
ENVIRONMENTAL SIDE AGREEMENTS TO TRADE TREATIES: A NEW MODEL OF ENVIRONMENTAL POLICY-MAKING?

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As the literature on improving international environmental treaty-making proliferates, this essay discusses whether including environmental conditions in trade agreements in general could be a new model for environmental policy-making. In the end, it is international cooperation and collaboration that lead to better environmental management. It is the contention of this piece that this increased cooperation is better established and developed through regional trade regimes than multilateral environmental agreements.

INTRODUCTION

According to some observers, “it has commonly been assumed that what is necessary to deal with global warming, chlorofluorocarbons (CFCs), and other environmental matters is an international treaty binding all signatories to reductions in levels of harmful emissions or production of which they are a byproduct” (Whalley and Hamilton 1996, 86). Indeed there have been several international efforts to control global and regional pollutants through a system of multilateral environmental agreement (MEA) making, a system most would agree is not perfect. Some of its weaknesses include the lack of enforcement mechanisms, its tendency to produce lowest common denominator solutions as each party bargains

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down the other, and its often ineffectual use of scientific information. Perhaps most disturbing, however, is the lack of demonstrated environmental results. While MEAs proliferate, the reputed environmental benefits associated with them remain unrealized.

An alternative that might produce better international environmental policy could come from the example of the North American Free Trade Agreement (NAFTA) regional trade regime. One could argue, for example, for the replacement or support of the MEA system with a system of regional trade block agreements with explicit environmental and labor standards similar to the NAFTA North American Agreement on Environmental Cooperation (NAAEC).¹ This essay will discuss whether including environmental conditions as part of trade agreements could be a new model for environmental policy-making. Using the NAAEC as a model, the paper will debate the strengths and weaknesses of making environmental policy in the context of a trade regime and attempt to devise a method for evaluating NAFTA's environmental effectiveness. Given the flawed MEA process, is a side-agreement to regional trade regimes more effective than MEAs for certain pollutants? In the end, it is international cooperation and collaboration that leads to better environmental management and this increased cooperation is better established and developed through regional trade regimes than multilateral environmental agreements.

THE NORTH AMERICAN AGREEMENT ON ENVIRONMENTAL COOPERATION

The side agreements on labor and environment negotiated as part of the North American Free Trade Agreement were quite controversial. Proponents argued that without the safeguards afforded by the side agreements, environment and labor standards would converge downwards to those of Mexico, as its Northern trading partners found it increasingly difficult to compete with the *de facto* price advantage of low-cost labor and lax environmental enforcement. In an effort to avoid this result, and under pressure from Congress and environmental groups, the Clinton Administration added the environmental and labor side agreements (Pastor 1993, 20).

The North American Agreement on Environmental Cooperation, signed in conjunction with the NAFTA in 1993 enumerates the general commitments of the parties (Article 2), including the preparation of public reports on the state of the environment in their territory, support of environmental education, and promotion of the use of economic instruments to achieve regulatory goals.² The most prominent feature of

the agreement, however, is its requirement that each signatory country endeavor to enforce its environmental regulations (Article 5). For Mexico this meant enforcing rigorous, previously unenforced, and expensive regulations, or the rewriting of its legislation with the intention of creating enforceable regulations.

Structurally, the agreement establishes a Commission for Environmental Cooperation (CEC) made up of a Council, a Secretariat, and advisory committees. The Council is made up of cabinet-level representatives of the parties; their charge is "strengthening cooperation on the development and *continuing improvement* of environmental laws and regulations" (Article 10,3, emphasis added). The Secretariat is responsible for providing "technical, administrative, and operational support to the council and submit[tal] of the annual program and budget" (Article 11). It also serves as an information clearinghouse for the signatory parties and the public.

The side agreement sets up a dispute settlement process in which any party can request consultations with the offending party. If this fails to reach resolution, the party can then request a special seating of the council. If the council fails to negotiate a resolution, the party can request an arbitration panel to review the matter, and produce and publish a report of their results. The panel can assess a monetary punishment and the complaining party can suspend NAFTA tariff reduction benefits if this monetary punishment is not paid (Article 36). The real strength of using a trade regime over an MEA is the ability to add an enforcement mechanism. When a party pushes a dispute all the way through the dispute resolution process, lack of enforcement of environmental regulations can result in a fine and a type of trade sanction.

Determining that environmental side agreements are environmentally more effective than MEAs requires some degree of confidence in the strengths of these agreements, and a great degree of faith that their weaknesses can be overcome. In the sections that follow, this paper will delineate the strengths and weaknesses of the NAAEC. It will then discuss how to evaluate the NAFTA experience to determine whether its strengths will result in strong environmental benefits and whether its weaknesses are surmountable.

STRENGTHS OF THE PROPOSAL

There are several environmental advantages to making environmental policy with regional trade agreements. First, this type of environmental policy-making allows regulatory flexibility for regional or like-interested nations rather than international agreement on such problems, which may

be watered down. It also allows for regional prioritization of environmental problems. Economists are fond of tradeable permits for everything from pollution to development rights, under the basic premise that they promote efficiency—that is—cost-effectiveness. If two companies face different pollution control costs, the efficient way of allocating the abatement requirements is according to the marginal costs of the abaters, where the firm with lower abatement costs abates more pollution than the firm with higher costs. Similarly, if countries have differential abilities to address particular environmental problems, the corollary is to allow regional management of resources and pollution control to allow for those differential international costs. Provided the pollutant in question is not toxic or persistent, it is more cost effective to manage the resources regionally than internationally.

Second, adding environmental contingencies to trade agreements illustrates a cause and effect relationship between increased trade and increased environmental degradation. If a trade agreement will lead to increased production of solid waste, for example, as more consumer nondurables enter an economy, what better way to address this problem than through the trade agreement responsible for causing it? Granted, it is difficult and perhaps impossible to predict the environmental outcomes of trade agreements.³ A discussion below outlines a way to identify the pollutants or polluting processes that could be candidates for this policy proposal.

Third, unlike multilateral environmental agreements, trade agreements allow for the inclusion of penalties and trade restrictions for noncompliance with environmental goals. In the case of transboundary production pollution like the kind found at the U.S.-Mexico border along the Rio Grande, it was fairly obvious that clean-up and pollution reduction on the Mexican side of the border would not be undertaken because there was little or no enforcement of environmental regulations. NAFTA has required the active enforcement of the participant parties' environmental legislation and regulations and Mexico has dramatically increased its monitoring activities since NAFTA's enactment (Schatan 1996, 19). An MEA would not have been able to reach this same result, as it would have no enforcement mechanism. Dixon Thompson, in the 1995 *NAFTA in Transition* agrees, stating that:

... international agreements generally reach consensus on what it is that the parties to the agreement want to achieve. However, they frequently fall short on specifying actions, which will help attain those goals, and in establishing the monitoring and feedback necessary for assessing and guiding progress.

This is where the parallel accord is a giant step forward . . . (Thompson 1995, 324)

There are also institutional and structural advantages to conducting environmental policy through trade. The first of these depends entirely on the design of the side agreement and is based on the NAFTA agreements. Trade regimes can provide more direct and focused institutional and technical support than traditional MEAs. The NAAEC created the Commission for Environmental Cooperation (CEC), a joint body tasked with answering complaints of citizens of the participant countries, mediating disputes between the parties, producing regular status reports, and providing technical assistance for implementation of the agreement. While MEAs are usually created with a Secretariat to fulfill this same function, the funding is often quite limited. A trade agreement automatically "raises the stakes" for implementation, as the strength and growth of the Parties' economies depends upon it. Mexico has received significant amounts of technical support in the form of environmental inspector training, for example, which has resulted in increased and stricter environmental compliance checks (Schatan 1996, 12). In short, conducting environmental policy through trade promotes the further integration of environmental and economic concerns.

A second structural advantage of this proposal is that, unlike traditional trade discussions, it can allow public participation. Again, this advantage is entirely contingent upon the design of the side agreement. The NAAEC includes provisions for public submittal of complaints against any of the three parties and requires that the CEC address those complaints. It also requires the publication of the findings of such complaints, as well as dispute resolution between parties. In addition, the agreement requires the research, production, and publication of regular environmental as well as trade progress reports. This formalizes to an extent the current informal level of participation in MEA monitoring and enforcement activities by nongovernmental organizations (NGOs), and establishes it in a trade regime.

Naturally, there remain issues regarding commercial proprietary information, but these tend to be concentrated in the negotiation phase, while the parties are developing the terms of public participation. While it may limit the level of NGO participation in the negotiation phase, this does not preclude their full involvement in the implementation, monitoring, and enforcement phases. Rather than drop the entire process, arguing that limited NGO involvement in the negotiation phase invalidates the proposal, it is possible to design negotiation guidelines that both allow the

participation of NGOs and ensure the integrity of sensitive commercial information.

Lastly, and most importantly, this proposal moves to integrate environmental concerns into the ministries and governmental departments that traditionally hold significant power and funds—the ministries of finance, trade, industry, and economic development. Frequently, but not exclusively in developing countries, the small, understaffed, underfunded environmental ministry is hardly able to send a participant to MEA meetings, let alone support the implementation and compliance with resultant agreements. Every country, however, finds some way to send trade delegations to regional meetings and to staff the implementation of trade agreements. While it is true that there is a dearth of environmental expertise in these ministries, trade penalties have the power to initiate understanding of environmental issues and encourage the capacity of people to learn over time.

Eventually, allaying environmental concerns could become one more expected requirement of trade agreements. At least one observer has noted that since the NAFTA was signed, Mexican ministers are paying more attention to environmental concerns simply because they must (Pastor 1993, 22). Lack of adherence to environmental side agreements can result in monetary penalties and even the repeal of the tariff advantages offered under the trade regime. This point will appear again in the discussion of the weaknesses of this method of environmental policy-making that follows.

WEAKNESSES OF THE PROPOSAL

Several caveats noted in this paper deserve further examination. As noted above, whether the initial proposition is true—that for some pollutants an environmental side agreement to a regional trade regime may be more effective than a multilateral environmental agreement—depends almost entirely on the strengths as identified and in the ability to overcome the weaknesses through design.

The first major weakness is the potential downward harmonization of environmental standards. With the requirement that countries enforce their own domestic environmental regulations, one might imagine a situation in which the country with higher standards lowers them so as not to face a comparative disadvantage from the higher price of stricter environmental regulations. This requires that the cost of compliance with environmental regulations actually increase the cost of production. There is some evidence that this is not the case (Morgenstern, Pizer, and Shih

1996, 3). Indeed, there is empirical evidence that stricter environmental regulations can lead to cost-savings measures that would not otherwise have been explored and perhaps even increase a country's competitiveness: the so-called "Porter Hypothesis."⁴

Nevertheless, if the popular conception that compliance with environmental regulations leads to higher production costs is true, and if compliance puts the more environmentally friendly country at a trade disadvantage, then provisions must be included in the agreement to offset this effect. The preamble to NAFTA states that "the partners are committed to sustainable development and to the strengthening of laws to protect the environment" (as quoted in Thompson 1995, 318). The chapter on investment further states that "partners should not relax provisions for protection of the environment to attract investment" (as quoted in Thompson 1995, 318). If experience shows us these are not being realized, this language must be strengthened and the agreement enforced.

However, while the NAAEC seems to provide for the regular evaluation of legislation and regulations to strengthen them (Article 10,3,b), whether the commission will rule on national legislation seems to be in doubt. The CEC takes public submissions on enforcement matters, not legislative matters. If changes in legislation cannot be challenged and ruled upon, "upward harmonization" is questionable. Thus, if there is an incentive for downward harmonization, whether the wording in the NAAEC is sufficient to prevent it can only be ascertained after a direct legislative challenge. If the existing precautions prove insufficient, future agreements should be framed to strengthen them. Borrowing a chapter from the MEA negotiation process, for example, a more specific, detailed listing of future meetings to propose and discuss regulation tightening should be included. If there is no attempt to improve environmental regulations and the NAAEC results in their stagnation, it is fair to level harsh criticism on the expressed desire for upward harmonization.

A second potential weakness of this proposal is that it puts environmental policy-making into the hands of trade experts who are inexperienced in dealing with environmental issues. Personal and institutional expertise on such issues generally exists in a nation's ministry of environment or natural resources, but the personnel of these agencies seldom coordinate policy with trade experts. Nations conduct trade negotiations in secret with commercial information closely guarded. Trade officials are unaccustomed to dealing with environmental public interest groups and with the public in general, whereas the nature of some environmental problems requires real information sharing between the public and private non-

profit sectors. It may be difficult to reconcile these institutional policy-making principles.

In NAFTA, environmental experts and not trade specialists crafted the environmental policy in the trade regime. In the Canadian case, Thompson notes “it is apparent that the Agreement [the NAAEC] was written by experts on environmental issues trying to deal with trade and environment issues, rather than by trade negotiators trying to understand and incorporate environmental matters in a trade agreement” (Thompson 1995, 323). In informal discussions with U.S. participants, however, it appears the U.S. experience may not have been the same. To ensure that environmental expert participation becomes the rule and not the exception, there must be a way of fostering learning about environmental issues in ministries and departments of commerce, trade, and industry. Adding offices of environmental affairs to these ministries can first do this. The United States, for example, has a Department of Sustainable Development housed in the Office of the Trade Representative and the well-respected National Oceanic and Atmospheric Administration (NOAA) housed in the Department of Commerce. There must also be representatives of the relevant environmental and health departments at the trade negotiation table.

A related danger is that NGOs may be bypassed in favor of trade secrecy. NGOs are making headway in participation in MEAs, but they have yet to gain access to many MEA negotiations. UN diplomats, among others, have a difficult time imagining a larger role for NGOs, despite the fact that many believe their participation would lead to better agreements (Susskind 1994, 130). In trade negotiations, they have almost no role, save for the lobbying power they may or may not be able to exercise domestically. The NAAEC moves to institutionalize NGO participation, but could go much further. While NGOs are able to register anonymous complaints⁵ regarding infractions against the environmental side agreements—specifically, the lack of implementation or enforcement of domestic regulations—and participate in the dispute resolution panels after providing written notification to the parties (Article 29), they are not given a permanent role in the commission. The council may seek their advice (Article 9,5), the Secretariat will protect them (Article 11,8), and they *may* be asked to sit on a National Advisory Committee that *may* be convened, but they have no regular role. If this model were to be used again, the NAAEC could be strengthened by the institutionalized participation of NGOs because they are typically more familiar with implementation issues. Their full participation could lead to better agreements as well as better environmental results.

The last shortcoming of this method of environmental policy-making is that it may only be useful for a limited number of pollution problems. An NAAEC-type agreement would not eliminate all environmental problems. The NAAEC merely works to ensure that environmental regulations are not harmonized downwards by a real or imagined price advantage due to differential regulatory regimes across trading partners. Downward harmonization means that regulations are changed to lower standards as governments attempt to keep manufacturers from moving operations to even less regulated countries in search of a price advantage. Empirical evidence refutes this so-called "pollution-haven hypothesis" and none supports it. Research has demonstrated that business executives do not tend to make relocation decisions based on environmental regulations (Panayotou and Vincent 1997, 72). If all countries enforced their existing environmental regulations and gradually tightened those regulations, then even less incentive would exist to relocate based on environmental regulations alone. In such a scenario, general environmental conditions would be unlikely to deteriorate appreciably.

However, this is not necessarily the case for all environmental problems. For example, in the case of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA), it is difficult to imagine a specific trade regime that would increase incentives to mine the resources. If there were, such an agreement could also then control these activities, or manage the "environmentally friendly" mining of these resources, assuming there is such a thing in this fragile environment. This type of policy appears most successfully to address environmental effects that have the following three characteristics: they are direct, predictable, and measurable.

For example, production in the *maquiladora* industries along the U.S.-Mexico border has resulted in high levels of water pollution. One could predict that lowering U.S. tariff barriers to products produced in Mexico would lead to an increase of their production elsewhere, as the tariffs would make the border free-trade zone redundant.⁶ These production processes are highly polluting and the increase in pollution can be predicted based on the predicted increase in production. This type of pollution is a good candidate for an environmental side agreement rather than a new multilateral environmental agreement; its causes are known, measurable, and somewhat predictable. A "Clean Waterways" MEA initiative to control manufacturing-related water pollution would take years to define and would not necessarily have the United States and Mexico as signatories in the end. The more specific it became, the more

difficult it would be to have parties to sign on. Furthermore, there would be no enforcement mechanism stronger than international shaming. This has been an ineffective strategy in Latin America, as demonstrated by the condition of the environment in those countries that are members in good standing in many MEAs (Schatan, forthcoming).

EVALUATING NAFTA'S ENVIRONMENTAL EFFECTS⁷

Many evaluations of NAFTA have been written, but almost all conclude that it is too early to determine whether NAFTA will harmonize the region's environmental regulations upwards and improve overall environmental quality. The highly political nature of the NAFTA negotiations has led some to conclude that the eventual effectiveness of the agreement never was a real concern (Thompson 1995, 326). However, the success of this single example among trade agreements is crucial if securing environmental and labor safeguards is ever to be attempted again within the framework of a trade agreement.

A Clinton administration report noted Mexico's early steps to address the environmental concerns of its northern neighbors. In 1992, Mexico restructured its federal environmental protection, folding it into a prominent position in its Secretariat for Social Development (SEDESOL). At the same time, Mexico created a "semi-independent office for environmental enforcement [and] the Federal Attorney General for Environmental Protection," and the United States and Mexico initiated the Integrated Environmental Plan for the Mexico-U.S. Border Area ("Border Plan") to "provide for long-term protection of human health and the environment within the border area" (Clinton 1993, ES-3). While these initiatives were not tied explicitly to the NAFTA or the NAAEC, they are a direct result of the preparations for the new regional trade regime.

The same administration report outlined several anticipated environmental effects. On product standards, pesticides, and food safety, along with the optimistic assertion that "pesticide standards and enforcement activities will be promoted in all three countries," the potential of NAFTA to provide a forum in which to "share expertise and experience" is again noted. It is the contention of this piece that increased cooperation brings more effective environmental agreements. The U.S. report claims that with or without NAFTA, air pollution in the region would have increased. Because of increased cooperation, however, the administration asserted that it might be possible "that border area air emissions in Mexico could be reduced below current levels" within eight to ten years of NAFTA implementation (Clinton 1993, ES-7). Better collaboration and informa-

tion sharing among health and environmental policy experts leads to better policy-making, and the question becomes whether this cooperation can be better achieved through an MEA or a regional trade regime.

Perhaps the most significant effect the agreement has had, however, is in the level of consultation and information sharing among its members. Sidney Weintraub of the Center for Strategic and International Studies (CSIS) noted in his recent evaluation that NAFTA has succeeded in using "economic means to temper the political antagonisms between the United States and Mexico" and has spawned a new and positive relationship (Weintraub 1997, 23). Prior to NAFTA, diplomats maintained the primary relationships between the United States and Mexico. Now, however, there is significant consultation among many other actors: NGOs, labor and environmental policy makers, industry leaders, legislators and trade policy makers. Weintraub says that the best part of the agreement may be that it made Mexico and the United States good neighbors at last, just as the European Community (EC) did for France and Germany.

Several observers have noted it is too early to make an assessment of NAFTA's environmental impacts for three reasons: 1) the Mexican peso crisis created a large amount of "noise" in the data and it is statistically difficult to control for these effects; 2) much of the environmental data is still being gathered and normalized and no real time-series analysis can be conducted as of yet; and 3) while the short-term effects of the agreement may be interesting, the real results of the NAFTA can only be measured in its long-term effects.

Therefore, a fair evaluation of the environmental effects of the agreement should compare the environmental intentions, as set out by the parties, to the results. Once the data can be analyzed for long-term trends, it should be compared to the environmental claims in the Clinton administration's Report on the Environment.⁸ The report claims numerous environmental improvements, almost all of which can be quantified and analyzed (See Table 1).

The Clinton administration pre-NAFTA report took the optimistic view that these objectives could be realized. The *Canadian Environmental Review*, also conducted as the trade regime came into force, arrived at similar conclusions. In Dixon Thompson's summary of its conclusions, he notes that ". . . with proper management practices and controls, any adverse environmental impacts would be within acceptable limits" (Government of Canada 1992 as reported in Thompson 1995, 323).

In July 1997, the Clinton administration published a report on the effects of NAFTA. In it, the administration notes a dramatic decrease in

Table 1. Environmental Improvements from NAFTA

Product standards, pesticides, and food safety

- Product standards and enforcement activities will be enhanced.

Air quality

- Border area air emissions will be reduced below current levels within eight to ten years.

Water quality and supply

- There will be added impetus to cooperative projects to promote water quality and preserve the border environment.
- Additional financing will be provided for infrastructure projects to treat wastewater and provide clean drinking water supplies.

Control of toxic chemicals

- The United States will maintain its ability to control toxic chemical imports from Canada and Mexico.
- Toxic chemical data and studies generated in Mexico will meet the same standards and Good Laboratory Practices as data gathered in the United States.

Hazardous waste

- Resources will be made available to manage hazardous waste properly and encourage enforcement of hazardous waste laws.

Nonhazardous waste

- The Border Financing Agreement will give a preference to infrastructure projects addressing solid waste disposal needs.
- The growth of waste along the U.S.-Mexico border as incentives to locate there are reduced.

Chemical emergencies

- Emergency preparedness coordination between the United States and Mexico will improve.

Wildlife and endangered species

- Maquiladora development will tend to be dispersed away from the border area, reducing its impact on wildlife.
- New environmental funding and increased personnel will result in improved environmental conditions and reduced environmental effects in the border regions of the United States and Mexico.

Fisheries

- Enforcement of laws relating to the use of fishery resources will be safeguarded.
- Management of each species and conservation of depleted stocks will be improved.

Forests, parks, and rangelands

- NAFTA will slow the rate of deforestation in Mexico.
- The increased cooperation afforded by the agreement will mitigate the short-term negative environmental effects of NAFTA such as those

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Table 1. Environmental Improvements from NAFTA (*continued*)

posed to the National Park System by increase cross-border transportation, increased population settlement with some additional industrial destruction of culture resources.

Health implications

- Assuming that NAFTA is successful in increasing economic development in Mexico, and along the border specifically, increased governmental support to the community and health infrastructure is expected, accompanied by an improved overall health status.

Source: The NAFTA: Expanding U.S. Exports, Jobs and Growth: Report on Environmental Issues. Clinton, 1993, ES-6-ES-10. Executive Summary. Verbs such as “might” and “could” have been changed to “will,” the result of which is a more stringent assessment of the U.S. claims regarding the environmental effects of the agreement.

Mexican average applied tariffs—from 10 percent to 2.9 percent—and a more modest decrease in U.S. average applied tariffs—from 2.07 percent to 0.65 percent (Clinton 1997, ii). NAFTA is credited with a “positive effect on U.S. net exports, income, investment and jobs supported by exports” (Clinton 1997, ii). The United States has increased its share of Mexican imports to the detriment of other exporting countries, and the agreement is also credited with pulling Mexico out of the peso crisis earlier than would have happened otherwise.

Regarding the effects of the labor and environmental side agreements, the administration claims the former has resulted in the recognition of a Mexican labor union previously unrecognized, a 250 percent increase in funding of labor law enforcement, and a 30 percent reduction of work-related injuries and illnesses in Mexico (Clinton 1997, vi). On the environmental side, the agreement has meant the rewriting and broader enforcement of Mexican environmental laws, increased funding for environmental clean-up projects,⁹ the establishment of a voluntary environmental auditing regime in Mexico, and the banning of two highly toxic pesticides, dichlorodiphenyl-trichloroethane (DDT) and chlordane (Clinton 1997, vii). In addition, the Clinton report notes that “Mexico reports a 72 percent reduction in serious environmental violations in the maquiladora industry . . . and a 43 percent increase in the number of maquiladora facilities in complete compliance” (Clinton 1997, vii).¹⁰

This report discusses institutional and organizational advances made in the region as indicators of the agreement’s success. While increased collaboration and improved monitoring of environmental regulations are necessary for better international environmental policy and a better

international environment—and trade agreements may be a better tool to achieve them—they are not sufficient. In addition to these measures of success of the NAAEC, there should be an evaluation of at least two purely physical environmental indicators: water and air quality. In a CEC report on the recent meeting of the parties in San Diego to discuss effects of NAFTA, nowhere is the status of air or water quality mentioned (Eco Region 1997). While NAFTA clearly has led to systemic advances, it is important to remember that the goal is a way of negotiating agreements that improve environmental conditions.

CONCLUSION

Directly tying mitigation of negative environmental effects to those regional trade agreements that lead to such effects may improve environmental quality in all participant countries through a process much easier and more enforceable than current MEAs. Environmental side agreements to regional trade agreements can be a more direct means of upward harmonization of environmental policies than multilateral environmental agreements, and may be a more expedient means of international environmental treaty making. Robert A. Pastor notes that

... all three countries will benefit from NAFTA, and they are likely to benefit environmentally as well. Environmentalists' concerns will be addressed more effectively if the United States, Mexico, and Canada are wedded to a new economic relationship than if they are not. Their worries about the negative environmental effects of increased trade and competition can be assuaged. Indeed, environmentalists should favor NAFTA: the agreement represents an important opportunity to translate transnational environmental concerns into international agreements and to encourage Mexico to make its environmental program more effective (Pastor 1993, 20).

In the end, it is international cooperation that leads to better environmental management. The question is whether this cooperation is better established and developed through the system that produces multilateral environmental agreements or that of regional trade regimes. The extensive trade and environment literature¹¹ supports the contention that the latter does more to foster the relationship essential to ensure the information and personal coordination necessary for effective environmental policy.

Notes

¹Hereinafter, "environmental side agreement," "side agreement" or NAAEC.

²See Appendix 1 for the objectives of the NAAEC.

³There are several attempts to quantify this effect as a result of NAFTA's signing alone and more expected to follow as the agreement matures. See, for example Grossman and Krueger 1991, and Commission for Environmental Cooperation 1996.

⁴The Porter hypothesis is developed in Michael Porter, 1990. *The Competitive Advantage of Nations*. New York: Free Press; Porter and van Der Linde 1995.

⁵While this may seem to promote spurious complaints, it provides for the protection of the identity of the complainant, thereby protecting them or their organization from the potential reprisal.

⁶This is an over-simplification of the effects on production of changes in tariff and non-tariff trade barriers and if one were to actually apply this criteria, one would need to use a dynamic general equilibrium model to predict the effects. There has been some work with these models by the CEC to evaluate NAFTA effects. See, for example the following CEC publications: *NAFTA Effects: A Survey of Recent Attempts to Model the Environmental Effects of Trade: An Overview and Selected Sources*, and *Building a Framework for Assessing NAFTA Environmental Effects*, Report of a Workshop held in La Jolla, California, on April 29 and 30, 1996.

⁷For one observer's tentative evaluation of the NAFTA trade agreement, see Sidney Weintraub's *NAFTA at Three*, Chapter 6: Conclusions.

⁸Thompson uses a different set of criteria in his evaluation. He calls these the "evolving set of environmental management tools which improve accountability and accounting, which direct us toward sustainable development, and which measure our progress." (318)

⁹16 projects for an estimated total of \$230 million.

¹⁰The author was unable to get secondary confirmation of these data.

¹¹Weintraub 1997, and Thompson 1995, both discuss this aspect of NAFTA in some detail.

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APPENDIX
**Objectives of the North American Agreement
on Environmental Cooperation**

The NAAEC objectives are to (Article 1):

- a) foster the protection and improvement of the environment in the territories of the Parties for the well-being of present and future generations;
- b) promote sustainable development based on cooperation and mutually supportive environmental and economic policies;
- c) increase cooperation between the Parties to better conserve, protect and enhance the environment, including wild flora and fauna;
- d) support the environmental goals and objectives of the NAFTA;
- e) avoid creating trade distortions or new trade barriers;
- f) strengthen cooperation on the development and improvement of environmental laws, regulations, procedures, policies, and practices;
- g) enhance compliance with, and enforcement of, environmental laws and regulations;
- h) promote transparency and public participation in the development of environmental laws, regulations, and policies;
- i) promote economically efficient and effective environmental measures;
- j) promote pollution prevention policies and practices.