6. NAFTA and the Environment: Lessons from Mexico and Beyond

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U.S. President Barack Obama, and the head of the Office of the United State Trade Representative (USTR), Ronald Kirk, have consistently committed to strengthening NAFTA's environmental provisions on repeated occasions. After initial reluctance, Mexican President Felipe Calderon and Canadian Prime Minister Stephen Harper now express a willingness to revisit the environmental ramifications of the agreement. This short essay looks at the case of NAFTA's environmental record in Mexico to highlight the need for reform beyond the relatively modest environmental measures included in the May 10th agreement and to provide specific proposals that can help NAFTA spur environmental sustainability across North America.

I. THE NEED FOR REFORM

NAFTA was a landmark trade agreement in terms of linking trade and environment. NAFTA was the first significant trade agreement that included environmental provisions through a side agreement, and established parallel institutions for monitoring and finance. These achievements have been positive, but limited.

On the one hand, the side agreement and the institutions surrounding it fostered an unprecedented level of tri-national environmental diplomacy and cooperation among parties to the agreement. NAFTA's environmental side agreement, “The North American Agreement on Environmental Cooperation,” created a North American Commission for Environmental Cooperation (CEC) that is in part overseen by a transparent and representative public advisory committee. One concrete achievement stemming from these efforts has been the

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establishment of a “Pollutant Release and Transfer Registry” law in Mexico that is broader in scope than similar laws in the U.S. and Canada.1 The CEC also boasts a “citizen submission” process whereby third parties can file claims identifying where they see violations of environmental laws in the three countries. This process has given rise to interesting fact-finding missions that have publicized coastal pollution and the genetic contamination of corn in Mexico. CEC has also hosted (but no longer does) an innovative funding mechanism for communities and small businesses to help them monitor and comply with environmental law. Finally, another collateral NAFTA institution of importance for the environment was the creation of the North American Development Bank (NADBANK) and the Border Environmental Cooperation Commission. These institutions fund and monitor water and sanitation projects in the U.S.-Mexico Border region.

In terms of environmental quality, NAFTA did not result in Mexico becoming a “pollution haven” for dirty U.S. firms seeking weaker environmental regulations, as many environmentalists feared. Indeed, in some cases foreign investment triggered through NAFTA brought clean technologies.2 Unfortunately, these gains are exceptions rather than the rule. According to Mexican government figures, the economic costs of environmental degradation have continued to average 10 percent of GDP since NAFTA.3 Hazardous waste and air pollution are on the rise. Eight million tons of hazardous waste are generated in Mexico each year, but Mexico can only absorb one million tons per year. This has led to a large pile-up of hazardous waste, and to illegal waste trade as well.4 Biological and genetic diversity have become increasingly threatened under NAFTA from import floods and bio-prospecting. The expansion of export-oriented industrial agriculture has had high environmental costs in the form of unsustainable water use, loading of nitrogen and other agro-chemicals.5 Mexico’s poor environment record has been due to the Mexican government’s lack of commitment to environmental protection in the post-NAFTA period. Indeed, real spending and inspection levels have all declined since NAFTA took effect.6 A consistent theme throughout this report is that NAFTA goes too far in regulating government authority. In the case of Mexico, NAFTA’s investment rules made it difficult for Mexico to maintain a hazardous waste site. Finally, NAFTA’s environmental side agreement and related institutions lack the authority to deal with these and other problems. In addition, they have been under-funded, relegating them to the role of interesting pilot projects rather than comprehensive tri-national mechanisms to address environmental issues.
II. OVERARCHING PRINCIPLES AND GOALS FOR REFORM

For markets to work more efficiently in the three nations, both positive and negative externalities need to be incorporated into pricing mechanisms across North America. Given that externalities are not included the decisions of private actors in the marketplace, governments are needed to act as “second-best” options for correcting market failures. NAFTA should afford appropriate policy space for governments to provide the necessary incentives to internalize externalities in the least trade-restrictive manner.

Four overarching principles should guide these goals:

- **Polluter pays principle** where those responsible for pollution pay for the external environmental costs of production.

- **Precautionary principle** that states that policies should account for uncertainty by taking steps to avoid outcomes that could potentially cause irreversible damage in the future.

- **Access and benefit sharing** where the action of sharing a portion of profits derived from the use of biological and/or genetic resources with its original providers and allowing those original providers the access to the resources in question.

- **Right to know** where producers and governments share environmental information with their populations.

III. POLICY RECOMMENDATIONS

Repairing NAFTA so that it can enhance environmental sustainability throughout North America will entail revisiting some of the core components of the NAFTA agreement. Such reform goes well beyond the May 10th agreement discussed throughout this report. Consistent with the May 10th agreement however, NAFTA's side agreement on the environment will need to be a standalone chapter of the agreement that adheres to the same enforcement and dispute mechanisms as NAFTA. Finally, NAFTA's environmental institutions need to be reformed and reinvigorated.

**Investment Rules**

Although NAFTA did not cause foreign investors to flock to Mexico in order to exploit Mexico's weaker environmental standards, many foreign investors were not model environmental firms when they decided to locate in Mexico. While
some firms brought strict environmental standards with them, others were quite lax and not in compliance with Mexican law.\textsuperscript{7} Furthermore, in all three NAFTA countries foreign firms challenged environmental laws claiming that such laws were “tantamount to expropriation,” or that they were in violation of the “minimum standards of treatment” accorded to foreign investors under NAFTA.\textsuperscript{8} A reformed investment regime for North America needs to give all three governments the policy space to internalize environmental externalities in all firms within its borders, regardless of their national origin. In addition, governments and citizens should have a right to know about the environmental performance of all firms in their economies.\textsuperscript{9}

Five general improvements are needed to repair the investment chapter of the NAFTA:

- Negotiate an “interpretive note” to reinforce recent NAFTA cases that affirm how indirect expropriation and minimum standard of treatment rules cannot trump genuine environmental regulations that internalize externalities. This could be accomplished by formally recognizing the Methanex and Glamis rulings under NAFTA tribunals.\textsuperscript{9}

- Require environmental impact statements by foreign investors before locating in a NAFTA country.

- Preserve the ability of governments to conduct “pre-establishment screening” whereby possible investors are screened for their environmental and other priorities.

- Grant governments GATT Article XX-like exceptions to use selective performance requirements to ensure that foreign firms are transferring environmental technologies and practices.

- Establish “right to know” provisions whereby citizens and governments have access to information regarding an investor’s environmental performance.
Many of these provisions have precedent under recent NAFTA cases, in the World Trade Organization, United States’ Preferential Trade Agreements that have come after NAFTA, and elsewhere. NAFTA investment tribunals in the Methanex and Glamis cases both affirmed that nations have the policy space for bona fide environmental laws. Under the WTO, foreign investors are granted no greater treatment than domestic investors and rules on indirect expropriation are absent. The “OECD Guidelines for Multinational Enterprises” which were separately signed by Mexico, Canada, and the United States, recognize the need for right-to-know provisions and environmental impact statements in foreign firms.10

**Intellectual Property Rights**

A reinvigorated NAFTA will need to have an intellectual property rights regime that recognizes the different levels of development among its parties and ensures that all parties can put in place systems of innovation, technology, and product development in an environmentally sustainable manner. Under NAFTA and similar agreements in the hemisphere, there has been an incentive for private multinational firms largely located in the U.S. to monopolize domestic and traditional knowledge and exclude these constituents from the benefits of innovation and new product development. There are also increasing concerns that the current intellectual property regime will prohibit Mexico from developing or deploying new clean technologies for climate-friendly development. With respect to the environment, a new intellectual property regime for North America would:

- Require patent applicants to disclose the source and country of origin of genetic and biological resources.
- Require patent applicants to show evidence of prior informed consent and fair and equitable sharing of benefits for patents entailing the use of genetic or biological resources.
- Ensure that intellectual property rules facilitate the transfer of clean technologies and grant parties to the agreement equal opportunities to develop new clean technologies.
- Re-affirm the right to exclude plants and animals from patentability and to use *sui-generis* systems of protection for plant varieties.

Again, many of these provisions have precedent in the post-NAFTA World Trade Organization, United States’ Preferential Trade Agreements, and elsewhere.
Article 27.3(b) of the Trade Related Intellectual Property agreement in the WTO grants countries the flexibilities to exclude plant and animals for patentability and grants nations the flexibility to use *sui-generis* systems of protection on plant varieties, as do the current NAFTA provisions on intellectual property. In the U.S.-Peru Free Trade Agreement and in the draft of the U.S.-Colombia Free Trade Agreement both parties agreed to a side letter whereby prior informed consent and access and benefit sharing for genetic resources are covered. Making commitments like these on access and benefit sharing part of the intellectual property chapter of NAFTA would make such provisions more enforceable and help alleviate some of the concerns over bio-prospecting/bio-piracy in Mexico.\(^{11}\) Intellectual property rules and clean technology transfer and development are a relatively new concern not largely debated during NAFTA negotiations, but have begun to become primary concerns under the WTO. Key among those concerns are the extent to which developing countries like Mexico will have to pay monopoly prices to install already expensive clean energy technologies and/or face insurmountable obstacles if they chose to develop indigenous clean energy technologies to adapt to and combat global climate change.\(^{12}\)

**Services**

As shown in Robert Stumberg’s chapter on services and climate change in this report, NAFTA does not extend to the services sector the limited environmental coverage that can be found for goods in the agreement. The ongoing case concerning Mexican trucks is emblematic of NAFTA’s services provisions running head-on into environmental policy. NAFTA’s services chapters may also collide with future efforts to deploy renewable energy and mitigate global climate change.

To reform NAFTA’s services provisions for environmental policy, policymakers should provide GATT Article XX-like exceptions for trade in services. For measures that regulate services, NAFTA could provide exceptions that are necessary to protect public morals, life and health, and conservation of exhaustible resources. Compared to goods trade, NAFTA does not provide parallel exceptions to national treatment for measures that relate to cross-border services. Without such exceptions for health and environmental policy a trade dispute based on services chapters can undermine the exceptions for measures that regulate goods.

**Environment Chapter**

NAFTA was a landmark for including environmental provisions as part of the agreement. However, many post-NAFTA agreements have gone on to have more
enforcement power and to have a larger environmental scope than NAFTA. First and foremost, the side agreement should be enshrined as a standalone chapter within NAFTA and be subject to the same enforcement and dispute resolution parts of the agreement. With greater responsibility will be the need for a greater mandate and funding.

Five general improvements are needed to create an environment chapter of the NAFTA:

- Subject the environmental provisions to the same enforcement and dispute resolution provisions as commercial parts of the agreement
- Require parties to maintain, improve, and effectively enforce a set of basic environmental laws and regulations
- Re-affirm the precedence of, and expand upon, the list of Multilateral Environmental Agreements (MEAs) that parties are to implement
- Commit to gradually harmonizing environmental standards
- Expand the mandate and funding for the North American Commission for Environmental Cooperation.

The North American Commission for Environmental Cooperation has been praised by independent assessments and by environmental organizations for its role in sparking tri-national initiatives on the environment under NAFTA, such as pollutant release and transfer registries. It has also been praised for its tri-partite nature that grants civil society an advisory role on how the organization works. Most important the commission has a “citizen submissions” process whereby non-governmental organizations can allege failures to effectively enforce environmental laws. Such allegations can be followed up on by the commission in the form of “factual records” which have been shown to shame violators into compliance.13 The commission has also been criticized for its lack of information and data gathering, and its limited mandate for enforceability. However, the commission has been provided with a paltry $9 million dollar budget and has not been able to change the course of environmental events in North America.

Renewed Institutions for Environment and Development

In order for the expanded role of environmental issues under NAFTA to work and be accepted, the existing mechanisms for financing environmental initia-
tives in the region will need to be strengthened. As it stands, funding for environmental improvements in Mexico has been on the decline since NAFTA. If the environmental provisions of NAFTA are seen as an unfunded mandate there will be great reluctance or ability on the part of the Mexican government to carry those provisions out. Indeed, there is some evidence that such perceptions persisted when NAFTA was signed, partly explaining why the environmental record under NAFTA has been poor in Mexico.\(^\text{14}\)

The NADBANK was originally proposed by prominent economists Albert Fishlow, Sherman Robinson, and Raul Hinojosa-Ojeda.\(^\text{15}\) The idea was that the institution would serve as a regional development and adjustment assistance bank to help harmonize development in North America. The NADBANK was indeed established under NAFTA, but in the end only to address environmental problems in the U.S.-Mexico border. The organization was long plagued by difficulties and reformed by the Bush and Fox administrations in 2001, but only to strengthen its mandate to U.S.-Mexico border environmental issues.

A revitalized NADBANK would go back to its originally proposed idea of being a development bank and adjustment assistance facilitator, modeled after the structural funds under European economic integration and Brazil's national development bank, (BNDES). To that end, the NADBANK would have to be recapitalized by NAFTA governments and be able to sell bonds and take equity stakes in order to raise more funds when needed as well. In relation to the environment in all three NAFTA countries, a revitalized NADBANK would have to:

- support small scale, sustainable agriculture initiatives.
- provide loans for small- and medium-sized enterprises (SMEs) for innovation and to comply with environmental regulations.
- provide loans and financing support for public infrastructure, renewable energy development, and environmental cleanup projects.
- support public-private partnerships for environment-related research and development activities.
- develop and maintain an active research team that examines the environment and development aspects of the NAFTA countries and bank activities.
This short essay confirms the concerns expressed by U.S. President Obama, the U.S. Congress, and civil society. NAFTA has clearly fallen short of enabling the three countries to protect their collective environment. This note also confirms that improving NAFTA’s ability to tackle trade-related environmental issues in the region will require comprehensive changes throughout the treaty, as well as the bolstering of existing collateral institutions for trade, environment, and development in North America.


3 Sistema de cuentas económicas y ecológicas>Indicadores de síntesis: PIN ecológico. Gobierno de México: INEGI.


This chapter is part of a Boston University Pardee Center Task Force report on reforming NAFTA and U.S. trade agreements. For more information on the project, and to find links to the full report and to Spanish language content, visit:

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