[3] The protocol defines "consumption" as the sum of domestic production and imports, minus exports.

[4] Seventy-four nations and, as a single entity, the European Community constitute the 75 parties to the protocol. All 12 nations within the Community are also among the 74 nations.

London Dumping Convention

The general objective of the London Dumping Convention is to control all sources of marine pollution effectively, particularly by controlling ships' disposal of wastes generated on land. Implementing the convention requires that national authorities establish a permit system governing the types and amounts of wastes that ships can dispose of at sea. Adopted in December 1972, the convention entered into force in August 1975, and as of November 1991, it had been ratified by 65 nations, including industrialized and developing nations.

MARPOL

In contrast to the London Dumping Convention, which governs marine pollution primarily from ships' disposal of wastes generated on land, MARPOL was adopted to control pollution from ships themselves. Signed in 1973 and amended in 1978, MARPOL requires parties to adopt specific standards governing the design, construction, and operation of ships and their equipment, as well as port facilities. To ensure that ships meet these standards, each party is supposed to (1) inspect and certify the ships that carry its flag before putting them into service and (2) perform a follow-up inspection at least twice during the 5-year certification period. A party may also inspect ships entering its ports. The agreement also requires that parties equip ports with waste reception facilities. Annexes I and II of MARPOL, each ratified by 61 nations, entered into force in 1983 and 1987, respectively; annex V, ratified by 46 nations, entered into force in 1988. Parties to these annexes include both industrialized and developing countries. As of August 1991, annexes III and IV were not yet in force.

CITES

The main purpose of CITES is to regulate international trade in species that are either threatened with extinction or may become endangered if their trade is not regulated. CITES requires that parties establish trade permit systems. In accordance with appendixes to the convention, parties specify which animals and plants may not be traded and which may be traded only in limited quantities. CITES was signed in 1973 and entered into force in 1975. As of October 1991, 112 nations had ratified the convention.

International Whaling Convention

The objectives of the International Whaling Convention, which was signed in 1946 and entered into force in 1948, are to protect whales from excessive harvesting and to properly conserve them, thus making possible the orderly development of the whaling industry. In 1982, parties adopted a moratorium on commercial whaling, which remains in

effect; currently, whales may be harvested only for aboriginal subsistence and scientific purposes. As of January 1991, 36 countries were parties, including both industrialized and developing countries.

International Tropical Timber Agreement

Unlike the other agreements, which have as a goal some specific environmental objective, the International Tropical Timber Agreement is intended to provide a forum for tropical timber producing and consuming countries to consider a variety of aspects of the tropical timber economy, including trade, forest management, and marketing. The agreement aims to encourage the development of national policies promoting the sustainable utilization and conservation of tropical forests, and in May 1990, parties adopted guidelines for establishing such policies. Adopted in 1983, the agreement entered into force in April 1985. As of May 1991, there were 48 parties. Of these, 22 are timber producers (developing countries), and 26 are consumers (primarily industrialized countries).

Objectives, Scope, and Methodology

In March 1990, the Chairman of the Senate Committee on Environment and Public Works and one of its Members, Senator Daniel Patrick Moynihan, requested that we evaluate the monitoring and implementation of international environmental agreements. Following discussions, we agreed to focus on the following questions:

- Are the environmental agreements specific enough to allow implementation to be measured?
- Are parties to agreements reporting required information and, if not, why?
- Do the secretariats that administer the agreements monitor implementation by verifying the information received and independently assessing compliance?

Because the United States is a party to or has a significant interest in more than 160 international environmental agreements, we examined the implementation of those agreements that address the most significant environmental problems requiring multilateral cooperation. On the basis of a review of relevant literature and discussions with officials of U.S. government agencies, international environmental organizations, and NGOs, we compiled a list of the primary agreements addressing the most significant environmental problems. We reviewed the list with key officials, who agreed that it covered the most significant problems and the most important treaties developed to address those problems. From

this process, we identified eight major international environmental agreements on which to focus our review—those described in the preceding section and outlined in table 1.1. Although one of these agreements—the International Tropical Timber Agreement—addresses more than environmental aspects of timber production and trade, we included it because of its potential importance in dealing with the major international environmental problem of deforestation. Though another of these eight agreements, the Basel Convention, has not yet entered into force, we included it in our review because it is the most important agreement addressing the major problem that hazardous wastes present and because we believed it was sufficiently well developed that an examination of it could offer useful information.

To determine whether the eight agreements have specific performance standards, we reviewed the texts of the agreements, related legal documents, and other relevant literature. We also discussed the agreements with secretariat officials, NGO representatives, and U.S. agency officials responsible for implementing these agreements domestically.

To determine the extent to which parties have reported required information, we reviewed reports on the annual meetings of parties. Also, we reviewed secretariats' summaries, analyses, and special studies of parties' compliance with annual reporting requirements. We did not meet with representatives of parties, other than U.S. government officials. However, we discussed reporting requirements and compliance with secretariat officials and NGO representatives.

To determine whether secretariats monitor implementation by verifying information received about compliance and independently assessing compliance, we interviewed each secretariat's director or other responsible representatives to obtain their views. We also reviewed (1) agreement provisions and written policies delineating secretariats' responsibilities, (2) financial reports covering requested revenues and actual revenues collected, and (3) other budgetary information. We also interviewed U.S. State Department officials to determine how the United States allocates its contributions to international secretariats.

In interviewing officials of these organizations and in reviewing related studies and other pertinent literature, we noted that various measures have been suggested, and in some cases implemented, to strengthen international oversight of environmental agreements and to improve parties' capacity to comply. Thus, in recognition of the evolving nature and importance of global environmental issues, this report presents an

overview of these measures. To more fully understand these measures, we interviewed officials from the Office of the U.S. Trade Representative, the International Trade Commission, and the General Agreement on Tariffs and Trade (GATT) secretariat.

We conducted our work between March 1990 and September 1991 in accordance with generally accepted government auditing standards. The specific organizations that we contacted are listed in appendix I. Officials from the Department of State, the Environmental Protection Agency (EPA), and the secretariats to the agreements reviewed a draft of this report. Comments provided by EPA and the State Department are discussed at the end of chapter 3 and included in appendixes II and III.

Compliance With International Environmental Agreements Is Not Well Monitored

Although most agreements specify how implementation is to be measured and require parties to report periodically on their performance, not all parties provide complete and timely information to the secretariats. Information on implementation may be available from informal sources, but reports submitted by parties represent the only formal source of information available to all parties. While both developed and developing countries provide incomplete and late reports, reporting is particularly a problem among developing countries, where it is part of a larger problem related to the financial and technical capability of these countries to comply with the agreements. Although some secretariat officials believe they have a sense of the level of compliance overall, secretariats generally do not have the authority to verify information or independently determine parties' compliance. Further, limited resources have prevented some secretariats from carrying out assigned duties and various activities that could improve implementation.

Most Environmental Agreements Reviewed Allow Implementation to Be Measured

As noted earlier, of the eight agreements we reviewed, seven have entered into force. Of those seven agreements, six are specific as to what constitutes implementation; that is, they contain measurable performance standards, or norms, rules, and procedures for parties to follow. One of the seven agreements, the International Tropical Timber Agreement, on the other hand, does not have provisions that allow for implementation to be measured. Instead, parties have adopted a set of general principles and possible actions—guidelines that may be used as the basis for developing more specific national policies. The agreement not yet in force, the Basel Convention, had also not established measurable performance standards as of November 1991, but nations have agreed to set up a working group to develop technical guidelines. When agreements do not have measurable performance standards, it is difficult to judge whether parties are in compliance.

As indicated in table 2.1, the agreements we reviewed contain performance standards that are either numerical or procedural (specifying designs and/or operations).

Table 2.1: Performance Standards in International Environmental Agreements

Agreement	Standard	Type of standard
Montreal Protocol	Targets and timetables for reducing use of ozone-depleting substances	Numerical
NOx Protocol	Targets and timetables for limiting emissions of NOx	Numerical
Basel Convention	Notification system to regulate transboundary movement of hazardous wastes	No measurable standard set
London Dumping Convention	Permit system and numerical limits to regulate primarily ships' dumping at sea wastes that are generated on land	Procedural and numerical
MARPOL	Design, construction, and operation standards for ships; numerical limits on discharge of oil	Procedural and numerical
CITES	Permit system and numerical limits to regulate trade in endangered species	Procedural and numerical
International Whaling Convention	Permit system, operation standards for whaling ships, and annual quotas on the whale harvest	Procedural and numerical
International Tropical Timber Agreement	Voluntary guidelines to improve management of internationally traded tropical timber	No measurable standard set

Two agreements, the Montreal Protocol and the NOx Protocol, have set numerical targets for reducing the use or emission of the controlled substances and allow nations flexibility in deciding which process or control scheme they will use to meet the targets. The Montreal Protocol provides further flexibility by setting different timetables for developed and developing countries to achieve designated reductions in ozone-depleting substances. Similarly, the NOx Protocol provides parties with flexibility by allowing them to choose 1987 or any previous year as a baseline for limiting their NOx emissions.[1]

Four other agreements—the London Dumping Convention, CITES, MARPOL, and the International Whaling Convention—include both procedural requirements and numerical limits. Under the London Dumping Convention, parties establish permit systems to regulate the dumping of

[1] The NOx Protocol allows parties this choice to give credit to those that had taken steps to reduce their emission levels prior to 1987. The United States, for example, has selected 1978 as its base year.

wastes and other matter. The convention categorizes substances in different appendixes depending on the nature of the substances and the amounts that can be dumped. Similarly, CITES establishes a permit system to regulate trade in wildlife. Parties can agree to move a species from appendix II, which lists species that can be traded under nationally set export quotas, to appendix I, which lists species that cannot be traded at all. MARPOL requires parties to meet numerical limits on the discharge of oil into the sea. Under this agreement, parties must also follow specific procedures covering the design, construction, and operation of ships, including the practices for disposing of wastes. The International Whaling Convention contains specific procedures for operating whaling ships and for reviewing permits to harvest whales for scientific purposes. Parties to the convention can set annual quotas on the number of whales harvested for commercial purposes or aboriginal subsistence. Using this means, the parties established a ban on all commercial whaling, effective in 1986, a moratorium that was still in effect at the time of our review.

The remaining two agreements—the International Tropical Timber Agreement and the Basel Convention—have not defined measurable performance standards. Parties to the International Tropical Timber Agreement have adopted as an objective that by the year 2000 all trade in tropical timber come from "sustainably" managed forests, but parties have not defined "sustainable" management for the purpose of compliance; instead, they have adopted a general set of principles for sustainable management that may be used by nations in developing their own guidelines or standards. Beyond this, the International Tropical Timber Organization has convened a panel of experts to develop possible methods of defining and measuring sustainable forest management and to develop a reporting format. The parties intend to discuss these issues.

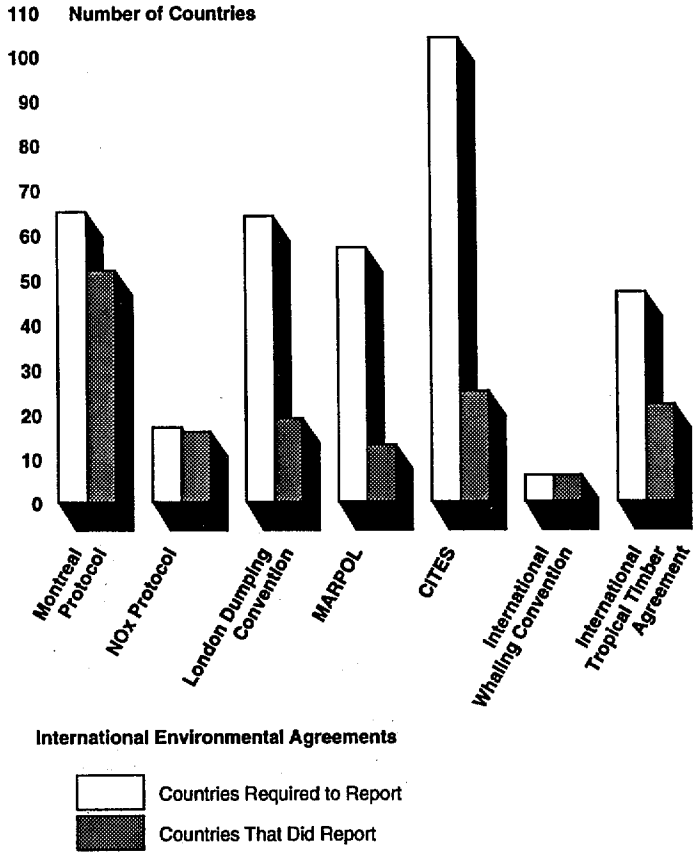
Because the Basel Convention has only recently been developed, nations are still in the process of defining guidelines for managing hazardous wastes. After the convention enters into force, national authorities will only allow the transport and disposal of hazardous wastes—listed in the convention—on the condition that they are managed in an "environmentally sound" manner and disposed of in "adequate" facilities. Although the convention requires parties to establish a notification system to regulate the transboundary movement of hazardous wastes, the convention does not set a measurable performance standard defining environmentally sound management or adequate disposal. Nations have agreed to establish a working group to develop technical guidelines on environmentally sound management. The parties agreed to consider at their

first meeting the working group's suggestions and to eventually adopt guidelines.

Parties' Reporting Has Often Been Late and Incomplete

Of the seven agreements that have entered into force and therefore require parties to report relevant information to the secretariats, three agreements—the Montreal Protocol, the NOx Protocol, and the International Whaling Convention—have relatively high rates of reporting, as shown in figure 2.1. That is, the majority of parties to these agreements had submitted required information as of the secretariats' most recent reporting periods. In the case of the Montreal Protocol, however, close to half of the reports were incomplete. For the other four agreements, reporting in general is a problem, with 47 percent or fewer of the parties providing required information. According to some secretariat officials, without these reports it is difficult to assess parties' compliance with the agreements and to determine the effectiveness of the agreements, and, in some cases, to target assistance to countries that need help in implementing the agreements. Although there may be other sources of information available from environmental groups, other NGOs, or governments, the reports submitted by countries are the only formal source of information available to all parties. Information submitted by parties to the International Tropical Timber Agreement, while not used to assess compliance with the agreement, is nevertheless useful for assessing the world tropical timber economy.

Figure 2.1: Reporting Status of International Environmental Agreements



Note: Figure reflects the most current data available at the time of our review and conveys the reporting status as of dates from February 1990 to January 1991, depending on the agreement. The number of parties required to report is sometimes lower than the number of parties listed in chapter 1 as ratifying the agreements because that chapter conveys ratification as of dates from November 1990 to November 1991. For the Montreal Protocol, the information to be reported was the consumption of controlled substances in 1986; for the NOx Protocol, emissions in 1987 or any previous year; London Dumping Convention, dumping permits issued in 1987; MARPOL, violations and penalties imposed in 1989; CITES, import and export certificates issued in 1989; Whaling Convention, whale harvests in 1989; Tropical Timber Agreement, data on trade in tropical timber in 1990.

Source: GAO's analysis of data from secretariats.

Montreal Protocol

As shown in figure 2.1, as of October 1990, 52 of the Montreal Protocol's 65 parties, or 80 percent, had responded to the requirement for reporting data on consumption, which will be used to establish baselines. The reporting countries account for approximately 90 percent of the worldwide consumption of the controlled substances. But while this reporting rate is relatively high, it is important to point out that just 29 of the 52 reporting parties submitted complete data, although these 29

parties account for 85 percent of the worldwide consumption. Sixteen of the reporting countries provided incomplete data, and seven reported that they had no data. Under the agreement, national consumption data are needed not only to determine compliance with the protocol's reduction targets, but also to identify those countries that qualify for financial and technical assistance. This assistance is provided to developing countries with low levels of consumption in order to help them phase out their use of ozone-depleting substances.

Concerns about the lack of complete reporting led the parties to the Montreal Protocol to establish in June 1990 the Ad Hoc Group of Experts on the Reporting of Data. The group found several reasons for incomplete reporting: Some countries do not have the financial and technical resources needed to gather the required data. In some cases, developing countries that reported they had no data available asked for technical assistance from the secretariat to help collect the data. In addition, some countries have not been able to use customs records to track imports and exports of the substances controlled under the agreement because the customs tracking system does not distinguish among individual substances. Finally, data on the controlled substances are often not given to customs officials because the importing companies treat the data as confidential.

NOx Protocol

Although the NOx Protocol did not enter into force until February 1991, 16 of 17 parties, or about 94 percent, submitted 1990 reports, which included baseline emission levels of NOx. These reports fulfilled reporting requirements under the umbrella convention of the NOx Protocol, the 1979 Long-range Transboundary Air Pollution Convention. Baseline data are essential for determining in the future whether parties limit their NOx emissions as called for under the protocol.

Compliance with reporting requirements is high because, among other reasons, parties generally have the capacity to report. Unlike for most of the other agreements we reviewed, the NOx Protocol's parties mostly are European countries with either developed or reforming economies; none of the 17 parties is a developing country. The parties generally have the administrative structures, such as reporting stations, needed for data collection and reporting. Although some Eastern European countries still require technical assistance, these nations want to demonstrate their commitment to meet the protocol's requirements, according to a secretariat official.

International Whaling Convention

Because a ban on commercial whaling has been in effect since 1986, only those countries that harvest whales for aboriginal subsistence or scientific purposes are required to report under the International Whaling Convention. As shown in figure 2.1, of the six countries required to report on whale harvests in 1989, all submitted complete information on the number and types caught.

London Dumping Convention

As shown in figure 2.1, 19 of 64 parties to the London Dumping Convention, or about 30 percent, reported on the number and types of dumping permits they issued in 1987. Of those reporting, 17, or 90 percent, were industrialized countries, which, secretariat officials claim, are among the most important parties for meeting the goals of the convention. However, as of April 1990 no reports had been submitted by 14 industrialized countries, including the United States, and by 31 of the 33 developing countries that are parties. According to secretariat officials, the United States submitted its report in March 1991.

According to secretariat officials, a variety of reasons account for the absence of reports from industrialized countries, including difficulties in assembling information from numerous offices and the higher priority given to other activities. Among developing countries, reporting problems generally occur because these countries do not have the financial resources, infrastructure, technology, and trained staff needed to fully comply with the convention's requirements, including the reporting provisions. An April 1990 report prepared by the International Maritime Organization (IMO), which acts as the secretariat for the convention, pointed out that inadequate reporting by parties has resulted in a lack of confidence in the effectiveness of the convention.

MARPOL

Many nations—both developed and developing—have not complied with MARPOL's annual reporting requirements. As shown in figure 2.1, only 13 of 57 parties (including 11 of the 27 industrialized countries), or about 23 percent, submitted reports summarizing 1989 violations and penalties imposed. Countries that reported the required information account for only about 27 percent of the world's gross shipping tonnage. Moreover, the two nations that together account for approximately 20 percent of the world's gross shipping tonnage did not submit 1989 reports. Although not shown in figure 2.1, the response rate for two other reporting requirements has also been low: As of October 1990, only 59 percent (36 of 61) and 41 percent (25 of 61) of the parties had

reported on the availability of reception facilities in ports for oily wastes and chemical wastes, respectively.

According to secretariat officials, in general countries have not reported because they lack the financial and technical resources needed to implement the agreement. According to an advisory group on implementation problems, many countries lack trained personnel to implement MARPOL's provisions. A secretariat official explained, for example, that one developing country has only one government officer and two consultants to inspect ships. Many countries also cannot afford to install the required port reception facilities and cannot, by the reporting deadline, collect, compile, and report the necessary data from possibly numerous and geographically dispersed ports. However, without more complete reporting, it is difficult for the secretariat, according to one official, to target financial and technical assistance to those countries most in need. In the case of developed countries, reporting may be given a lower priority and fewer resources than other responsibilities of the designated national authority.

CITES

As shown in figure 2.1, 25 of 104 parties to CITES, or about 24 percent, submitted by the reporting deadline the required annual reports summarizing their 1989 trade in listed species. Of the developed countries that are parties to CITES, only 10 of 26, or 38 percent, met the reporting requirements; of the developing countries, 15 of 78, or 19 percent, reported. According to secretariat officials, most parties either submit reports that are late, incomplete, or in the wrong format, or do not submit any report at all.

According to a 1989 report on the implementation of CITES prepared for the secretariat, these types of reporting problems occurred throughout the 1980s.[2] For example, from 1981 through 1987, late reports were submitted 4 to 12 months after the deadline, with the average being 8.4 months. Importantly, several nations whose volume of trade is high have submitted reports late. Late and incomplete reporting limits the ability of the secretariat to both identify instances of illegal activity and notify parties of those instances, as well as determine which species may be threatened by excessive harvesting and trading.

[2] C.S. Harcourt and R.A. Luxmoore, World Conservation Monitoring Centre, Wildlife Trade Monitoring Unit, The Implementation of CITES in 1986 and 1987 as Demonstrated by the Trade Statistics in the Annual Reports Submitted by the Parties (Cambridge, England: Aug. 1989), p. 5.

In the case of developing countries, poor reporting appears to be related to the capability of these countries to comply with the agreement. Many of these countries cannot fully implement CITES or fulfill their reporting obligations because they lack adequate enforcement legislation and sufficient administrative, technical, and financial resources. According to a U.S. State Department official, some developing countries have "one-person" wildlife departments to implement CITES as well as perform other tasks. Some countries may even lack sufficient resources to print the certificates needed to document and control trade in endangered species, according to a secretariat official. Moreover, according to an October 1989 report prepared by the secretariat, parties may lack enthusiasm for and an understanding of the usefulness of reporting; these factors could contribute to parties' failure to report.

Among developed countries, late or incomplete reporting occurs for several reasons, according to a secretariat official. In some cases, the administrative body responsible for submitting data to the secretariat may find it difficult to get all necessary records from customs officials. In addition, the volume of trade may be very high in these countries, and there may not be sufficient personnel to complete the reports.

International Tropical Timber Agreement

Although not used to measure compliance with the agreement, reports submitted by parties to the International Tropical Timber Agreement allow for an overall annual assessment of the world tropical timber economy, including environmental aspects. According to a secretariat official, only 22 of 47 parties, or 47 percent, submitted by the official deadline data on their harvesting and trading of timber in 1990 and on their projected harvesting and trading in 1991. Most of those reporting are tropical timber importers. Even though approximately half of the parties reported, a secretariat official noted that of the reports received on time, only a few were complete. Many reports included inaccurate figures, regardless of whether or not the reports were complete. Some developing countries did not report because they lack the resources and information networks to develop reliable data on timber trade, according to a U.S. Commerce Department official.

Secretariats Generally Do Not Verify or Assess Compliance

Although the secretariats to the agreements we reviewed are required to collect and distribute information that parties report about implementation, they generally do not have the authority to monitor implementation by verifying information submitted to them or independently assessing compliance. While some secretariat officials believe that on

the basis of existing information, they have a broad view of overall compliance, only one agreement—CITES—grants the secretariat specific authority to assess compliance and provides a formal mechanism for doing so. Because of their restricted roles, secretariats are small organizations with limited resources. Even operating within the mandate the parties have provided, some secretariats, according to their officials, have been funded insufficiently to allow them to carry out assigned duties or undertake activities that could improve implementation.

Secretariats Have Limited Authority

As established by the parties to the agreements, the role of secretariats generally is to help implement agreements by coordinating and facilitating the collection and exchange of information and providing some technical assistance or guidance. All of the agreements in force call on secretariats to compile information submitted by the parties and prepare and distribute periodic (generally annual) summary reports.[3]

To fulfill this role, secretariats have taken steps to encourage parties to report data as required. For example, most of the secretariats have provided parties with standardized formats to facilitate the reporting process, and most periodically call on parties to report required information. Moreover, at various times, most of the secretariats have distributed lists of nonreporting parties in order to generate peer pressure to stimulate future compliance with reporting provisions.

The CITES secretariat goes somewhat beyond these measures to analyze the information countries report, in order to detect threats to wildlife and possible violations. Through a contractual arrangement with the Wildlife Trade Monitoring Unit—a private organization based in Cambridge, England—the secretariat analyzes the data it receives and publishes reports detailing violations of the convention. In the case of particularly egregious violations, the secretariat may recommend that parties cease trading with a particular country. According to a secretariat official, these reports have led parties to apply more pressure on one another to comply with CITES and have helped to ensure that parties are responsive to requests for information.

[3] After the Basel Convention enters into force, the secretariat will be required to prepare and transmit reports based on information submitted by the parties.

However, secretariats generally do not verify the information received or otherwise assess compliance. The London Dumping Convention secretariat, for example, publishes an annual report on the types and numbers of dumping permits issued, but the secretariat does not independently verify data from parties, and the reports contain few conclusions about compliance. Similarly, the MARPOL secretariat publishes annual reports summarizing data on the inspection of ships and violations found, but does not verify information reported by parties.

Despite the low rates of reporting and secretariats' lack of authority to verify information and independently assess compliance, officials of some secretariats believe that they have enough information to detect any major implementation problems. Secretariat officials with whom we spoke stressed that they are not expected to act as monitors and that they have neither the authority nor the resources to act in that capacity. Instead, most secretariat officials view themselves as information clearinghouses and facilitators.

Secretariats Have Limited Resources

In conjunction with their restricted roles, secretariats have limited and often unstable funding. As shown in table 2.3, the secretariats of the eight agreements we reviewed are small organizations, with staffs of 4 to 20 people and annual budgets of less than $1 million to $3 million in 1990.

Generally, each secretariat is funded by voluntary financial contributions from parties and/or by resources apportioned by a related parent organization, such as the United Nations Environment Program (UNEP), the United Nations Economic Commission for Europe, or IMO. It is important to note that these parent organizations themselves operate largely on financial contributions from member nations.

Table 2.2: Staffing and Funding for Secretariats of International Environmental Agreements, 1990

U.S. Dollars in millions

Agreement	Staffing[a]	Funding	
		Amount	Major sources
Montreal Protocol	4.0	$2.30	Parties' contributions and UNEP
NOx Protocol	7.5	1.83[b]	United Nations Economic Commission for Europe
Basel Convention	4.0	0.68	Nations' contributions and UNEP
London Dumping Convention	5.0	0.76	IMO
MARPOL	20.0[c]	3.03	IMO
CITES	18.0	2.46	Parties' contributions
International Whaling Convention	13.0	1.31	Parties' contributions
International Tropical Timber Agreement	20.0	2.10	Parties' contributions

Note: The staffing and funding figures shown are for calendar year 1990, except for the International Whaling Convention. The figures for this convention are for its fiscal year (Sept. 1990-Aug. 1991). Funding figures represent either estimated or actual funds received.

[a]Staffing figures include administrative and clerical personnel and any part-time employees.

[b]The calendar year 1990 budget for the Environment Program of the Economic Commission for Europe was about $1.83 million, a portion of which was used to fund secretariat services for the Air Pollution Convention and its protocols, including the NOx Protocol. The figure shown does not include funding for overall administration and conferences.

[c]An official of the MARPOL secretariat, a subunit of IMO, estimated IMO's resources (staffing and funding) devoted to administering the agreement. Though the secretariat has only three permanent employees, the official estimated that IMO provided an additional 17 staff years of services.

Source: GAO's analysis of data from secretariats.

In the case of three of the agreements we reviewed—the London Dumping Convention, MARPOL, and CITES—secretariat officials believe that funding is not adequate for the limited purposes for which the secretariats were created. IMO, for example, has experienced funding shortages over the last several years because not all members have paid their contributions. As of May 1991, IMO had received only 48 percent of the contributions pledged for 1991, which were due January 1, 1991. As a result, secretariats for the London Dumping Convention and MARPOL have had to reduce the technical assistance provided to developing countries because fewer trips can be made to those countries. Further, according to a London Dumping Convention secretariat official, IMO has been unable to hire two additional officers needed to help implement the convention. Similarly, CITES secretariat officials told us that parties have never approved a budget with sufficient funds to cover all of the activities necessary to implement the agreement. These officials explained,

for example, that parties regularly have not approved funding requested by the secretariat for studies to help determine whether certain species should be protected under CITES and for certain technical assistance.

Secretariat officials for the five other agreements told us that while their organizations generally have not had any major funding shortfalls, in some cases, funding for their required activities has not been stable. In those cases, parties' contributions were sometimes incomplete and late, and funds had to be obtained from alternative sources. The secretariats for the Montreal Protocol and the Basel Convention, for example, periodically have received additional funds from UNEP to compensate for incomplete contributions from parties. But according to UNEP's Executive Director, those secretariats cannot continue to rely on UNEP for financial support; rather, parties must begin honoring their commitments to fund the secretariats. Also, because of shortfalls in contributions from parties, the International Whaling Commission has used reserve funds to continue assessing whale populations. According to the U.S. State Department, the instability of funding caused by countries' (including the United States') late payments is a major problem for the International Tropical Timber Organization.

Conclusions

While the international environmental agreements we reviewed generally require parties to submit information that can be used to measure compliance, there is not a comprehensive view of compliance because often the information is late, incomplete, or not submitted at all. A variety of reasons seem to account for poor reporting among developed countries, but three that recur are difficulties in assembling information from disparate sources, a low priority given to reporting, and insufficient resources devoted to it. These reasons appear to apply to developing countries as well, but in these countries, poor reporting is more widespread and is part of a larger and more serious problem related to their financial and technical capability to implement the agreements.

However, even if reporting by parties were better, the organizations responsible for administering agreements—the secretariats—still would have insufficient authority to verify the information reported or to independently assess parties' compliance. Moreover, secretariats currently are small organizations and do not have the resources that would be necessary for these tasks.

Although most of the secretariat officials believe they have a general sense of compliance, or at least of major problems, there is a growing sense within the international community that more systematic monitoring is warranted, given the seriousness of international environmental problems and the high costs of correcting or preventing them. In chapter 3, we present an overview of some of the measures that have been proposed to improve the monitoring and implementation of international environmental agreements.

Measures Have Been Proposed to Strengthen Monitoring and Countries' Capacity to Implement Agreements

Because of the perceived growing importance of global environmental problems, a number of measures have been proposed to strengthen international oversight of the implementation of international environmental agreements through improving information. While we plan to evaluate such measures further in a future report, we describe here a number of relevant proposals and precedents. Among them are the provisions for monitoring and review in other types of international agreements and the activities of their administering organizations, such as the International Labor Organization (ILO). Some observers have suggested that public and private interest groups, or nongovernmental organizations (NGO), be given a more formal role in the monitoring process. Finally, in recognition that in many instances the incapacity to comply with agreements is a serious underlying problem, some efforts have been undertaken to provide developing countries with greater financial and technical assistance.

Many Believe Oversight Deserves Greater Emphasis

Within the last couple of years, United Nations officials, other international experts, and the U.S. International Trade Commission have suggested that the monitoring of compliance with international environmental agreements now deserves greater emphasis and attention. Historically, nations have conceded some of their sovereignty to an international organization and subjected themselves to public review only when dealing with issues of great international importance, such as arms control or nuclear proliferation. According to a number of observers, international environmental concerns, such as global warming, have now assumed a similar urgency, so nations' relevant actions warrant closer international scrutiny. Some experts also point out that because the costs to implement international agreements may be very great, nations may be more willing to open up their actions for review in order to ensure that implementation is equitable and that all parties are honoring their commitments. As a result, consideration of methods for strengthening monitoring has been proposed for the agenda of the 1992 United Nations Conference on Environment and Development. According to officials from some secretariats to the agreements we reviewed, parties have begun to express an interest in examining more effective means of monitoring implementation. For example, a working committee of members of IMO, which serves as the secretariat for the London Dumping Convention and MARPOL, has begun considering means to more effectively monitor implementation of IMO conventions.

One proposal to increase monitoring was suggested by the Executive Director of UNEP at the May 1991 meeting of the organization's Governing Council. Noting that verification of implementation is a potentially powerful way to enhance environmental protection through juridical means, the Executive Director's report proposed to the Governing Council the possibility of creating an Inter-Secretariat Coordination Committee. The committee would, among other things, evaluate and report to the Governing Council on means of improving the verification mechanisms and practices under environmental agreements. The Governing Council could then include the committee's conclusions in its reports to the United Nations General Assembly. The proposal also suggested that the Governing Council consider inviting parties to establish monitoring mechanisms in cases in which agreements themselves do not provide for such mechanisms. According to the U.S. State Department, the Governing Council deferred action in favor of leaving the initiative for consideration during preparatory meetings for the 1992 United Nations Conference on Environment and Development.

Another suggestion for increasing the quality and quantity of information available on the implementation of international environmental agreements was made by the U.S. International Trade Commission. Responding to a request from the Senate Committee on Finance that it suggest a method for periodically evaluating current and future environmental treaties, the Commission, in a January 1991 report, noted that there is no single source of information on the coverage or effectiveness of international environmental agreements. The Commission therefore recommended that the U.S. government prepare a report that would include information on participation in and compliance with each of the environmental agreements to which the United States is a party, as well as a country-by-country assessment of the agreements covered.[1]

[1] International Agreements to Protect the Environment and Wildlife, U.S. International Trade Commission, Report to the Committee on Finance, United States Senate, on Investigation No. 332-287 Under Section 332 of the Tariff Act of 1930, Publication No. 2351 (Washington, D.C.: Jan. 1991).

Mechanisms Used by Other International Agreements May Offer Models for Monitoring Implementation

Some experts have suggested that environmental agreements be modeled after other types of international agreements that provide for monitoring and review, such as those covering labor, human rights, the production of nuclear materials, and trade. As with environmental agreements, parties to these other agreements must periodically report on compliance. However, these other international agreements also require that additional steps be taken to verify or obtain information, generally through independent reviews of the data reported by countries, visits to or inspections of relevant sites, hearings, and complaint procedures (see table 3.1). Although the public dissemination of information and peer or public pressure continue to be the means to encourage compliance, these additional steps offer the possibility of increasing the amount and quality of information needed to do so.

Table 3.1: Selected Mechanisms Used by International Organizations to Monitor Compliance

	Monitoring mechanisms			
International organization	**Independent review of reports countries submit**	**Visits to countries/on-site inspections**	**Hearings**	**Complaint procedures**
ILO	Worker and employer representatives review and comment on reports countries submit. ILO staff analyze reports. ILO's Committee of Experts prepares written analysis of reports and other data.	Not applicable	ILO's Committee of Experts presents its analysis and other data to the Conference Committee. If a party appears to have compliance problems, it may be requested to testify and respond to complaints lodged against it. The results of these hearings are distributed at the annual conference of the parties.	ILO reviews complaints from workers, employers, and governments to determine if a party is in violation.
United Nations Center for Human Rights	The Human Rights Committee, composed of independent experts, reviews information countries report on compliance.	The Commission on Human Rights, a designated group under the United Nations Economic and Social Council, can conduct fact-finding missions within nations being investigated for violations.	The Human Rights Committee conducts hearings on information countries report and invites countries to testify.	The Commission on Human Rights investigates complaints of human rights violations.
International Atomic Energy Agency	Not applicable	The Agency's team of trained experts inspects nuclear facilities.	The team's results are reported to and reviewed by the Agency's Board of Governors.	Not applicable
General Agreement on Tariffs and Trade (GATT)	To determine compliance, GATT's Trade Policies Review Division staff examine information countries report.	GATT's Trade Policies Review Division staff visit countries.	The GATT Council reviews and discusses the results of the Trade Policies Review Division's examinations.	Through the GATT secretariat, parties may request a consultation with countries they believe are violating the agreement. If the consultation fails, the parties may resort to a panel that hears disputes.

International Labor Agreements

ILO, a specialized agency of the United Nations, coordinates the development and implementation of international labor conventions intended to safeguard workers' rights and ensure safe workplaces. A part of the United Nations system since 1946, ILO is unique in that it includes representation of workers and employers, as well as the governments of 150 countries. Its permanent secretariat is the International Labor Office, which oversees more than 160 conventions. With annual work-years of approximately 1,740 and an annual budget of more than $165 million,

the ILO secretariat is considerably larger than those that administer environmental agreements.

The ILO Constitution requires that member states regularly submit reports to representatives of workers and employers for comments. An independent body appointed by ILO—the Committee of Experts on the Application of Conventions and Recommendations—then analyzes compliance by reviewing the reports and accompanying comments, as well as an analysis of countries' reports that is prepared by the secretariat's Standards Department, which has about 60 staff members. The Committee of Experts presents its findings in a publicly distributed annual report to the Conference Committee, which is composed of representatives of employees, employers, and governments.

The Conference Committee holds a hearing on the annual report, during which government representatives from nations with identified compliance problems are invited to testify. Representatives from about 50 countries are usually requested to appear annually. While a few governments have failed to cooperate, most have sent representatives when requested, according to an official from the Standards Department. The results of these hearings are then summarized and distributed at the annual conference of the parties. If ILO requests that a country institute a change as a result of this process, the organization also offers to provide technical assistance in order to enable the country to comply. This step, according to secretariat staff, is important in encouraging countries to institute changes.

In addition to its annual review and hearing process, ILO also hears complaints made by employees, employers, and governments against parties and determines if they are complying with applicable conventions. The Governing Body, which supervises the work of the International Labor Office, can publish these complaints and the results of any determinations.

Human Rights Agreements

Like international labor agreements, human rights agreements also mandate some assessment and public disclosure of nations' performance. These tasks are performed under the auspices of the United Nations Center for Human Rights. The Center, which had an annual budget of approximately $8.7 million in 1990 and a staff of 115, serves as a secretariat for the Human Rights Committee and the Commission on Human Rights. The Human Rights Committee, composed of 18 independent

experts elected by parties, is responsible for determining whether individual rights protected under the International Covenant on Civil and Political Rights and its optional protocol have been violated. The Commission on Human Rights, the group under the United Nations Economic and Social Council, is responsible for determining whether any nations have consistently violated human rights under a number of different agreements. Close to 90 countries were participating in the International Covenant and 45 in its protocol as of June 1989.

The Human Rights Committee reviews the information countries report and holds hearings, during which representatives of parties suspected of violations are asked to testify. Under the optional protocol to the International Covenant, the Human Rights Committee may receive complaints from individuals in ratifying countries and determine whether violations have occurred. The Committee's final decisions are then made public.

Responsible for determining if countries exhibit a consistent pattern of human rights violations, the Commission on Human Rights also has the authority to receive and investigate complaints. As part of its investigations, the Commission may make fact-finding visits to nations and may report its findings to the United Nations Economic and Social Council.

Nuclear Materials Production Agreements

Similarly, the International Atomic Energy Agency uses several monitoring mechanisms to determine whether nuclear facilities and materials are being used for peaceful purposes and not for weapons production. Two conventions—the Treaty on the Non-Proliferation of Nuclear Weapons and the Treaty for the Prohibition of Nuclear Weapons in Latin America—use the Agency's program for monitoring nuclear materials production. Under this program, parties agree to make their nuclear facilities available for inspection and to establish a national accounting system for nuclear materials. In 1990, the Agency, with 112 member nations, had an annual budget of $178.7 million and a staff of 2,175, with approximately $58.6 million and 479 staff dedicated to the program.

To facilitate monitoring the amounts of nuclear materials produced, the Agency requires parties to maintain records and submit accounting reports. Agency staff also make on-site inspections to verify the accuracy of accounting reports submitted by national authorities. In 1990, the Agency had approximately 208 inspectors to perform this function. On the basis of these inspections, the Agency prepares for its Board of

Governors an annual Safeguards Implementation Report disclosing whether any nuclear facilities or materials have been used for weapons production.

International Trade Agreements

GATT, which was established to promote free trade, also includes several mechanisms for monitoring compliance among its 122 parties. In 1990, the GATT secretariat had an annual budget of $42.6 million and over 400 staff.

In 1989, GATT parties established the Trade Policies Review Division, with a staff of 20, to periodically assess parties' trade policies. In addition to examining reports on national compliance submitted by GATT parties, Division staff visit countries to verify compliance. The staff then prepare a compliance report on each country. All reports—both those prepared by parties and by the Division—are sent to GATT's executive body, the GATT Council, for review and discussion. While the GATT Council cannot make binding recommendations, the results of its discussions are widely circulated in order to generate peer pressure for countries to modify their practices.

GATT also has a process for hearing complaints from parties. Under this process, any party that believes another party is violating the agreement can file a complaint and request a consultation with that party to try to resolve the dispute. If the alleged violator does not reply to the request for a consultation, or if the consultation is unsuccessful, the complainant may request the establishment of a dispute panel to examine the evidence. The panel issues a report stating whether or not the party violated the agreement. Subsequently, the panel's report must be approved by all parties to GATT, including the parties to the dispute.

A bill introduced in the U.S. Senate in January 1991 proposes using the existing framework of GATT to monitor and enforce international environmental agreements.[2] The bill is intended to require the establishment, either within GATT or separately, of a mechanism to monitor and enforce compliance with international environmental agreements that use trade measures. Specifically, the bill would require the United States Trade

[2] Senate bill S. 59, the General Agreement on Tariffs and Trade for the Environment Act of 1991, was introduced by Senator Daniel Patrick Moynihan on January 14, 1991.

Representative to report to Congress, within 2 years of the bill's enactment, on, among other things, the Representative's efforts to establish a GATT for the environment.[3]

Some restrictions on international trade have long been recognized as being permissible. For instance, article XX of GATT allows parties to adopt or enforce measures that may restrict trade if they are for environmental, health, or safety purposes. GATT parties are obliged to show, however, that such standards were established for the permissible reasons only and that the standards have been applied in a nondiscriminatory way.

Further, to ensure that domestic standards are not used as obstacles to international trade, the Agreement on Technical Barriers to Trade (Standards Code), signed by a subset of the parties to GATT, entered into force in 1980. The code requires that parties either use internationally recognized standards or circulate any proposed alternative standards to all parties. If a dispute should arise concerning a domestic standard, the code requires that a panel of scientific experts be established to settle the dispute.

In recent years, parties to GATT have shown an increasing interest in the relationship between trade and the environment. In December 1990, for example, members of the European Free Trade Association, including Austria, Finland, Iceland, Norway, Sweden, and Switzerland, requested that GATT's Working Group on Environmental Measures and International Trade be convened, with an "updated mandate" to provide a forum for discussing the links between trade and environmental policy. According to a GATT official, however, developing countries objected to the request because of their concerns that efforts to link the environment and trade will ultimately lead to increased environmental requirements and increased costs to meet the requirements. Nevertheless, after extensive negotiations, agreement was reached in October 1991 to convene the Group with the understanding that its agenda would initially be limited to consideration of the following issues: (1) trade provisions contained in existing multilateral agreements, (2) the transparency of national environmental regulations likely to affect trade, and (3) the effects that new packaging and labeling requirements aimed at protecting the environment could have on trade.

[3] Despite the bill's apparent multilateral approach, it would also require the Trade Representative to take unilateral action against any nation whose acts, policies, or practices diminish the effectiveness of any international environmental agreement.

A More Formal Role for Nongovernmental Organizations Has Been Suggested

Since the 1972 Stockholm Conference, NGOs have played an important role in providing information on compliance with international environmental agreements. Representatives of environmental NGOs are active, for example, in attending and submitting documents to meetings of the parties of the Montreal Protocol. Some parties include members of NGOs in their delegations attending meetings of the International Tropical Timber Organization. At times, NGOs have also identified and made public information about parties that have not fully implemented MARPOL. The International Chamber of Shipping, for example, a group representing major shippers, has conducted surveys disclosing the lack of, and problems with, port reception facilities worldwide. Similarly, two other NGOs, TRAFFIC and the International Union for the Conservation of Nature and Natural Resources, have independently monitored CITES' implementation by conducting studies of nations' permit systems and studying species to determine whether or not they should be protected under CITES.

Generally, while NGOs have played an active role, their involvement in monitoring international environmental agreements has been informal. Some observers have suggested, however, that NGOs could play a more formal role in the international debate on environmental problems. In particular, in its 1987 report, the World Commission on Environment and Development recommended that in all relevant intergovernmental organizations, governments establish or strengthen procedures for official consultation with NGOs.[4]

Some NGOs themselves have proposed that they be granted a more formal role in implementing international environmental agreements. According to representatives from several NGOs, formally incorporating these organizations into the monitoring process would provide a mechanism for verifying the information countries report and would increase public access to information on compliance. On the other hand, some of these NGO representatives told us that their organizations might not have the resources necessary to actively monitor implementation. Further, even if sufficient resources were available, these representatives noted that some process would have to be established for determining which NGOs would be given formal monitoring roles.

[4] Our Common Future, World Commission on Environment and Development (Oxford: 1987), p. 328.

Nations' Capability to Implement Agreements Could Be Strengthened

Even those who have advocated additional monitoring recognize that it could be unpalatable to many nations and could discourage them from signing agreements in the future. Consequently, a number of observers have recommended that any efforts to increase monitoring be accompanied by additional incentives for nations to comply. Providing financial and technical assistance, for example, or allowing some countries additional flexibility in implementing an agreement might serve to increase nations' capability and willingness to comply.

In addition, as noted in chapter 2, a fundamental obstacle to reporting, and to implementing environmental agreements generally, is the lack of financial and technical resources in developing countries. Over the last 15 years or so, this has come to be recognized as a problem, and international efforts have been made to help developing countries strengthen their environmental institutions and administrative systems. Since the mid-1970s, when the United Nations General Assembly called on UNEP's Executive Director to provide technical assistance to developing countries, UNEP has assisted 41 developing countries in creating environmental legislation and administrative systems.[5] In addition, in order to provide donors an opportunity to earmark funds to assist specific countries or to go to certain projects, UNEP established a Clearinghouse Unit in 1983, according to a UNEP official.

To various degrees, the texts or provisions of the agreements we reviewed address the issue of financial and technical assistance. The NOx Protocol, for example, states that parties should facilitate the exchange of technical information and assistance. Similarly, the London Dumping Convention calls for parties to support one another's requests for technical assistance. In contrast, the Montreal Protocol goes beyond these more general encouragements for cooperation and establishes an interim multilateral fund to help developing countries reduce their use of the controlled substances. As of March 1991, the fund had received $160 million in commitments from 14 developed countries. Once the Basel Convention enters into force, it also may provide for financing training and the transfer of technology.

Another recent effort is the Global Environmental Facility, which provides grants and low-interest loans to developing countries in order to assist them in carrying out programs to relieve pressures on global ecosystems. The Facility, which is jointly run by the World Bank, UNEP, and

[5] New Directions in Environmental Legislation and Administration Particularly in Developing Countries, UNEP, Environmental Law and Machinery Unit (Nairobi: 1989), p. 1.

the United Nations Development Program, began operating in 1991 as a 3-year pilot project with initial commitments of about $1.5 billion. Funding will be used for projects in four areas: protecting the ozone layer, reducing and limiting emissions of greenhouse gases, reducing marine pollution, and preserving biological diversity. Funds for projects related to ozone depletion will be granted only to parties of the Montreal Protocol. Likewise, the Facility gives priority to those projects that facilitate compliance with MARPOL and other agreements governing international rivers, lakes, or seas. Also, funds for preserving biological diversity have been designated for a project to support the enforcement of CITES in selected African countries.

Conclusions

Because of the seriousness of international environmental problems and the costs involved in addressing them, a number of knowledgeable observers have come to believe that measures ought to be adopted that would strengthen the oversight of international environmental agreements. By establishing measurable standards and requiring parties to report on compliance, existing environmental agreements already contain important elements of a monitoring system. However, increasing the quantity and quality of information on compliance will require additional measures, and some that have been proposed merit further consideration. Other international agreements, for example, offer some models for improving information through independent review, site visits, hearings, and other complaint procedures.

At the same time, it is also recognized that some nations may not accept additional monitoring and that additional monitoring might in fact discourage nations from signing agreements. It is also apparent that monitoring alone will not strengthen compliance with agreements unless it is accompanied by the financial and technical assistance needed to improve countries' capacity to comply. Recent measures, such as the Montreal Protocol's multilateral fund and the Global Environmental Facility, may offer models for providing necessary financial and technical assistance in future agreements once more is known about how well these measures work.

Any multilateral efforts to strengthen oversight of environmental agreements will require strengthened international authorities responsible for their implementation. Should nations decide to adopt additional monitoring mechanisms, they will clearly be required to commit far greater resources to support these efforts. These efforts, however, could improve the information available about compliance, and, given the

extent to which the enforcement of agreements depends on information, could ultimately improve compliance with the agreements as well.

Agency Comments on This Report

Both the Environmental Protection Agency (EPA) and the Department of State commented on this report. EPA found the report to be an informative overview of the issues, but raised a number of questions about factors besides monitoring that affect implementation, suggesting that these factors ought to be considered as well. While important and perhaps the subject of GAO's further work, these questions are nevertheless outside the scope of this review.

The State Department took issue with what it believed to be the premise of our report, namely, that incomplete reporting implies less than full compliance. We are not suggesting, however, that incomplete reporting necessarily equates to less than full compliance, but, rather, that the level of compliance is difficult to judge because of incomplete reporting. In the case of developing countries, we point out that incomplete reporting is part of a larger problem related to their financial and technical capability to comply. The remainder of the State Department's comments provided technical corrections and clarifications. These comments, along with those provided by all reviewers, were incorporated into the report where appropriate.

The full texts of EPA's and the State Department's comments, as well as our responses, appear in appendixes II and III.

Organizations Contacted by GAO

United States Government Agencies

Council on Environmental Quality

Department of Commerce:
- International Trade Administration
- National Oceanic and Atmospheric Administration

Department of State:
- Bureau of International Organization Affairs
- Bureau of Oceans and International Environmental and Scientific Affairs
- Office of the Legal Advisor
- Office of the Permanent Representative to the United Nations Environment Program (Kenya)
- U.S. Mission to the United Nations (Geneva)
- U.S. Mission to the European Community (Brussels)
- U.S. Mission to the Organization for Economic Cooperation and Development (Paris)

Environmental Protection Agency (EPA)

U.S. International Trade Commission

Office of the United States Trade Representative

U.S. Coast Guard

U.S. Fish and Wildlife Service

International Governmental Organizations

Commission of the European Communities:
- Environment, Nuclear Safety, and Civil Protection Directorate-General

Organization for Economic Cooperation and Development:
- Environment Directorate

International Whaling Commission

United Nations Environment Program:
- Industry and Environment Office
- Interim Secretariat for the Basel Convention on the Transboundary Movements of Hazardous Wastes and Their Disposal
- Office of the Deputy Executive Director

United Nations Environment Program (continued):
- Office of the Environmental Fund and Administration:
  - Fund Program Management Branch
- Environmental Law and Institutions Unit
- International Register of Potentially Toxic Chemicals
- Oceans and Coastal Areas Program Activity Center
- Terrestrial Ecosystems Branch
- Secretariat for the Convention on International Trade in Endangered Species of Wild Fauna and Flora
- Secretariat for the Vienna Convention and its Montreal Protocol
- Washington, D.C., Office

Other United Nations agencies:
- Economic Commission for Europe:
  - Environment and Human Settlements Division
- International Labor Organization
- International Maritime Organization
- International Tropical Timber Organization
- Secretariat for the General Agreement on Tariffs and Trade
- United Nations Center for Human Rights
- United Nations Conference on Environment and Development
- United Nations Conference on Trade and Development
- World Meteorological Organization:
  - Intergovernmental Panel on Climate Change

Nongovernmental Organizations

- Advisory Committee on Pollution of the Sea (London)
- Center for Marine Conservation (Washington, D.C.)
- Climate Action Network (Brussels)
- Club of Rome (Paris)
- European Environment Bureau (Brussels)
- Greenpeace (Washington, D.C.)
- Humane Society of the United States (Washington, D.C.)
- Institute of Maritime Law (Southampton, England)
- International Chamber of Shipping (London)
- International Union for the Conservation of Nature and Natural Resources (Geneva):
  - Environmental Law Center (Bonn)
- Monitor (Washington, D.C.)
- Natural Resources Defense Council (Washington, D.C.)
- Oceanic Society (Washington, D.C.)
- Resources for the Future (Washington, D.C.)

TRAFFIC International (Cambridge, England)
TRAFFIC (USA) (Washington, D.C.)
World Conservation Monitoring Center (Cambridge, England)
World Resources Institute (Washington, D.C.)
World Wide Fund for Nature (London)

Comments From the Environmental Protection Agency

Note: GAO's comments supplementing those in the report text appear at the end of this appendix.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 15 1991

OFFICE OF
POLICY, PLANNING AND EVALUATION

Mr. Richard L. Hembra
Director, Environmental Protection Issues
Resources, Community, and Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Hembra:

Thank you for the opportunity for the Agency to review and comment on the General Accounting Office (GAO) draft report on compliance with international environmental agreements. The report is entitled "International Environment: International Agreements Are Not Well Monitored". Your November 1 letter to the Administrator asked for a response within 15 days. I appreciate the earlier briefing for the Agency's senior managers and solicitation for their views on this issue.

In the draft report, GAO addresses two separate but closely related issues -- implementation of international environmental agreements, measured in terms of compliance by signatory states with obligations voluntarily assumed under such agreements, and international efforts to verify implementation by monitoring both the level of and quality of compliance with international obligations of signatory states. The draft report makes an excellent contribution to our understanding of these important issues.

One challenge in writing a report with as broad an agenda as the GAO report is adequately addressing all relevant issues. In this respect, the Office of General Counsel believes that the draft report might be improved by giving more attention to factors other than inadequate monitoring which affect implementation of international environmental agreements. While better monitoring may have a positive impact on implementation (perhaps by embarrassing non-complying states into compliance or pointing out gaps in implementation states themselves are unaware of), it is not the only means of improving implementation of international environmental agreements. This point is made in the report, but it could be underscored with a more detailed discussion of other factors affecting implementation.

Chapter 3 ("Measures Have Been Proposed to Strengthen Compliance with Agreements") might be expanded beyond its brief discussion of proposals to strengthen the financial and technical capacity of developing countries to implement international environmental agreements as an incentive for better compliance. It could include an analysis of the various ways in which the eight international environmental agreements covered by the report provide incentives for contracting parties to comply voluntarily with the terms of the agreement. The delayed time frame for developing country compliance in the Montreal Protocol might be one such example. The report might also state that further research is needed into the question of how future international agreements might more effectively encourage voluntary compliance.

In addition to a discussion of incentives for voluntary compliance, the use of sanctions for non-compliance deserves further attention in the report. For example, the report might analyze how trade measures are used in several of the eight international agreements covered by the report to encourage compliance by those who are parties as well as to encourage non-parties to join the agreement. As a general matter, the usefulness of measures denying benefits to non-parties and to parties not in compliance with an international agreement might be examined in greater detail.

Finally, the report might include a discussion of the need to understand better the factors which affect compliance at the national level. If possible, this analysis should provide a brief overview of compliance issues under U.S. law and practice as well as the law and practice in other countries in order to provide a valuable comparative perspective on this topic. At a minimum, the report might mention that there is a need for further analysis in this area, both domestically and in the comparative context.

I appreciate this opportunity to provide these comments and hope that they are useful. I look forward to receiving the final report.

Sincerely,

Thomas E Kelly for

Richard D. Morgenstern
Acting Assistant Administrator

The following are GAO's comments on EPA's letter of November 15, 1991.

GAO's Comments

Recognizing that our report already acknowledges that factors other than monitoring affect the implementation of international environmental agreements, EPA stated that this point could be underscored with a more detailed discussion of these other factors, examples of which the agency provided. We appreciate EPA's suggestions and may examine them further in our future work. However, such an expanded discussion was beyond the scope of this review.

Comments From the U.S. Department of State

Note: GAO's comments supplementing those in the report text appear at the end of this appendix.

United States Department of State

Washington, D.C. 20520

November 29, 1991

Mr. Richard L. Hembra
Director, Environmental Protection Issues
Resources, Community, and
Economic Development Division
General Accounting Office
441 G Street, NW,
Washington, DC 20548

Dear Mr. Hembra:

Enclosed are Department of State comments on your proposed report International Environment: International Agreements Are Not Well Monitored (GAO/RCED-92-43).

If you have any questions, please contact Margaret Shields at (703) 875-6866.

Sincerely,

Larry J. Eisenhart
Associate Comptroller
Office of Financial Management

Enclosure

The State Department appreciates the opportunity to comment on the subject report, which addresses the monitoring of eight key international environmental agreements. The report notes that there have been some calls for adopting measures to strengthen the oversight of such agreements. The premise of the report is that incomplete reporting under these agreements may indicate less than full compliance with their terms.

See comment 1.

The United States attaches major importance to the issue of compliance with environmental agreements. Generally, our view is that questions of compliance with international agreements should be addressed flexibly in the agreements themselves or in arrangements on specific commitments. Since questions of compliance and dispute settlement depend on the parties, the subject matter, the character of the obligations, and the terms of each agreement, we do not believe a rigid or universal approach is the best way to proceed. In this regard, it must be emphasized that there is often an inverse relationship between the intrusiveness of compliance mechanisms and the strength of commitments that states are willing to accept. Thus, it can be misleading to view existing agreements as satisfactory except with respect to their compliance mechanisms. In some cases, were the compliance mechanisms more stringent, the substantive obligations might be weaker or the number of parties would be lower.

See comment 2.

With regard to the UNEP proposal to create an inter-secretariat coordination committee toward this end, the U.S. instead supported the idea of exploratory discussions with the secretariats implementing the various conventions, to determine what common problems of compliance may exist. However, the Governing Council deferred action on compliance on UNEP's part, in favor of leaving the initiative to the UNCED preparatory process--specifically the Working Group on legal and institutional issues.

See comment 3.

See comment 4.

It should also be noted that verifying compliance is not limited to reviewing a country's reporting; a number of other, more informal channels exist to determine this. For example, in the case of the Montreal Protocol, industry in one country might be in a position to know if another country's industry is not adhering to production limits on controlled substances, which have an important commercial value. Further, international NGOs are often a valuable source of information about environmental protection activities in other countries. Thus, it is important not to focus on the question of reporting to the exclusion of other approaches.

See comment 5.

The State Department does not share the view reflected in the report that secretariats should be entrusted with monitoring compliance. This is a function ordinarily retained by the parties, e.g., through a Conference of the Parties or non-compliance committee, and not one given to international civil servants working in a secretariat.

The GAO report correctly points out that in many cases, the secretariats for environmental agreements are very small and perhaps under-funded to fulfill their assigned functions. But this is part of a larger problem of funding these agreements in general, given the typically voluntary nature of contributions. Increased funding for secretariats, while in principle not a bad idea, would have to come from the "program" portion of the agreement: conference costs, travel expenses for developing country delegates, clearinghouse functions, etc.

See comment 6.

With respect to the ITTO, "compliance" takes on a different character and is not generally applicable. The ITTO is a forum for consultation, as the report points out. Members do not take on obligations to comply with normative rules. The only reporting requirement is the annual report on market activities, which deals with an aspect of ITTO's activities largely unrrelated to the environment. The failure of some members to meet the market report obligation is due primarily to a lack of country capacity to respond, not to a policy of non-compliance. The fact that the ITTA has no environmental compliance provision, and that therefore the concept of environmental compliance is not directly applicable to the ITTO, needs to be further clarified (see specific comments below).

The following are specific comments on the GAO report:

See comment 7.

In our view, the paper does not sufficiently distinguish several very discrete concepts: reporting, verification, monitoring, and enforcement.

- "Reporting" constitutes a sharing of information between the parties, using the Secretariat only as a conduit. Generally, the parties report how and to what extent they have exercised their rights/obligations under an agreement (e.g., permits issued). Failure to report or tardiness in reporting means less information to share and therefore ultimately a less effective convention, but is not necessarily indicative of non-compliance with substantive obligations.

- "Verification" is generally associated with compliance, not reporting. It may be appropriate where there is a substantial risk of non-compliance or if the issue of compliance is so sensitive that verification is an acceptable safeguard (e.g. arms control). Verification is best performed by either the parties themselves or by a neutral body created for that purpose. Secretariats, which are generally administrative organs, are not usually appropriate for verification functions. Verification of reporting per se may not make much sense at all.

- The report uses the term "monitoring" quite loosely. Monitoring can connote many things, including the policing of an agreement or simply the technical collection of data. Secretariats by their very nature do not have and should not have the authority to police an agreement; it is the parties that should monitor compliance. Data collection is something best accomplished by expert bodies. The report may be using the term as equivalent of verification, in which case the previous comments apply.

- "Noncompliance" refers to a breach of substantive obligations under an agreement. Most international environmental agreements to not have mandatory provisions for remedying non-compliance, because such provisions touch on sensitive questions of sovereignty and enforcement. In any event, as noted above, it is entirely inappropriate to associate Secretariats acting alone with any role vis-a-vis compliance.

See comment 8.

The report also uses the terms "signatory," "party" and "member" in inconsistent and inaccurate ways. A state that signs a treaty is a "signatory." In the case of most multilateral treaties, however, this is only the first step toward becoming a "party." A mere signatory is not legally bound to comply with the provisions of the treaty. A state undertakes legally binding obligations under the treaty when it fulfills all the formalities necessary to ratify or approve the treaty, together with a sufficient number of other states, and the treaty comes into force. At this point it is a "party" and should no longer be called simply a "signatory." There is no legal category of being a "member" of a treaty, although states can become members of international organizations (such as the United Nations) through becoming a party to a treaty (i.e., the UN Charter).

See comment 9.

We do not agree with the general statement in the background section of the Executive Summary, where it is stated that "because no supranational enforcement body exists, public pressure...is generally the primary mechanism for enforcing multilateral agreements." This statement appears to ignore the role of the parties to an agreement, which, in our view, play the primary role in inducing parties to comply with agreements. Whether through political pressure (e.g., statements at meetings of the parties, diplomatic demarches) or legal pressure (invocation of an agreement's dispute settlement procedures), the parties themselves are the main enforcement vehicle under most agreements.

Chart now on p. 11.
Footnote deleted.
See comment 10.

The chart and footnote on p. 12 are misleading in that they appear to characterize as irregular the U.S. practice of putting necessary implementing laws into place before ratifying an agreement. On the contrary, if a state were to ratify an agreement and only later adopt the necessary implementing laws, it would be putting itself in a possible non-compliance situation during the period before the laws were in place.

See comment 11.

We do not agree with the notion that "a federal agency be designated to periodically evaluate compliance with present and future international environmental agreements." Unilateral action is not necessarily an effective approach to monitoring compliance with multilateral treaties and could be counterproductive. Issues involving monitoring and compliance should be addressed in a coordinated way by the parties to treaties.

See comment 12.

We have the following specific comments with respect to the ITTO:

Reference deleted.

- Page 3, under Parties Reporting: It should be noted that the ITTA does not establish normative reporting requirements. The guidelines for sustainable management of production forests developed by ITTO constitute broad, international principles. The ITTO can encourage, but cannot call for, the development of step-down national guidelines by its members.

Now on p. 20.

- Page 25, para. 2: ITTO guidelines are intended as an international reference standard to national decision-making, other international organizations and public interest groups. While the ITTO encourages their application, the guidelines have no legislative character.

Now on p. 21.

- Page 27, column 2: Insert "internationally traded" before "tropical." ITTO guidelines apply primarily to timber entering international trade (less than 20 percent of all timber). Although they could be broadly applicable or provide some useful examples on domestic trade, this is not their primary purpose.

Now on p. 22.

- Page 29, para. 2: The ITTO is now formally in the process of developing a definition of sustainable forest management applicable in the timber trade context.

Now on p. 32.

- Page 39, para. 1: In the case of the ITTO, the instability of funding due to dues arrearages (including U.S. arrearages) is a major problem.

The following are GAO's comments on the State Department's letter dated November 29, 1991.

GAO's Comments

1. We are not suggesting that incomplete reporting equates to less than full compliance, but rather that incomplete reporting makes it difficult to determine compliance. Nevertheless, in the case of developing countries, we point out that incomplete reporting is part of a larger problem related to these countries' financial and technical capability to comply.

2. Our report does not state or imply that a rigid or universal approach to compliance is appropriate. In fact, chapter 1 specifically recognizes that implementation of agreements depends on the nations' voluntary participation. We recognize that the more stringent the compliance mechanisms, the less willing nations may be to participate in agreements, a point we now make in chapter 1.

3. We incorporated this information in chapter 3 of the report.

4. We clarified our discussion in the executive summary and in chapter 2 of the report to reflect this point and to note that information submitted by countries is the only formal source of information available to all parties. Moreover, we also note in chapter 3 that nongovernmental organizations in some cases now play an important role and could assume an expanded role.

5. While the report takes note of proposals to give secretariats a monitoring role, we have not endorsed this or any of the other proposals identified in our report.

6. We clarified our discussion in the executive summary and in chapter 2 of the report. However, we note that the agreement itself calls for an assessment of environmental aspects of the world tropical timber economy.

7. To the extent we believed necessary, we clarified these terms in our report.

8. We made appropriate corrections throughout the report.

9. We revised our discussion in the executive summary of the report to note that peer pressure—that is, pressure brought by other parties—is an element of the enforcement mechanism.

10. We clarified our discussion in the executive summary and in chapter 1 and corrected the chart to eliminate the implication that it is unusual for a nation to enact national legislation prior to ratifying an agreement.

11. We revised our discussion of a proposal made by the International Trade Commission, which suggests that the U.S. government prepare a report discussing parties' compliance.

12. We made appropriate changes in the executive summary and in chapter 2 of the report.

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C.	Peter F. Guerrero, Associate Director Bernice Steinhardt, Assistant Director Timothy L. Minelli, Staff Evaluator Gesele E. Durham, Staff Evaluator Brian Sexton, Advisor John H. Skeen, III, Reports Analyst
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