ENVIRONMENTAL EFFECTS OF IMPLEMENTING MERCOSUR IN ARGENTINA: AN INTEGRATED ASSESSMENT

By

JOSÉ A. GOBBI

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To my beloved wife, Analía, and to my parents
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<td>ACE</td>
<td>Accord on Economic Complementation; Acuerdo de Alcance Parcial de Complementación Económica</td>
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<td>Agenda on Sustainable Development for Mercosur; Agenda para el Desarrollo Sustentable del Mercosur</td>
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<td>ALADI</td>
<td>Latin American Integration Association; Asociación Latinoamericana de Integración</td>
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<td>BP</td>
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<td>CACM</td>
<td>Central American Common Market</td>
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<td>CAN</td>
<td>Community of Andean Nation</td>
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<td>CARICOM</td>
<td>Caribbean Community; Comunidad del Caribe</td>
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<td>CCM</td>
<td>Market Trade Commission; Comisión de Comercio de Mercosur</td>
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<td>CEC</td>
<td>Commission for Environmental Cooperation</td>
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<td>CEPAL</td>
<td>Economic Commission for Latin America and the Caribbean; Comisión Económica para América Latina y el Caribe</td>
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<td>CET</td>
<td>Common External Tariff</td>
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CITES  Convention on International Trade in Endangered Species
CMC  Common Market Council; Consejo Mercado Común
CPRM  Commission of Permanent Representatives of Mercosur
ECLAC  Economic Commission for Latin America and the Caribbean
ECT  External Common Tariff
EU  European Union
FAO  Food and Agriculture Organization
FARN  Natural Resources and Environment Foundation; Fundación Ambiente y Recursos Naturales
FDI  Foreign Direct Investment
FTAA  Free Trade Area for the Americas
GATT  General Agreement on Trade and Tariffs
GDP  Gross Domestic Product
GMC  Common Market Group
GTZ  German Development Agency
INDEC  National Institute of Statistics and Census; Instituto Nacional de Estadísticas y Censos, Argentina
INTA  National Institute of Agricultural Technology; Instituto Nacional de Tecnología Agropecuaria, Argentina
INTAL  Institute for the Latin American and Caribbean Integration; Instituto para la Integración de Latinoamérica y el Caribe
IRAM  Argentine Institute for Normalization; Instituto Argentino de Normalización y Certificación
ISI  Import Substitution Industrialization
ISO  International Standard Organization
LAC  Latin America and the Caribbean
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<td>LACISD</td>
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<td>LAFTA</td>
<td>Latin American Free Trade Agreement; Asociación de Libre Comercio de Latinoamérica</td>
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<td>MEA</td>
<td>Multilateral Environmental Agreements</td>
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<td>MERCOSUR</td>
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<td>MCTN</td>
<td>Mercosur Common Trade Nomenclature</td>
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<td>MP</td>
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<td>Nitrogen</td>
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<td>NAAEC</td>
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<td>NAFTA</td>
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<td>NEM</td>
<td>New Economic Model</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>P</td>
<td>Phosphorous</td>
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<td>PA</td>
<td>Andean Pact; Pacto Andino</td>
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<td>PAEAM</td>
<td>Agreement on Environmental Emergencies of Mercosur; Protocolo Adicional al AMMAM sobre Emergencias Ambientales del Mercosur</td>
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<td>PC</td>
<td>Convertibility Plan; Plan de Convertibilidad</td>
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<td>PIWSD</td>
<td>Johannesburg Plan of Implementation of the World Summit on Sustainable Development</td>
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<td>POP</td>
<td>Ouro Preto Protocol; Protocolo de Ouro Preto</td>
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<td>PPM</td>
<td>Process and Production Methods</td>
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<td>PN</td>
<td>Tasks to be Negotiated; Pautas Negociadoras</td>
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<td>PT</td>
<td>Annual Work Plans; Planes Anuales de Trabajo</td>
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REMA Specialized Forum on Environment; Reunión Especializada de Medio Ambiente

RMMAM Meeting of Ministers of Environment of Mercosur; Reunión de Ministros de Medio Ambiente de Mercosur

SACU South African Custom Union

SAM Technical Secretariat of Mercosur; Secretaría Administrativa del Mercosur

SAYG Secretaria de Agricultura y Ganadería, Argentina

SAGPyA Secretaría de Agricultura, Ganadería, Pesca y Alimentación, Argentina

SIAM Environmental Information System of Mercosur; Sistema de Información Ambiental del Mercosur

SMEs Small and Medium Enterprises

SPS Sanitary and Phytosanitary Measures

SGT Work Subgroup; Subgrupo de Trabajo

TA Treaty of Asuncion; Tratado de Asunción

TBT Technical Barriers to Trade

TICD Treaty for Integration, Cooperation and Development

TLA Trade Liberalization Agreements

UN United Nations

UNCED United Nations Commission on Environment and Development

UNEP United Nations Environmental Program

US United States

USA United States of America

WHO World Health Organization

WRI World Resources Institute
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<td>WS</td>
<td>Work Subgroup (<em>Subgrupo de Trabajo</em>)</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<td>WWF</td>
<td>World Wildlife Fund</td>
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This study examines the incorporation of the environmental dimension in the integration process of Mercosur, and explores the environmentally trade-related effects of implementing the Common Market on Argentina’s agricultural sector. Findings indicate that the creation of Mercosur in 1991 centered on providing more open conditions for trade and that negotiations for implementing the Common Market were carried out at a faster pace and intensity than discussions on other non-commercial issues, including the environment. However, there has been a gradual incorporation of the environmental dimension into the integration process over time. Such incorporation has been conducted in steps, with each step representing a more significant role of the environment in the integration process. In spite of those efforts, the environmental dimension in Mercosur represents a marginal topic in the overall integration process, and environmental policy initiatives remain of secondary importance in the agenda.
One of the concerns related with the implementation of trade liberalization agreements is that they may erode existing environmental regulatory frameworks to favor trade liberalization, as environmental norms may be considered non-trade barriers to trade. However, the implementation of Mercosur does not seem to be modifying the existing Argentinean environmental regulatory framework. Furthermore, the implementation of Mercosur is not showing signs of reducing the ability of the government of Argentina to implement environmental policies.

In terms of environmental trade-related effects associated with the implementation of Mercosur, the volume of Argentina’s agricultural exports to Mercosur has increased substantially since 1991, and seven commodities—namely wheat, milk, barley, rice, potatoes, onions, and garlic—have had more than 50% of their exports directed to the Common Market. The role of Mercosur as a driver for land use change in Argentina seems to be limited, and in the best of cases, restricted to expansions in the cultivation of wheat, barley, and rice. On the same token, its role in the technological transformations operated in the cultivation of wheat and the production of milk observed in recent years—which have resulted in both positive and negative environmental repercussions—has been of secondary importance.
The links between trade liberalization agreements (treaties aimed to facilitate trade) and the environment are numerous and multifaceted (Ford Runge, 1994; Jayadevappa and Chhatre, 2000; OECD, 2000). Trade liberalization agreements induce changes in the economy and public policy that, in turn, have direct and indirect effects on the environment (Conway, 1998; Johnstone, 1999). Direct effects result from intensification in economic activity in certain sectors (i.e., agriculture, forestry, fisheries) linked with the international trade market. Indirect effects arise from increases in the overall economic activity stimulated by trade liberalization, as well as from investment patterns, development of new technologies, and the life cycle of natural resource-base products. The environmental impacts of these effects largely will be determined by the interplay between the kinds of trade policies that countries will adopt and the existing national conservation policies, along with the institutional support of the latter, vis-à-vis trade liberalization reforms (Conway, 1998).

Trade liberalization reforms associated with trade agreements may be consonant with objectives of sustainable development (UNCED, 1992), and the effects described above can have positive consequences for the environment (GATT, 1992; CEC, 1999; OECD, 2000). Trade liberalization may promote a more efficient use of natural resources, reducing wasteful patterns of production and consumption (Ford Runge, 1994). Trade liberalization may also promote improvements in environmental standards by allowing the transfer and adoption of more efficient and clean technologies, by
increasing income to be devoted to improve environmental standards, and by consumer-driven demands in importing countries for environmentally-friendly products (GATT, 1992; OECD, 2000). Researchers have shown that after initial negative environmental impacts, trade liberalization has resulted in environmental improvements in certain economic sectors (Anderson and Blackhurst, 1992; Low et al., 1992; Grossman, 1994; Cole, 2004) and that economic sectors oriented to the external market are more prone to internalize environmentally-friendly standards to respond to foreign market demands (Johnstone, 1996).

There is the danger, however, of negative effects on biodiversity and natural resources when free trade policies and practices do not reflect the value of nature (Daly and Goodland, 1994; Røpke, 1994; Costanza et al., 1995; Conway, 1998; Daly, 1999; WWF, 1999). For example, empirical analyses show that macroeconomic factors and trade-liberalization policies are linked to the causes of deforestation (Capistrano and Kiker, 1995), over-fishing (Sun and Chiang, 1998), overexploitation of wildlife (Rose, 1991), and monoculture intensification (Runge, 1993). This perspective is particularly alarming for developing countries where the economy is dominated by the commodity sector in terms of production, employment, and export earnings. In those countries trade liberalization agreements will facilitate export of goods based on natural resources, such as agriculture, forestry, wildlife, fisheries, and mining (Torres, 1996). This situation may result in loss of biodiversity and degradation of natural resources by means of increased habitat destruction, resource depletion, introduction of exotic species and diseases, monoculture, landscape modifications, and industrial pollution (Lee, 1996; Conway, 1998; WWF, 1998).
Multilateral trade agreements are the most important category of trade policies when considering the effects of trade on the environment and natural resource use and conservation (Anderson and Blackhurst, 1992; Beghin et al., 1994; Daly and Goodland, 1994; DeBellueve et al., 1994; Winham, 1994; Costanza et al., 1995; Benton, 1996; WWF, 1999). Multilateral trade agreements establish a legal and institutional framework to favor more liberal conditions of trade. As part of the liberalization process, tariffs are reduced or eliminated and non-tariff barriers of trade are removed or harmonized. Therefore, multilateral trade agreements encourage certain types of trade patterns, and limit the use of trade measures and trade-related public policies that might alter those patterns (Conway, 1998).

A process of economic integration is currently underway in the Southern Cone of Latin America. Since 1991, Argentina, Brazil, Paraguay, and Uruguay are moving toward the formation of the Southern Common Market (Mercosur) to allow the free flow of goods, services, and production factors among the four countries. As part of this integration process, tariffs among member countries were eliminated, technical barriers to trade are being harmonized/eliminated, and initiatives to promote intra-Mercosur trade are being implemented (Díaz-Labrano, 1998). Findings from the initial stages of the integration process indicated that policies for implementing Mercosur had been mainly directed to create fair conditions for trade, and that concerns for the environment and for conservation of natural resources were relegated to a low position in the agenda with weak institutional support (Novara, 1994; Salinas, 2002). Since the Mercosur member countries are highly rich in natural resources, but are faced with increasing deforestation, agricultural intensification, and wildlife depletion (WRI, 2000), the liberalization of trade
associated with implementing Mercosur may have intensified those processes. For example, intra-Mercosur trade in agriculture and natural resource-based products increased almost twofold between 1990 and 1995 (Dow and Jauregui, 1996), which apparently triggered agricultural dislocation leading to losses of wetlands in Uruguay (May and Bonilla, 1997). It also has promoted the use of agrochemicals in Argentina (Bertonatti and Corcuera, 2000), which in one incident caused the death of thousands of Swainson’s hawks (Goldstein et al., 1999; Canavelli, 2000). Since it is forecasted that intra-Mercosur trade in agricultural and natural resource-based products will continue to increase in the future (Diao and Somwaru, 2000), there is a need to assess the role that trade-related measures and signals generated by Mercosur are having on the use and conservation of natural resources in its member countries.

**Objectives**

In its broadest terms, this study investigates the relationship between trade-related measures associated with implementing Mercosur and the use and conservation of natural resources in Argentina. Specific objectives are as follow:

- To develop a conceptual framework for establishing the relationship between implementing Mercosur and the use and conservation of natural resources on its member countries;

- To investigate the incorporation of the environmental dimension into the integration process and to analyze the effect of Mercosur trade-related measures on conservation policies and on regulatory frameworks for the use and conservation of natural resources in Argentina; and

- To examine the scale, composition, technological, and geographical effects of trade growth on natural resource use (particularly agriculture) in Argentina because of implementing Mercosur.
Main Questions

The general question to be addressed by this study is: what are the effects of implementing Mercosur on the use and conservation of natural resources (particularly agriculture) in Argentina? From this broad question, three specific questions are derived:

- Is the environment taken into consideration by Mercosur decision-making bodies when deciding the direction of the integration process?
- Is the Mercosur harmonization process of trade-favoring measures eroding or strengthening the existing regulatory framework for the use and conservation of natural resources in Argentina?
- What environmental trade-related effects (particularly in agriculture) have been brought about by the implementation of Mercosur in Argentina?

Significance for Conservation and Sustainable Development

This research will generate and provide much needed information about the nature and extent of implementing Mercosur on the use and conservation of natural resources in Argentina. Policy issues of current interest include the development of strategies to transform Mercosur into an initiative promoting sustainable development and to make trade-related measures compatible with conservation policies. Results from this study will improve the background on which to base related policy decisions. In addition, the insights from this investigation will be useful to environmental action groups and governmental institutions involved in the design of policies for the interface between trade and the environment in the region.

Overview of the Dissertation

The organization of this study is as follows: Chapter Two develops a conceptual framework to analyzing the effects of implementing Mercosur on the use and conservation of natural resources in member countries. It is also a review of the literature
on the approaches for assessing the environmental effects of multilateral trade liberalization agreements. Chapter Three is a review of the antecedents on regional integration attempts in Latin America and includes a description of the evolution of Mercosur. It also describes the organization and juridical structure of the Common Market and provides a synopsis of current negotiations with several other Latin American countries to expand Mercosur. Chapter Four is an examination of the assimilation of the environmental dimension within the common market institutional process, and also includes analyses of the implications of Mercosur trade-related instruments on conservation policies and domestic conservation legislation. Chapter Five is an exploration of the regulatory effects of Mercosur on the environmental legislation of Argentina related to conservation of natural resources. Chapter Six is an exploration of the scale, composition, and technological and geographical effects that trade measures associated with the implementation of Mercosur have had on the use of natural resources in Argentina. Chapter Seven closes the dissertation with conclusions.
CHAPTER 2
CONCEPTUAL FRAMEWORK TO ANALYZING MERCOSUR

Introduction

Although there are efficiency gains to be made from trade liberalization (Bhagwati et al., 1998), economic efficiency is no longer the sole criterion for the appraisal of trade liberalization agreements (TLA). Environmental issues (relating to resource conservation and environmental protection) and social issues (relating to equity and distribution of benefits and costs) increasingly are considered for assessing the overall effect of TLA (WWF, 1998; 1999; Lee, 2000), as TLA usually contain measures that may have both direct and indirect economic, environmental, and social effects. For example, some measures, such as changes in quotas, have direct economic consequences (e.g., increase trade). In turn, these may have further social (reducing employment in certain sector and increasing employment in others) and environmental (increase use of resources) consequences. Other measures, such as removal of trade-related distortions, may affect environmental and worker-protection provisions (change in regulations), which then have environmental, social, and economic impacts (through change in policies).

The assessment of TLA is complicated by the direct and indirect cause-relationships described above, as well as the execution of other regulatory reforms (e.g., privatization, deregulation) that may be taking place parallel to the implementation of the TLA; these two sets of regulatory changes may interact and have synergistic economic, environmental, and social consequences. In spite of these difficulties, there is generalized consensus that if the objective of TLA is to improve the welfare of citizens of
member countries and to promote sustainable development, the effects of implementing TLA on the environment and on the ability of a member country to protect the environment must be assessed. This assessment should be aimed at providing negotiators and the public with the elements and information necessary for designing policies directed at preventing or mitigating negative effects or reinforcing positive effects arising from the implementation of the TLA (Miguel and Núñez, 2001).

**Previous Work on TLA Appraisal**

The effects of trade liberalization policies and agreements on the environment have received considerable attention in recent years (World Bank, 2000). Even though there have been some efforts since the beginning of the 1970s to investigate the links between trade and the environment, it was with the negotiations of the Uruguay Round of the General Agreement on Trade and Tariffs (GATT) and the discussions leading to a North American Free Trade Agreement (NAFTA) that attention to the effects of trade on the environment increased significantly (see amongst others, GATT, 1992; Anderson and Blackhurst, 1992; Low, 1992; Benton, 1996; Ekins et al., 1994; Jayavadeppa and Chhatre, 2000).

Early works tended to be mostly theoretical, descriptive, and qualitative in nature, and expressed rigid views that trade liberalization would either be beneficial for the environment or that it would result in environmental disaster. The debate in the early 1990s surrounding the implementation of NAFTA, a commercial agreement to establish a free trade area among Canada, Mexico, and the United States, was dominated by such views. Environmentalists feared that NAFTA would weaken US environmental laws and standards (resulting in a “race to the bottom”), provoke a flight of US industries to “pollution havens” in Mexico, and generate negative environmental impacts (such as
pollution and illegal trade in wildlife) along the US-Mexico border. Free traders in favor of NAFTA feared that environmental concerns could be used as disguised protectionist measures that could prevent potential gains to be obtained from trade liberalization.

Amongst the extensive literature on the environmental effects of NAFTA, see Bhagwati (1993) and Daly (1993), for a debate.

Increased interest in the effects resulting from the trade and environment relationship has resulted in the recognition for the need to assess the consequences that TLA have on the environment in member countries (Miguel and Núñez, 2001). The heated debate surrounding the implementation of NAFTA provoked the creation of the Commission for Environmental Cooperation to assess the effects of the treaty on the environment (CEC, 1996). The conformation of the European Internal Market also prompted the implementation of a Task Force on the Environment to analyze the impact of policies associated with the Internal Market on the environmental domain (Huda, 2000). And parallel to these developments, a series of methodologies to assess the environmental effects of implementing TLA have been developed (see CEC, 1996; OECD, 1994, 2000; WWF, 1998; Kirkpatrick and Lee, 2000; UNEP, 2000).

In recent years, opinions on the trade and environment issue have converged to a certain extent, and a more balanced evaluation has emerged. There is growing consensus on the following aspects regarding the analysis of trade liberalization policies and the environment. First, certain possible effects of trade and trade-related agreements on the environment (see below) have been identified (Grossman and Krueger, 1991; OECD, 1994; Potier, 1997; UNEP, 2000) and serve as a useful basis for assessing the trade-environment relationship (CEC, 1996; OECD, 2000). Second, there is recognition that
trade agreements can have both positive and negative consequences on the environment depending on existing environmental policies of member states and their institutional support (CEC, 1994; Ford Runge, 1994; Conway, 1998; OECD, 2000). Last, issues surrounding trade, agriculture, and natural resources (forestry, fisheries, wildlife, and mining) may be relatively more important to the environment than those surrounding manufacturing; this is especially relevant in trade agreements involving developing countries where the primary sector constitutes the base for their exports (Torres, 1996). Nevertheless, the specific conditions surrounding distinct trade agreements, the direct and indirect nature of the relation between trade liberalization policies and the environment, and the case-specific methodology needed to assess such relation have made generalizations very difficult and substantiate the evaluation of the contribution (or not) of each trade agreement to the sustainable development of their member countries.

**Previous Work on the Environmental Aspects of Mercosur**

Examination of the literature on the environmental effects of implementing Mercosur reveals the minimal state of our knowledge on the subject. Most studies focus on describing some of the regulatory and policy measures related to the environment taken by Mercosur (Novara, 1994; Drnas, 2000), on reviewing the existing environmental legislation of the member countries (FARN, 1995; Bertucci et al., 1996), on the links between Mercosur and global environmental treaties (Buxedas, 1998), on the potential impacts derived from expanding infrastructure associated with the Hidrovia Project (Gudynas, 2000; Hochstetler, 2002), and on agricultural production and dislocation (May and Bonilla, 1997; Blanco and Borregaard, 1998). Several works describe the economic changes on the composition and structure of exports from different economic sectors (particularly agriculture) brought about by the adoption of the export-led growth model.
by Argentina since the early 1990s (Schaper, 1999; Chudnovsky et al., 1999; Reca and Parellada, 2001). However, these studies do not analyze the specific role of Mercosur as a market for Argentinean export during that period, nor they examine potential negative and positive environmental effects caused by the growth and composition of trade associated with its creation. Although the studies mentioned above provide some insights on aspects of the Mercosur-environment relationship, none of them provide an overall picture of the environmental effects of implementing the Common Market.

In addition to the scant literature on the environmental effects of implementing Mercosur, four substantial limitations appear in the studies reviewed. First, limited or no attention has been given to the political process of incorporating the environmental dimension into Mercosur institutional process. This failure makes it difficult to identify sectors promoting/retarding the adoption and implementation of environmental policies into the economic integration process. Likewise, it makes difficult to understand, much less to explain, the policies toward the environment that are being defined by Mercosur decision-making bodies.

Second, studies on the regulatory aspects of Mercosur fail to identify the incidence of trade liberalization measures on existing environmental regulations in member countries. Similarly, the studies do not analyze if the Mercosur trade measures are hindering the ability of member countries to protect their environment. This is paradoxical because environmentalists and free-trade advocates are both preoccupied with issues related to the harmonization process directed to removing technical barriers to trade, particularly because measures to protect the environment and conserve biodiversity
and natural resources are generally considered technical barriers and subject to elimination under trade-liberalization initiatives.

Third, there is no recognition that impacts on the direction of the Mercosur integration process arising from the dynamics of macroeconomic conditions in the economies of member countries, along with the interaction of those economies with the international context, have environmental consequences. This is seen when changes in macroeconomic variables (such as the exchange rate) or in international conditions (such as commodity prices), influence the direction, volume, and composition of trade of Mercosur member countries, which in turn, may have environmental repercussions. Although there is some recognition of the importance of the interactions between the national economies and the international context on the Mercosur integration process (Robinson et al., 1998; Stallings and Peres, 2000), little attention is paid to the links between those interactions and the resulting Mercosur policies and signals toward the environment.

Last, the scarce quantitative analyses on the environmental effects of trade liberalization in Argentina focus exclusively on variables and categories operating at an aggregated, national level (see Schaper, 1999 for an example). This represents a problem at two levels. On one hand, it does not allow for the capture of impacts of signals emanating from Mercosur at the sectoral level, which hinders comprehension of the environmental consequences brought about by the process of specialization within the productive system related with natural resources and the environment. On the other hand, it obscures the differential environmental effects that trade-favoring policies associated with Mercosur will have on the economic regions inside a member country, as
the degree of connection of the economic region with Mercosur will be given by its comparative advantages.

**Analytical Framework**

The analytical framework is designed to establish the relationship between Mercosur and the use and conservation of biodiversity and natural resources on country members. In this sense, the analytical framework helps to identify components and relations and provides conceptual unity to the different portions of this research. The analytical framework draws on the methodologies developed for assessing the environmental effects of TLA on the environment, and it tackles the four problems identified above. The main characteristic that distinguishes this study from other studies on Mercosur is its systems approach, which allows for reflecting the linkages between the various micro- and macro-scale processes occurring at several levels. The approach is derived from mathematical graph theory, in which elements and connections are the main focus of analysis (Potts, 2001). The schema is only one way to represent the processes and connections operating at different scales among the ecological, economic, and institutional systems involved with Mercosur implementation. The underlying premise behind the schema is that the system is a dynamic one, in which its elements are linked and interact with each other leading to adaptive evolving ecological-social systems (Berkes and Folke, 1998).

To study the signals generated by the Mercosur integration process, the corresponding response by economic actors, and the resulting outcomes on the use and conservation of natural resources in member countries, the analytical framework illustrated in Figure 2-1 is used. Although the schema depicts the elements and connections that make up the Mercosur system associated with the use and conservation
of natural resources in Argentina, it can be applied to study the environmental effects of implementing Mercosur in any of its member countries. The analytical framework covers three scales: (i) international markets and multilateral financial and trade institutions (international context); (ii) other Mercosur member countries and institutions of Mercosur (Mercosur regional context); and (iii) ecological and social systems of Argentina (national context).

Figure 2-1. Components and relations that define the framework of the Southern Common Market (Mercosur).

The elements that constitute the international context are related to international finance and the demand for Argentinean exports (from markets other than Mercosur), and to the international trade system. The need to attract external finance to finance fiscal
deficits and to facilitate investment and technical change processes make the multilateral financing institutions and the flow of international funds greatly influential on government decisions, making certain economic policies more likely than others. Similarly, fluctuations in international demand and the relative terms of trade influence export volumes and the trade balance, and the relative importance of Mercosur as a market for Argentinean exports. These elements help in shaping domestic economic, political, and social conditions and the government policies in the social and economic arena. Those policies, in turn, have an impact on the position of Argentina regarding the direction and speed of the Mercosur integration process.

The international trade system exerts a direct influence on Mercosur through the set of general rules established by multilateral trade organizations, such as the General Agreement on Trade and Tariffs, its successor the World Trade Organization, or the Latin American Integration Association, to govern international trade and the constitution of trade agreements. Since the nature of Mercosur is fundamentally a trade agreement, it must comply with those general rules and follow trade procedures according to agreed upon international principles on trade liberalization. The international trade system also influences Mercosur through the interplay with other regional trade agreements—such as NAFTA or the EU—or other regional trade initiatives—such as the Free Trade Area for the Americas—by affecting the strategic decisions taken by the Common Market as a bloc and the governments of its member countries, vis-à-vis those trade agreements and initiatives.

In the Mercosur regional context, the national economic and political objectives of member countries combine to form the Southern Common Market. Although the nature
of Mercosur is primarily economic, it is also a historical, political, and cultural event with vast repercussions on Latin America and on the social and ecological systems of its member countries (Ferrer, 1997; Ferrer and Jaguaribe, 2001). It has reshaped the geopolitics of South America and altered the production and commercialization patterns in member countries.

Mercosur is presented as an institution located at the interface amid the national context of member countries to represent its intergovernmental character. Thus, it has a dynamic of its own in terms of decision-making for the integration process, but that dynamic is heavily influenced by the international context and by local developments in its country members. Particularly relevant regarding the latter are the macroeconomic, social, and political conditions existing in Brazil and Argentina, the two main trade partners and largest members of the Common Market. Domestic conditions in those countries have considerable influence on the volume and direction of trade and on the speed of the integration process. In addition, and due to the degree of integration among the economies of member countries brought about by Mercosur, oscillations in the economic conditions in one of the two main partners greatly affect the economic, social, and political conditions existing in the other main partner, and the rest of the member countries as well. For example, expansions or contractions in the Brazilian economy have profound consequences in Argentina, since Brazil has been a major market for Argentinean exports since the implementation of Mercosur. When Brazil devalued its currency in early 1999, Argentinean exports to that country decreased significantly (25%), and added to the recession in Argentina that lasted until middle 2002 (see Chapter 3). Although the Brazilian devaluation was not a decisive factor (see Mondino et al.,
2000; O’Connell, 2001), it contributed in creating the domestic conditions that led to the defeat of the candidate from the incumbent party in the Argentinean presidential elections held that year.

As an institution, the main role of Mercosur is to make policy decisions to favor the economic integration among its member countries, and transmit them to the relevant economic actors through government policies that change the environment in which those actors operate. Policy decisions emerging from the Mercosur decision-making bodies are mostly determined by domestic developments in member countries, although they are also influenced by external factors linked to the world economy. From the perspective of each member country, those policy decisions constitute signals that help to shape behaviors by which economic actors operate at the macro- and microeconomic level.

At the national level, governments internalize Mercosur decisions by issuing regulations and implementing policies aimed at fostering economic integration. Local firms related to the tradable goods sector based on natural resources react to signals emerging from Mercosur and, depending upon large-scale conditions within the country and internationally, expand or reduce their production depending on their comparative advantage. Those that expand production do so by investing in new technologies and increasing the use of natural resources. Important also for their decision-making regarding the production of goods directed to the international market is the exchange rate, as changes in the exchange rate modify relative prices between domestic input prices and international commodity prices. Therefore, the exchange rate acts—among other factors—as an incentive or a disincentive to production for the international market, which in turn, affects the rate of use of natural resources.
As a result of the factors described above, a pattern of interactions emerges between signals generated from Mercosur and the ecological and socio-economic systems of member countries. The pattern of interactions occurs at the national level, and produces as outcomes a series of environmental changes through scale effects, composition effects, technique effects, geographical effects, and regulatory effects. The scale effect refers to the increase in the scale of economic activity and the volume of exports brought about by trade liberalization. The composition effect is given by shifts in production and in the make up of exports. Similarly, trade liberalization generates changes in technology by favoring the adoption of certain technologies to further develop comparative advantages. The geographical effect refers to the differential capabilities of the ecosystems to produce particular commodities and recover from human-induced disturbances. Finally, the regulatory effect points to the changes on environmental policy-making imposed by Mercosur regulations.

Although the outcomes of this pattern of interactions may be compatible with sustainable development, the new background created by Mercosur can translate into an increase in the pressure of biological resources and natural ecosystems on member countries. If trade liberalization reforms are blindly adopted, they may result in losses of natural resources and biodiversity by means of increased habitat destruction, resource depletion, introduction of exotic species and diseases, monoculture, and industrial pollution (Conway, 1988). As such, the overall effect of implementing Mercosur on the use and conservation of natural resources in member countries constitutes an empirical matter.
Methodological Considerations

The general methodological scope of this study draws from the guidelines developed by the OECD (1994) and Kirkpatrick and Lee (2000) for assessing environmental effects of trade agreements. The guidelines from those methodologies command to start the assessment at the macro-level and progressively move down to the micro-level, in order to identify key areas in which the environmental effects of TLA could be more relevant. This approach is applied to the analytical framework of the present study by beginning the assessment at the Mercosur regional level, then descending to the country level, to finally conclude at the sectoral level.

The focus of the analytical framework on macro-micro relations and on the temporal dimension associated with the implementation of Mercosur has implications for the methodological tools applied in this study. The complex direct and indirect interrelations of the variables included in the analytical framework require the application of quantitative as well as qualitative methods. Depending on the availability of reliable data, quantitative methods are used whenever possible. For example, quantitative analysis is used to examine the trade pattern and composition of Argentina. However, the examination of many parts of the Mercosur environmental effects demands qualitative, historical analyses. This methodology becomes relevant in order to establish potential cause-effect relationships, as the implementation of Mercosur in Argentina was parallel to, and as a part of, the execution of other regulatory reforms (e.g., privatization, deregulation) that also may have had similar environmental, social, and economic consequences.

The assessment of the scale, composition, technology, and geographical effects of implementing Mercosur on the environment of Argentina is centered on the agricultural
sector for three reasons. First, the agricultural sector is important for the Argentinean economy—it represented 9.4% of GDP and 55.7% of exports in 2004, respectively. Second, agriculture-related activities accounts for 47% of the land use in Argentina (FAO, 2006), and thus is probably the single most powerful influence on environmental quality in the country. Last, reliable data on the agricultural sector (level of exports, amount of land under cultivation, and use of agrochemicals, for example) covering the Mercosur time span is available with a certain degree of detail, which is not the case for other productive sectors.

To assess the mentioned trade-related effects on the use and conservation of natural resources in Argentina, a counterfactual approach is implemented. In other words, given the parallel changes in macroeconomic policies (i.e., privatizations, deregulations) taking place in Argentina during the time span covered by this study that may have expanded agricultural exports, the interest of the analysis is on comparing situations with and without Mercosur (instead of before and after Mercosur). To do so, indicators used to assess the different trade-related effects are analyzed in terms of their contribution to exports directed to Mercosur versus those directed to the rest of the world. The indicators used to assess the different trade-related effects are the following: scale effects—changes in the volume of agricultural exports (cereals and oilseeds, vegetable oils, meat, dairy products and cotton); composition effects—changes in the composition of the mentioned agricultural exports; technology effect—changes in (i) the use and incorporation of new cropping technologies, (ii) the use of agrochemicals, and (iii) yields in agricultural products directed to international markets. To conduct those comparisons, a database extending from 1985 to 2005 was constructed. This time span encompasses both the
years of the pre-Mercosur negotiations conducted during the late 1980s, as well as the implementation of the Common Market since its creation in 1991.

**Data sources.** Data from several Argentinean and international statistical sources were used in this study. Documents on Mercosur free trade policies and regulations came from the Mercosur Secretariat (*Secretaría Administrativa del Mercosur*). Documents on Mercosur environmental policies and resolutions, and on Argentinean environmental laws and regulations were from the Argentina Ministry of Health and Environment (*Ministerio de Salud y Ambiente*). Statistics on Argentinean exports of goods based on natural resources, such as agriculture, forestry, and wildlife came from the National Institute of Statistics and Census (*Instituto Nacional de Estadísticas y Censos, INDEC*). Prices of commodities, export/import duties, forest cover and agriculture land planted were obtained from INDEC and the Food and Agriculture Organization (FAO). Data on use of agrochemicals and agricultural production techniques came from the National Institute of Agricultural Technology (*Instituto Nacional de Tecnología Agropecuaria, INTA*), INDEC, and FAO. Macroeconomic financial indicators on Mercosur countries come mainly from the Mercosur Secretariat, the Argentine Ministry of Economics, the International Monetary Fund, and the World Bank.
CHAPTER 3
UNDERSTANDING THE SOUTHERN COMMON MARKET

Introduction

The Southern Common Market (Mercosur) is the most comprehensive and ambitious regional integration initiative in the Southern Cone of Latin America in recent times. Since 1991, Argentina, Brazil, Paraguay, and Uruguay have moved toward the formation of a Common Market to allow for the free flow of goods, services, and production factors among the four countries. This chapter focuses upon Mercosur legal and organizational structure. The chapter is organized as follows. First, a synopsis of Mercosur main socio-economic attributes is provided. Second, the evolution of Mercosur is presented to recognize its links with previous regional integration attempts and explain the progression of the integration process. Third, the juridical nature of Mercosur is explained to comprehend the effects that norms generated from its decision bodies have on the legal and juridical frameworks of the countries. Fourth, the organizational structure of Mercosur is described to understand the functioning and attributes of its decision-making bodies. Finally, the situation of current negotiations with several Latin American countries to expand Mercosur is presented, along with a synopsis of the discussions conducted with other countries and economic blocs to establish preferential trade agreements.

About the Southern Common Market

The Southern Common Market is the third largest trading bloc behind the European Union and the North American Free Trade Agreement (Ferrer, 1997). Mercosur covers
an area of more than 12 million square kilometers with a total population of more than 200 million people, representing 58% of the surface and 42% of the population of Latin America, respectively. In 2004, the total Gross Domestic Product (GDP) for the four member countries was slightly more than US$ 1 trillion (Table 3-1). GDP per capita is about US$ 4500, with marked differences among countries (Table 3-1). Although Mercosur is not yet fully implemented (see below), the volume of trade (exports plus imports) among its members has increased more than threefold since its creation, reaching more than US$ 42 billion in 2005.

Economically, Mercosur is dominated by Brazil and Argentina, the two largest and most developed economies in South America. Both countries represent approximately 96% of the population, and 92% of the foreign trade on Mercosur (Table 3-1). Uruguay and Paraguay, in turn, represent the smaller economies in the bloc. Uruguay has the smallest population and territory in the Common Market. Paraguay constitutes the smallest economy within Mercosur and is also highly dependent on intra-Mercosur trade.

The Evolution of Mercosur

Previous Regional Attempts

Latin America has a long history of attempts at regional integration. In the case of the Southern Cone, there were several failed attempts during the first half of the Twentieth Century, the most ambitious one being the proposal for the creation of a customs union among the countries of the River Plate Basin during World War II (Rapoport and Musacchio, 1993). It was, however, during the late 1950s that Latin

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1 The attempts included: the proposal to build a Panamerican railroad presented during the Panamerican Conferences of 1920, 1930, and 1940; the proposal to create a customs union between Argentina and Brazil in 1940; and the bilateral agreements signed by Argentina with Chile, Paraguay, Bolivia, and Peru after the end of WWII.
American countries—inspired by the emerging European Economic Community, and as part of the import substitution industrialization strategy (ISI) promoted by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC)—saw regional integration as a means to overcome the structural problems affecting their economies and to accelerate development (Bulmer-Thomas, 1994).

Table 3-1. Socio-economic indicators of the four countries that are members of Mercosur and of Mercosur per se; 2005.

<table>
<thead>
<tr>
<th>Socio-Economic Indicators</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Paraguay</th>
<th>Uruguay</th>
<th>Mercosur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface (sq. km)</td>
<td>2,767,889</td>
<td>8,512,965</td>
<td>406,752</td>
<td>176,251</td>
<td>11,861,821</td>
</tr>
<tr>
<td>Population (thousands)</td>
<td>38,226</td>
<td>1,850,48</td>
<td>6,068</td>
<td>3,432</td>
<td>232,774</td>
</tr>
<tr>
<td>Urban population (%)</td>
<td>89.6</td>
<td>79.9</td>
<td>56.1</td>
<td>92.6</td>
<td>81.6</td>
</tr>
<tr>
<td>Demographic growth (%)</td>
<td>0.9</td>
<td>1.4</td>
<td>2.5</td>
<td>0.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Life expectancy (years)</td>
<td>74.1</td>
<td>71.0</td>
<td>70.8</td>
<td>75.2</td>
<td>—</td>
</tr>
<tr>
<td>Literacy (%)^a</td>
<td>96.8</td>
<td>86.9</td>
<td>93.3</td>
<td>97.6</td>
<td>90.5</td>
</tr>
<tr>
<td>2004 GDP rate growth (%)</td>
<td>9.0</td>
<td>4.9</td>
<td>4.0</td>
<td>12.3</td>
<td>6.0</td>
</tr>
<tr>
<td>2004 GDP (millions US$)^b</td>
<td>249,972</td>
<td>763,070</td>
<td>7,313</td>
<td>16,879</td>
<td>1,037,234</td>
</tr>
<tr>
<td>2004 GDP capita (US$)^b</td>
<td>6,601</td>
<td>4182</td>
<td>1,235</td>
<td>4,953</td>
<td>4516</td>
</tr>
<tr>
<td>Total exports^c</td>
<td>40,014</td>
<td>118,309</td>
<td>1,688</td>
<td>3,405</td>
<td>163,416</td>
</tr>
<tr>
<td>Total imports^d</td>
<td>28,693</td>
<td>73,524</td>
<td>3,251</td>
<td>3,879</td>
<td>109,347</td>
</tr>
<tr>
<td>Exports to Mercosur^c</td>
<td>7,559</td>
<td>11,726</td>
<td>913</td>
<td>781</td>
<td>20,979</td>
</tr>
<tr>
<td>Imports from Mercosur^d</td>
<td>10,905</td>
<td>7,052</td>
<td>1,576</td>
<td>1,631</td>
<td>21,164</td>
</tr>
<tr>
<td>% Exports to Mercosur^e</td>
<td>18.9</td>
<td>9.9</td>
<td>54.0</td>
<td>22.9</td>
<td>12.8</td>
</tr>
<tr>
<td>% Imports from Mercosur^e</td>
<td>38.0</td>
<td>9.6</td>
<td>48.5</td>
<td>40.2</td>
<td>21.3</td>
</tr>
</tbody>
</table>

Source: ALADI, ECLAC, SAM and INDEC databases, and own calculations.

^a Percentage over total population of 15 years-old and older.

^b In 1995 US dollars.

^c FOB values, in millions of 2005 US dollars.

^d CIF values, in millions of 2005 US dollars.

^e Percentage of total exports and total imports originated from Mercosur partners.

In 1960, the Latin American Free Trade Association (ALALC) and the Central American Common Market (CACM) were established. The ALALC was composed of Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay,

^2 Only the LAFTA is discussed here due to its importance as a direct antecedent for Mercosur.
and Venezuela. The ultimate objective of ALALC was the creation of a Common Market among its members. That objective would be achieved by establishing a free trade area among its member countries by the gradual and progressive elimination of barriers to trade, which would result in the constitution of a Common Market in 12 years. After some initial success of lowering tariffs among member countries, this initiative failed in achieving its objective of promoting trade and efficiency. The main reason for the failure was that high tariffs for protected sectors were kept in place, which created captive markets and generated trade diversion instead of trade creation (Bulmer-Thomas, 1994). Moreover, discontent among some member countries regarding the direction that the integration process was taking, prompted the creation of the Andean Pact (PA) in 1969. The PA was composed of Chile, Bolivia, Peru, Colombia, Ecuador and Venezuela,³ and operated as a sub-regional accord under the aegis of ALALC (Bulmer-Thomas, 1994).

In 1980, there was an effort to revitalize the ALALC, and the Latin American Integration Association (ALADI) was created in its place. Instead of the multilateral commercial liberalization program stipulated in the ALALC, leading to a free trade area and a latter Common Market in a certain period of time, ALADI was a more flexible integration instrument that put on place a series of procedures allowing for the establishment of preferential tariff agreements among its members (Rapoport and Musacchio, 1993). Those preferential agreements could be of regional as well as partial in scope, giving member countries ample margin to devise procedures for promoting

³ Due to differences with the ISI strategy followed by AP and the neoliberal policies pursued by the government of dictator Pinochet, Chile retired from the AP in 1976.
economic integration. However, the debt crisis initiated in Mexico in August 1982 and the protective policies implemented by ALADI country members to cope with that issue undermined its effectiveness.

The outcome of the integration processes described above has not been the originally anticipated one. Both the ALALC and the ALADI failed in promoting efficiency in the economies of its country members. They also failed in preventing the protection of declining non-competitive industries; however, this last point was more related to the inward-looking pattern of development prevalent in the region under the ISI than to the functioning of those trade agreements (Bulmer-Thomas, 1994). In spite of these shortcomings, the juridical structure created as a result of the integration attempts in past decades served as a basis for the economic undertakings in the region during the 1990s. For example, the ALADI provides the juridical framework for all protocols and treaties signed by Argentina and Brazil that led to the formation of Mercosur (see below), as well as the Treaty of Asuncion—that creates the Southern Common Market—and its additional protocols.

The debt crisis, the recurrent problems associated with the balance-of-payment, and the suffering of hyperinflation episodes, along with changing conditions in the international arena (i.e., fall of the Soviet Union in 1989), determined the exhaustion of the ISI model and its inward-looking orientation as a development strategy. The adoption of a New Economic Model (NEM), as prescribed in the Consensus of Washington, produced a radical transformation in the development strategy of the Latin American countries. The structural reforms (privatization, trade liberalization, and relaxation of

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4 ALADI consists of nine basic instruments of negotiation under which member countries may establish trade and economic agreements.
conditions for foreign investment and capital flows, among others) associated with the
NEM brought drastic changes in the economic environment in the region (Stallings and
Peres, 2000). In addition to these economic changes, there were political changes in the
region as well. By the end of the 1980s, most Latin American countries had
democratically elected governments and armed conflicts (particularly in Central
America) had almost disappeared. This new environment prompted a new round of
regional integration initiatives, but this time with a very different philosophy from the
previous one.

The new regional integration initiatives pursued—under an outward oriented
development strategy—the liberalization of trade and the formation of larger markets to
increase productivity, the creation of economies of scale, the improvement of
competitiveness vis-à-vis the rest of the world, and the establishment of favorable
conditions to attract direct foreign investments (Bulmer-Thomas, 1994; Mendes, 1995;
Ethier, 1998; Estevadeordal et al., 2000; Devlin, 2001). In addition, and unlike previous
attempts in the region, an important objective guiding the formation of the new economic
agreements was to increase member countries’ negotiating power in the international
arena (Mendes, 1995; Ferrer, 1997). This was observed as a reaction to the multi-polar
structure based on economic relations that arose after the collapse of the Soviet Union, in
which USA, Europe and Japan, emerged as the dominant regional economic actors
(Gilpin, 2001).

**Origins of Mercosur**

The origins of the process leading to the formation of the Southern Common
Market began with the change in the character of the bilateral relations between
Argentina and Brazil during the middle eighties, and the subsequent integration process
initiated between these two countries (Barraza and Jardel, 1998; Díaz Labrano, 1998; Lavagna, 1998; Ferrer and Jaguaribe, 2001). Since the beginning of the last century, both countries competed for the political and economic hegemony of South America. This scenario changed drastically with the democratization process of the subcontinent during the early 1980s.

In 1985, the new democratically elected presidents of Argentina and Brazil signed the Declaration of Foz do Iguaçu to bring the two countries closer together. After the initial step for initiating better bilateral relations, both countries signed the Cooperation and Integration Program in 1986. The Program included twelve commercial protocols (the twelve protocols involved in the agreement were signed under the ALADI juridical framework), ranging from cooperation in nuclear energy research to trade liberalization. In 1988, Argentina and Brazil signed the Treaty for Integration, Cooperation and Development\(^5\) (TICD) that set the stage for a Common Market between the two countries within ten years. The Treaty provided for the gradual elimination of all tariff barriers and the harmonization of the macroeconomic policies of both nations, and declared that this agreement would be open to other members of the Latin America Integration Association (for a detailed account of the negotiations leading to the TICD, see Lavagna, 1991.)

By 1990, the governments of Argentina and Brazil changed, and with them also changed their policies and strategies toward the integration program. The new presidents of Argentina and Brazil signed the Act of Buenos Aires in 1990, by which the integration process accelerated. The Act shortened the period for the creation of a Common Market between Argentina and Brazil, establishing it for December 31, 1994. Immediately after

\(^5\) This Treaty was signed under the framework of ALADI as Accord on Economic Complementation No. 14.
the signing of the Act, Chile, Paraguay, and Uruguay were invited by Argentina and Brazil to become members of the would-be Common Market. While Paraguay and Uruguay agreed to join the future Common Market, Chile declined the invitation for the time being and expressed its intention to create a free trade area with the Common Market in the future.6

The Treaty of Asuncion

Negotiations amongst the four countries resulted in the Treaty of Asuncion (TA), signed on March 26, 1991, which established the basis for the formation of the Southern Common Market. The Treaty has 25 Articles in six main chapters covering the purposes, principles and instruments, the initial organizational structure, the period of application, the accession and denunciation process, and the general provisions of the would-be Common Market. In addition, the Treaty has five annexes covering the trade liberalization program, rules of origin, dispute settlement, safeguards, and the establishment of technical and policy work subgroups. The TA is generic in nature, since it only establishes general objectives, and needs future agreements to concretize its principles (Barraza and Jardel, 1998; Díaz-Labrano, 1998; Ruiz, 2000). Therefore, the Treaty lacks operative norms in most of its text, with the exception of specific references related to tariff reduction schedules described in the annex on the trade liberalization program.

The Treaty created a free trade area and provided the legal framework for the negotiations that would lead to the formations of a customs union, and eventually a

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6 At that time, Chile—which was concluding a bilateral trade agreement with Mexico—was in negotiations with the US to become part of NAFTA. Since the US was one of the main markets for Chilean exports, securing access to that market was considered strategically more important by Chilean negotiators than becoming part of Mercosur (Mendes, 1995).
Common Market among Argentina, Brazil, Paraguay, and Uruguay. The goal of the TA was to establish a single market among its member countries based on: (i) the free circulation of goods, services, persons, and capital, (ii) the establishment of a common external tariff and trade policies, (iii) the coordination of macroeconomic and sectoral policies, and (iv) the harmonization of legislation to deepen the process of economic integration.

The TA proclaimed that the Common Market would be formed according to the principles of gradualism, flexibility, and balance. The principle of gradualism implies that the Common Market will be formed through successive steps to avoid the adoption of drastic measures that may provoke serious economic distortions in member states. By flexibility is meant the impossibility to foresee all possible scenarios that reality may present in the future, and the need to design policies for adapting to those new realities. Finally, the principle of balance establishes that measures taken to establish the Common Market must not result in grave harm for one Party and disproportionate benefits for another (Díaz-Labrano, 1998).

Based on the principles described above, the Treaty established a transition period that extended until December 31, 1994. During such period, the TA commanded the implementation of a trade liberalization program consisting of a progressive, linear, automatic, and across-the-board tariff reduction, together with the elimination of all non-tariff barriers to achieve a zero duty without non-tariff restrictions among member countries by December 31, 1994. The progressive and automatic tariff cuts were implemented according to a schedule over a five-year period, and allowed protection that was both selective and temporary. The automatic tariff reductions were applied to all
products, excluding those listed in the schedule of exceptions presented by each member country. The number of items included in the schedule of exceptions was reduced at the end of each year, and the retired items received an automatic tariff cut equal to the percentage stipulated in the tariff reduction schedule corresponding to the moment of their withdrawal from the list. The percentage of items reduced per year was in accordance to a timetable that applied differently for Argentina and Brazil (ending on December 31, 1994) than for Paraguay and Uruguay (ending on December 31, 1995). The Treaty granted Paraguay and Uruguay one more year to reduce their tariffs because it recognized the differences in the size of their economies compared to those of Argentina and Brazil, and the difficulties that those countries would face in adjusting them to those of the larger partners of Mercosur (Abreu, 1991).

Additional to the implementation of the automatic tariff reduction program, the Treaty called for: (i) the elimination of non-tariff barriers, (ii) the gradual coordination of macroeconomic and sectoral policies—particularly those related with trade flows and the composition of member countries’ productive sectors and, (iii) the commitment between member countries to harmonize their legislation on those areas required to strengthen the integration. The Treaty also called for the establishment of an external common tariff by January 1, 1995, along with the adoption of common trade policies vis-à-vis third parties, as well as the coordination of positions in economic, trade, regional, and international Forums.

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7 The number of exceptions submitted by each country was as follows: Argentina 394, Brazil 324, Paraguay 439, and Uruguay 960.
Transition Period (March 1991–December 1994)

During the transition period extending between the signing of the TA and December 31, 1994, Mercosur countries reduced dramatically the tariffs on trade among each other, except for a small number of products that are considered sensitive by each member country and are still under special arrangements. The trade liberalization program resulted in a marked increase on intra-Mercosur trade. Trade among Mercosur countries more than tripled during the period and intra-Mercosur exports increased from $4.1 billion in 1990 to $14.5 billion by 1995.

Although the transition period was characterized by the rapid advance in the reduction of tariffs (as mandated by the TA) and the growth of intra-Mercosur trade, the period was not devoid of controversies among the parties. According to Barraza and Jardel (1998), the period can be described as a non-linear, “stop and go” cycle, in which the macroeconomic conditions of the two larger partners determined the achievements of the integration process. For example, since the middle of 1993 until early 1994, Mercosur was in a “stop” situation provoked mainly by the political and economic crisis suffered by Brazil. The instabilities in that country had an impact on the integration process, and Mercosur seemed to be a project of secondary importance for the two larger partners. On one hand, the Argentinean government indicated that at the end of the transition period Mercosur would be only a free trade area, while Brazil was advancing the idea of creating a South American Free Trade Area (Jardel and Barraza, 1998). The “go” situation came back in middle 1994 with the Plan Real in Brazil that decreased
inflation and recovered its economy, which created a favorable environment for trade and investment in the region.  

Besides the automatic tariff reduction program, two relevant policy instruments were developed during the transition period: the Brasilia Protocol on Dispute Resolutions and the Ouro Preto Protocol on the Institutional Structure of Mercosur. 

The Brasilia Protocol (BP) regulated the procedure for solving disputes among Party States on the interpretations of the TA, and the regulations generated by Mercosur decision-making organs. The mechanism established in the BP consisted of a set of progressive options, based mainly on diplomatic negotiations, for settling disputes. If diplomatic negotiations were unsuccessful, the BP allowed the possibility of setting up an Ad Hoc Tribunal constituted by representatives of the Party States involved in the dispute. Although the dispute settlement provided at the BP was directed mainly to controversies among Party States, it also allowed a limited procedure for presentation by private persons (see section on dispute resolution below). In turn, the Ouro Preto Protocol was complementary of the TA, defined the juridical nature of Mercosur,

8 In late 1992, Brazil suffered a profound political crisis resulting in the destitution of president Collor de Melo under charges of corruption. On top of the political crisis, the Brazilian economy was suffering from persistent high inflation rates (973.9% during 1992). During 1993, the inflation rate increased to 2068%. The situation escalated in early 1994 and prompted the launching of the Plan Real in June of that year. The Plan Real included—among other measures—the replacement of the Cruzeiro, the Brazilian currency, for the Real. As a result, the monthly inflation rate decreased from 50% in June 1994 to less than 2% in September 1994.

9 Annex III of the Treaty of Asuncion provided a procedure—based on diplomatic negotiations—for solving commercial disputes among country members. The Annex also mandated Party States to establish a permanent mechanism for dispute resolution before the end of the transition period. As a result, the Brasilia Protocol was approved on December 17, 1991, at the IV CMC Meeting, and entered into force on April 21, 1993. The Brasilia Protocol was employed in nine controversies, until its replacement by the Olivos Protocol on Dispute Resolution in February 2003.

10 Under Article 18 of the Treaty of Asuncion, it was mandated that member countries would call for an extraordinary meeting before December 31, 1994, to determine the definitive institutional structure of Mercosur. The Ouro Preto Protocol, complementary to the Treaty of Asuncion, was signed on December 17, 1994.
described its sources of law, and established the organs for the functioning of the customs union (see section on Mercosur organization).


As provided in the Treaty of Asuncion, on January 1, 1995, Mercosur became an imperfect customs union with no internal duties (except for a list of exempted items for each country; see below) and an external common tariff; although Mercosur has a CET, not all imports from non-member countries (informatics and telecommunications are exempted of the CET until 2011) are subject to that CET. Consequently, Mercosur constitutes an imperfect customs union until a consolidated CET is adopted. The removal of internal tariffs brought a marked expansion in intra-Mercosur trade. Exports among Mercosur member countries increased from US$ 14.4 billion in 1995 to US$ 20.4 billion in 1998. Moreover, several administrative instruments were adopted to facilitate the implementation of the customs union. They included a unified, single customs procedures code to govern both intra-Mercosur trade and trade with non-member countries, and the establishment of a Harmonized System on the Common Nomenclature for Mercosur (*Sistema Armonizado de Nomenclatura Común del Mercosur*) to classify goods subject to intra- and extra-Mercosur trade.

On the policy front, a five-year program named “Mercosur 2000” was introduced in December 1995 (see “**Programa de Acción del Mercosur hasta el año 2000**”, Mercosur Decision CMC 9/95) to guide the integration process and perfect the implementation of the customs union. The program provided political guidelines and actions to direct the integration process until the year 2000, and included aspects related to standardization of trade-related rules and procedures, harmonization of economic policies, and institutional development. The execution of this program of action faced numerous challenges and
was characterized by a series of “ups and downs” prompted by external economic shocks. The successive Mexican crisis of 1995, the Asian crisis of 1997, and the Russian crisis of 1998, along with the macroeconomic imbalances they created in Mercosur member countries, delayed and obstructed the implementation of the five-year program of action.

A particularly thorny issue during the period was the negotiations regarding the common external tariff (CET). While the TA specified the trade liberalization program during the transition period as the procedure for eliminating tariffs among member countries, it did not provide a mechanism for establishing a CET. This point was problematic since there were differences among the member countries on the level of the common external tariff, which were based on different national objectives. Argentina, Paraguay, and Uruguay had low tariffs on capital goods since they were interested in providing their firms with cheap foreign technology. Brazil, with an extensive capital-goods industry, was imposing high import tariffs (average tariff was 105% in 1990).

The negotiations led to the establishment of an initial CET¹¹ that covered about 85% of the import categories from non-member countries. The CET was set at 11 different levels ranging from 0 to 20%, with an average trade-weighted external tariff of 14%. The remaining 15% of import categories not covered under the initial CET included capital goods, informatics, and telecommunications, and each country established different tariffs for those categories ranging from 0 to 35%. During the negotiations it was also agreed that tariffs for capital goods would converge to a 14% CET by January 1, 2001, and the other two categories would converge to a CET of 16% by January 1, 2006. In addition, Argentina, Brazil, and Uruguay were allowed to

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¹¹ See “Proyecto de Arancel Externo Común del Mercosur” elaborated by the Work Subgroup No. 10 on Co-ordination of macroeconomic policies and approved by Mercosur Resolution GMC 7/94.
maintain up to 300 items (besides those under the category of capital goods, informatics, and telecommunications) in exceptions lists to the application of the CET until January 1, 2001. Paraguay, in turn, was allowed to maintain up to 399 items until 2006.

The regime associated with the initial CET was modified numerous times since its establishment in 1995, in order to cope with macroeconomic difficulties experienced by Mercosur member countries during the 1995–1998 period. To deal with the Mexican crisis in 1995, Argentina decided to re-apply a “statistics levy” of 3% to all imports—except those coming from Mercosur countries (the “statistical levy” had been eliminated on January 1, 1995 as mandated by the TA) and to increase the tariffs to the 300 items in its list of exception to the CET. Brazil, in turn, raised the import tariff on extra-Mercosur automobiles and electronic appliances to 70%. Further modifications were introduced during the Asian crisis of 1997 that prompted a transitory increase of 3 points in the CET until December 31, 2000. Although most of the described modifications to the CET were accorded among Mercosur members, in numerous occasions the modifications were taken unilaterally (Taccone and Nogueira, 2001). Those events created frictions among Party States and prompted several commercial disputes, particularly between Argentina and Brazil. Nonetheless, the expansion in trade among Mercosur members during the period created a favorable environment that made it easier to deal with those disputes.

**Crisis Years (1999–2002)**

The expansion in intra-Mercosur trade and the advances in the integration process achieved during the 1991–1998 period came to a halt in early 1999. Facing a loss of foreign reserves due to increasing capital outflows and a growing trade deficit (O’Connell, 2001), Brazil underwent a 40% devaluation of the Real in January 1999. This situation created a dramatic change in the comparative advantages of Brazil vis-à-vis
other Mercosur members, and prompted a serious political crisis between Argentina and Brazil,\textsuperscript{12} with the former adopting numerous unilateral protective measures against Brazilian products (Bulmer-Thomas, 1999; de Almeida, 2002).

As a reaction to the Argentinean measures, Brazil called for the application of the Mercosur mechanism on dispute resolutions and threatened to bring the case before the WTO (de Almeida, 2002). The differences in competitiveness created by the continuous devaluation of the Brazilian currency during those years (the Brazilian currency suffered a devaluation of 96% between December 1998 and December 2001) were exacerbated by the inflexibility of the Argentinean fixed exchange rate regime, and by the progressive deterioration of the economic activity and the fiscal situation in that country. The disparities in the exchange rates between both countries became a thorny issue in Mercosur negotiations during the period and threatened to derail the integration process. Moreover, the remaining differences between Brazil and Argentina on the direction of the integration process\textsuperscript{13} found Mercosur at the end of the decade in an “identity crisis” that was progressively deteriorating the relations among the member countries (Bouzas and da Motta Veiga, 2001; de Almeida, 2002). Furthermore, they created skepticism on the future of the integration process and “froze” the internal agenda of Mercosur (da Motta Veiga and Rios, 2002; INTAL, 2000).

\textsuperscript{12} The Argentinean government feared a “flooding” of its market by Brazilian products (INTAL, 2002). Although this situation never materialized because of the generalized decrease in economic activity in Argentina and the rest of the region (see INTAL, 2002; O’Connell, 2002), the Argentinean government reacted and took actions based on that assumption (INTAL, 2000).

\textsuperscript{13} This difference was mostly visible in the role that Mercosur and its member countries would play regarding the initiative for a Free Trade Area of the Americas. While Argentina during the 1990s pursued a “strategic alignment” with the US and favored the initiative, Brazil was promoting the establishment of a Free Trade Area for South America instead.
In order to avert the impasse the integration process was facing since the beginning of 1999, the Argentinean administration elaborated a project for revitalizing Mercosur, which was presented and approved during Mercosur XVIII CMC Meeting held in Buenos Aires in June 2000. The project, known as the “Re-launching of Mercosur”, consisted of ten measures related to those aspects of the integration process that had seen little advance in the last years. The measures covered issues ranging from access to markets and solution of controversies to the CET, macroeconomic coordination, and Mercosur relations with other economic blocs (see Mercosur Decisions CMC 22/00 to 32/00).

The program was a political response for moving the integration process forward (Bouzas and da Motta Veiga, 2001), but it failed to produce significant results in terms of solving the underlying differences that led to the impasse. The failure to advance in the integration process was the result of several reasons. One of these reasons was the increasing difficult macroeconomic situation faced by Mercosur member countries as a result of the 1999 Asian crisis, which led to the combined effects of falling commodity prices and decreasing availability of foreign finance for the emerging markets. This constrained the economic policy options of Argentina and Brazil and placed both countries in a difficult fiscal position. Other reasons for the failure of the integration process were the disparity in the exchange rate regimes between Argentina and Brazil and in the nature of the Mercosur re-launching program. Bouzas (2002) has argued that the program adopted a series of specific compromises based on national demands without an order of priorities or a common vision.

This approach avoided definitions on the main issues (i.e., a better implementation of the CET, coordination of positions vis-à-vis other economic blocs, and coordination of
responses under macroeconomic oscillations), which undermined its effectiveness.

Ultimately, the program was abandoned when the economic crisis that had been brewing in Argentina since the end of 1998 finally exploded in December 2001.

Since the last quarter of 1998, the Argentinean economy presented negative growth, coupled with increasing fiscal deficit, escalating pressure on the Peso, reduction in commodity prices, decrease in exports, and increasingly high unemployment rates (Aronskid, 2003). By the end of 2001, the fiscal situation had considerably deteriorated, and after facing mounting difficulties to obtain financing abroad and an increasing loss of reserves, the government decided to drastically limit withdraws from banking accounts along with imposing restrictions on operations with foreign currency. These measures, in practice, constituted an abandonment of the Convertibility Plan (see Chapter 5) adopted in 1991 (Rozemberg and Svarzman, 2003) and sparked a social reaction that provoked the fall of the Argentine government on December 21, 2001. The subsequent political crisis resulted in Argentina technically defaulting its public debt and an initial devaluation of 40% of the Peso. In 2002 Argentina suffered a 10.8% reduction in its economic activity and the unemployment rate reached a historical record high of 19.4%. In addition, the Peso suffered an accumulated devaluation of 200% (in nominal terms) during that year.

The Argentine crisis was felt in the rest of Mercosur members as well, and it magnified the unfavorable economic context existing in the region. The most affected country was Uruguay, which was forced to devalue its currency as result of fiscal problems generated by a decrease in exports, and suffered a contraction of 12% of its economic activity (Taccone and Nogueira, 2003). The effects of the crisis were less
significant in Brazil and Paraguay, although both economies experienced devaluations and a deterioration of their macroeconomic indicators.

The repercussions of the economic crisis involving the region affected the Mercosur integration process at two levels. On one hand, the mounting macroeconomic difficulties faced by all member countries, particularly during the second half of 2001 and the entire 2002, relegated Mercosur initiatives to a second plane, as governments were more preoccupied with stabilizing their economies and preventing the spread of the Argentine crisis than with furthering the integration process (Ríos, 2003; Taccone and Nogueira, 2003). On the other hand, intra-Mercosur trade reverted the expansion undertaken until 1998. After a decline of 25% in 1999 and a recovery of 17% in 2000, intra-Mercosur trade experienced a sharp contraction of 43% between 2001 and 2002. As a result, the level of intra-Mercosur exports in 2002 was similar to that of 1993 (US$ 10.1 billion). This contraction, however, was not mimicked by the behavior of exports from Mercosur members to the rest of the world, since they increased 35% during the same period and reached a historic high of US$ 78 billion in 2002. This behavior seemed to reflect the mood transpiring from the continuous commercial disputes among Mercosur members during the period, and the perception held by many sectors and decision-makers in the four countries that the integration process was not the most adequate tool to develop their economies and insert their countries in the international arena.

**New Political Landscape and the Revitalization of Mercosur (2003–present)**

After a traumatic 2002, the following year brought renovated impulses to the integration process. In early 2003, there were changes of governments in Brazil and
Argentina. The new administrations were favorable toward reinvigorating the integration process and made it explicit that Mercosur constituted a strategic option for the sustainable development of their countries and for inserting them in the global economy (Comunicado Presidencial, June 18, 2003). This favorable vision about Mercosur was being reinforced by three developments. First, the new administrations in Argentina and Brazil presented certain ideological affinities, particularly in holding critical positions toward the neoliberal policies derived from the Consensus of Washington that dominated economic policies in Latin America during the 1990s. Second, the region was experiencing an economic recovery since the last quarter of 2002 with positive growth in GDP—except Brazil that was showing a slowing down of its economy in 2003—increases in exports and imports, and the stabilization of macroeconomic indicators. Last, the Argentine devaluation allowed a convergence in the exchange rates between Brazil and Argentina, removing an issue that had prompted many disputes in the past.

Facing such an advantageous macroeconomic context, the Brazilian administration introduced a working proposal to revive the integration process that was approved during Mercosur XXV CMC Meeting held in Montevideo in December 2003. The proposal, known as the “Working Plan 2004–2006”, covered a vast array of issues considered as priorities to revitalize the internal agenda of Mercosur and move the integration process forward (see “Plan de Trabajo 2004-2006 del Mercosur”, Mercosur Decision CMC 26/03). The issues to be tackled in the agenda of the working plan included procedures for applying the CET and the elimination of countervailing and antidumping duties,

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14 Mr. Inácio Lula da Silva took office as the new elected president of Brazil on January 1, 2003. In Argentina, Mr. Néstor Kirchner took office as the new elected president of Argentina on May 25, 2003.
measures related to common trade defense, development of structural funds, strengthening institutional processes, procedures for tax harmonization, and government procurement, among others. The working plan also listed specific tasks for each topic and established the Year 2004 as the deadline for the completion of most of the assigned tasks.

Although the initial deadline for the completion of the tasks has been extended for some of the topics until middle 2006, the implementation of the working plan has been relatively successful in moving the integration progress forward. Following is a brief account of some of the most relevant achievements in the execution of the working plan during the last two years.\(^\text{15}\) On trade issues, although the treatment of the CET remains a contentious topic in the negotiations so far,\(^\text{16}\) regulations have been enacted for avoiding double levying of the CET on imports from third countries that were to be later re-exported to another Mercosur country (see Mercosur Decisions CMC 37/05, CMC 39/05 and CMC 40/05). With this new regulation, once an imported good pays the CET levy, it receives treatment as a good originated in Mercosur and circulates free of charge inside the Common Market.

On institutional issues, three initiatives are worth mentioning. First, a new mechanism for solving commercial disputes among Parties—the Olivos Protocol on Dispute Resolutions—has been adopted in replacement of the settlement mechanism

\(^{15}\) For more details on the development of the working plan occurred during the period December 2003–June 2005 see Taccone and Nogueira (2004) and Rozemberg et al. (2005).

\(^{16}\) The working plan calls for the High-Level Group on the CET to analyze the consistency and dispersal of the CET and prepare a proposal for a consolidated common external tariff, as mandated by Mercosur Decision CMC 5/01. By April 2006 no meeting of the High-Level Group on the CET had taken place, and several exceptions to the CET that were to expire in 2006 were extended until 2008. See Mercosur Decisions CMC 38/05.
established during the transition period (see more details in section on dispute resolution below). The Olivos Protocol introduced a more expeditious mechanism for dealing with commercial disputes among Mercosur members, and also created a Permanent Review Tribunal to offer greater legal security to the dispute settlement process (Taccone and Nogueira, 2004). Moreover, during the Mercosur XXIX CMC Meeting held in Montevideo in December 2005, the procedures ruling the functioning of the Permanent Review Tribunal were enacted to fully implement the new dispute settlement system (see Mercosur Decision CMC 26/05). Secondly, a Commission of Permanent Representatives of Mercosur (CPRM; see Mercosur Decision CMC 11/03) was created to act as a central office for coordinating policy initiatives among the different bodies of the Common Market. The president of the Commission was entitled to represent Mercosur before third-party countries, trade associations and international organizations providing a “face” to Mercosur and making the Common Market more recognizable before the international community. Finally, a protocol was approved for creating the Mercosur Parliament (MP; see Mercosur Decision CMC 23/05). The MP would be composed of representatives elected from each member country and must be in place by the end of 2006. The creation of both the CPRM and the MP introduced a kind of “light supra-nationality” in the integration process and gave a more permanent character to Mercosur organs (see below).

There are other aspects of the agenda upon which significant advances have also been made. To deal with the asymmetries in the size of the economies of member countries and to help increase the competitiveness of the smaller economies in the bloc (Paraguay and Uruguay), a structural fund with an annual budget of US$ 100 million has
been created (see Mercosur Decisions CMC 27/03, CMC 18/05 and CMC 24/05). Although member countries have not made their corresponding disbursement to the fund yet, the procedures for the functioning of the fund are already in place. It is expected that the fund will be fully operational by 2008. A new Protocol on Government Procurements has been negotiated and approved.\textsuperscript{17} The protocol applies to the acquisition of goods and services by federal and sub-federal bodies, grants national treatment to providers of goods and services from other Mercosur member countries, and gives preference to Mercosur providers in bidding processes. Another initiative that has been developed during the last two years is the formulation of a plan for combating foot-and-mouth disease in the region (see “Programa de Acción Mercosur Libre de Aftosa”, Mercosur Decision CMC 25/05). The plan calls for the eradication of the disease in Mercosur and its associated states by the end of 2009. To do so, the plan calls for the coordination among member states of policies and actions to combat the disease, including the implementation of early warning and control systems, the exchange of information, and technical cooperation, among others.

In the same way the differences in exchange rates between Argentina and Brazil generated many conflicts during the 1999–2002 period, the lack of a mechanism related to trade safeguards have created several sectoral disputes between those two countries since 2003. The resumption of economic growth in Argentina after the collapse of 2002 brought a marked increase in industrial imports from Brazil. The increase in Argentinean industrial imports from Brazil was based on two main factors. On one hand, the relative

\textsuperscript{17} In December 2003, the CMC approved the Mercosur Protocol on Government Procurements by Decision CMC 40/03. This protocol was subsequently modified during 2004. The current protocol was approved in December 2004 by Decision CMC 27/04.
parity in exchange rates experimented after the Argentine devaluation of 2002 was favoring Brazilian products vis-à-vis those from third-party countries. On the other hand, many multinational enterprises followed the strategy of locating their plants in Brazil and supplying the entire Mercosur from that country.\textsuperscript{18} According to Rozemberg et al. (2005), this situation was in contradiction with the re-industrialization policies promoted by the Argentine government since 2003. As a result, the growing influx of Brazilian imports brought a succession of sectoral disputes (i.e., on appliances, textiles, shoes, ceramics, among others) between Argentina and Brazil, with the former imposing import restrictions to protect those sectors under competition.

The disputes, however, arose mainly because of a lack of agreement between Argentina and Brazil on the application of a trade safeguard mechanism. Unlike other agreements under the ALADI, Mercosur does not have a mechanism for applying trade safeguards when imports from one member country are threatening to damage the competing sector in another (Rozemberg et al., 2005). Although Argentina elaborated several proposals on the subject, and a commission for monitoring bilateral trade was created in 2003 with the mandate of providing recommendations on those matters, it was only in February 2006 that an agreement was reached (see \textit{Protocolo Adicional al ACE 14: Adaptación Competititiva, Integración Productiva y Expansión Equilibrada del Comercio}, signed between Argentina and Brazil in Buenos Aires on February 2, 2006.\textsuperscript{19}

\textsuperscript{18} This strategy was initiated after the 1999 Brazilian devaluation and accentuated during the subsequent years, with even some plants of multinationals located in Argentina being relocated to Brazil, such as Whirpool, for example. Furthermore, the largest proportion of foreign direct investment directed to Mercosur has been funneled to Brazil (85% in the period 2001–2005), a situation that has allowed that country to expand its export base.

\textsuperscript{19} The agreement was reached after several negotiations were conducted between the presidents of both countries. Nonetheless, the agreement was resisted by Brazilian industrial sectors, which threatened to press its government for the application of retaliatory measures.
The agreement allowed for the application of trade safeguards destined to repair or prevent the damage caused to a local sector due to substantial increases in imports, and provided a mechanism for its implementation. The agreement also indicated that the application of trade safeguards should be articulated to a program to increase competitiveness for the involved sector. The implementation of this mechanism represented a major step to provide an institutional avenue for resolving sectoral disputes and decreasing the application of unilateral measures.

In spite of the controversies and disputes described above, intra-Mercosur trade has shown marked recovery since 2003. After a decline that started in 1999 and reached a floor of US$ 10.1 billion in 2002, intra-Mercosur exports started to recuperate in 2003, reaching US$ 20.9 billion in 2005. Although they were at the same level as in 1998 and represented 12.8% of total Mercosur exports, intra-Mercosur exports grew faster between 2003 and 2005 than did the exports from Mercosur to the rest of the world during the same period, 66% versus 52%, respectively. On the same token, intra-Mercosur imports represented 19.3% of the total Mercosur imports for 2005, close to the highest percent of intra-Mercosur imports in the total Mercosur imports reached in 1998 (21.4%). The recovery of intra-Mercosur trade during the last three years seems to indicate that the Common Market has started to recuperate its importance as a destination for exports from its member countries, although it is still lower than the levels reached at the end of the 1990s.

**Juridical Aspects of Mercosur**

**Juridical Nature of the Treaty of Asuncion**

The Treaty of Asuncion is the source of the juridical framework for building Mercosur because it creates the Common Market and regulates the relations among its
Party States (Barraza and Jardel, 1998). According to the Vienna Convention on the Law of International Treaties, The Treaty of Asuncion is considered a “treaty” in the sense that it is a written agreement concluded between States and governed by international law (Vienna Convention on the Law of International Treaties, Art 2(1)). This condition of treaty implies that the juridical order generated by the integration process has primacy over the internal juridical order of member countries (all Mercosur member countries are signatories to the Vienna Convention) (Díaz-Labrano, 1998; Guerrero, 2001).

Mercosur member countries are Parties to ALADI and its principles are mandatory for them. Consequently, the provisions of the Treaty of Asuncion were made compatible with those from the 1980 Treaty of Montevideo that created the ALADI. Accordingly, the Treaty was incorporated into the juridical structure of ALADI on November 29 1991, as an Accord of Partial Scope on Economic Complementation (Acuerdo de Alcance Parcial de Complementación Económica, ACE No. 18). Therefore, Mercosur is formally a sub-regional agreement within the ALADI framework. As such, it was notified to the GATT in early 1992 through Brazil on behalf of the Secretary of the ALADI. The notification was made invoking the provisions of the Enabling Clause rather than Article XXIV of GATT. The Enabling Clause gives a legal cover for establishing preferential agreements between developing countries without having to

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20 ACE are accords that are not extensive to the rest of the ALADI members, but follow certain provisions regarding accession, rules of origin, and safeguards.

21 Argentina, Brazil, Paraguay, and Uruguay are Parties to GATT, and as such, GATT principles are mandatory for them. Thus, Mercosur must be compatible with GATT principles.

22 GATT Article XXIV allows the creation of free trade areas and customs unions if they are compatible with GATT objectives (Jackson, 1998). However, the procedure for assessing trade agreements established in Art. XXIV does not take into account the characteristics and level of economic development of the Parties involved, which may be disadvantageous for developing countries (Díaz-Labrano, 1998).
extend them automatically to other GATT Parties. In addition, conditions associated with the Enabling Clause are less restrictive than the one established in Article XXIV (Paglieri and Sanguinetti, 2000). Consequently, and from the juridical point of view, the Treaty of Asuncion is a treaty within the juridical framework of the Vienna Convention and ALADI, follows the principles of free trade established by the GATT/WTO, and corresponds to an accord on economic complementation among the member countries (Barraza and Jardel, 1998).

**Juridical Nature of Mercosur**

During the transition period, Mercosur did not have a juridical nature of its own because it did not have an existence apart from the Party States (Faria, 1995). Party States were required to follow the norms established in the Treaty of Asuncion to form the Common Market. Through the Ouro Preto Protocol, Mercosur acquires a juridical personality of International Law (*personalidad jurídica de Derecho Internacional*; Ouro Preto Protocol, Art. 34) different from Party States (Faria, 1995; Díaz-Labrano, 1998). Mercosur acquired rights and is able to contract obligations; thus, it can implement all necessary acts to achieve the Common Market (Barraza and Jardel, 1998).

According to Art. 2 of the Ouro Preto Protocol, Mercosur is defined as an intergovernmental institution. This means that: (i) representation is exerted and directed by the States through their delegates, (ii) the State members cannot be compelled to adopt decisions contrary to their interests, and (iii) decisions must be adopted by consensus to be legally binding. It also implies that, unlike the European Union, there is no

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23 The conditions include that any such arrangements should not create barriers or undue difficulties to other GATT Contracting Parties, and that the reduction of non-tariff measures are to be governed by criteria which may be set by the Parties. In addition, no criteria are specified for assessing the acceptable degree of elimination or reduction of tariffs (see Laird, 1997).
supranational institution governing Mercosur. Consequently, the inter-governmental
close character of Mercosur as an organization determines that the governmental agencies of
the Party States constitute Mercosur bodies.

Sources of Law in Mercosur

Since Mercosur member countries are Parties of the WTO, the relationships
between the bloc and third countries are governed by GATT/WTO norms. Within
Mercosur, Art. 41 of the Ouro Preto Protocol establishes that the sources of law, in
decreasing order of importance, are:

- The Treaty of Asuncion, its protocols and additional and complementary
instruments;
- The accords established in the framework of the Treaty of Asuncion and its
protocols; and
- The Decisions of the CMC, the Resolutions of the GMC, and the Directives of the
CCM adopted since the entry into force of the Treaty of Asuncion.

These sources of law represent integration norms that create rights and duties for
the State Parties and must be incorporated into the national juridical framework of
Mercosur member countries because they do not have direct application (Barraza and
Jardel, 1998; Díaz-Labrano, 1998; Ruiz, 2000). Therefore, Parties have the obligation to
adopt all necessary means to assure the implementation of the norms generated by
Mercosur bodies in their territories (Ouro Preto Protocol, Art. 42).

The Organizational Structure of Mercosur

Organizational Evolution

Although Mercosur has an organization represented by inter-governmental
decision-making bodies (see below), in practice, decision-making rests on each member’s
president at their twice-per-year meetings. Central to the fate of the direction and speed
of the integration process, even from the initial agreements between Argentina and Brazil during the 1980s, has been the personal relationships between the presidents of member and associated countries. As a result, disputes and deadlocks are settled politically during the presidents’ meetings, and the official statements issued after the meetings (Comunicados Presidenciales) provide the overall political guidelines for the integration process.

The inter-governmental approach has been taken to avoid the failure of previous attempts at regional integration in Latin America, which comprised complex institutional structures that were rendered ineffective to the countries concerned (Díaz-Labrano, 1998). In the negotiations leading to Mercosur, Argentina leaned toward the European Union as a model, while Brazil was reluctant to cede sovereignty to smaller countries and favored a decision-making process by consensus with a minimum involvement of supranational institutions (García Pelufo, 2003).

The Treaty of Asuncion established an initial institutional structure to administer and execute the treaty during the transition period. It consisted of two bodies: the Common Market Council and the Common Market Group. The first body was the highest organ of the Common Market, composed of the member countries’ foreign and financial ministers, and responsible for the political leadership and decision making necessary to ensure the achievement of the objectives of the Treaty. The second body was the executive organ of the Common Market, coordinated by the ministries of foreign affairs, and was in charge of implementing the actions leading to the formation of the
Common Market. The Common Market Group could set up whatever working groups were necessary to perform its duties.24

The Current Organizational Structure of Mercosur

The current organizational structure of Mercosur, as defined by the Ouro Preto Protocol, includes; (i) three decision-making bodies—the Common Market Council, the Common Market Group, and the Market Trade Commission; (ii) two advisory bodies—the Joint Parliamentary Committee and the Consultative Economic and Social Forum; and (iii) an administrative body—the Administrative Secretariat (Figure 3-1). The Common Market Council (CMC) is the highest-level agency of Mercosur and is integrated by the Ministers of Foreign Affairs and Finances of the Parties. The Council conducts the policy of Mercosur, has the responsibility of complying with the objectives and the time frames set forth by the Treaty of Asuncion and additional protocols, decides on proposals elevated by the Common Market Group, and creates bodies and agencies to implement Mercosur policies. The CMC adopts Decisions by consensus.

The Common Market Group (GMC) is the executive body of Mercosur, and is coordinated by the Ministers of Foreign Affairs of the Parties. Each member country sends four representatives to the GMC, representing the Ministry of Foreign Affairs, the Ministry of Finances, and the Central Banks. Its basic duties are to ensure compliance with the Treaty of Asuncion and additional protocols, and to implement the Decisions made by the CMC. It also has the authority to create, supervise, and abolish the Work

24 During the transition period, 10 Work Subgroups were created: Commercial issues; Customs issues; Technical standards; Fiscal and monetary policies relating to trade; Inland transport; Maritime transport; Industrial and technological policy; Agricultural policy; Energy policy; and Co-ordination of macroeconomic policies.
Subgroups and Specialized Forums,\textsuperscript{25} which are conceived to conduct studies on specific issues of concern for Mercosur and to generate proposals to be submitted for consideration to the Council. The GMC adopts Resolutions by consensus.

![Diagram of the Organizational Structure of Mercosur](image)

Figure 3-1. Organizational structure of Mercosur. Note that only the auxiliary bodies of the Common Market Group are depicted.

The Market Trade Commission (CCM) is comprised of four members from each Party, and is coordinated by the Ministers of Foreign Affairs. The basic duties of the Commission are to apply the instruments of common trade policy— intra-Mercosur and with other countries—agreed to by the member states and to develop regulations related

\textsuperscript{25} The number of Work Subgroups and Specialized Forums varies over the time. By April 2006, there were 15 Work Subgroups, 9 Specialized Forums, 8 Groups Ad-Hoc, and 2 Committees constituting the GMC.
to commercial and customs issues to be harmonized with Mercosur policies. The CCM adopts Directives by consensus.

The Joint Parliamentary Committee is an advisory body that facilitates the work of the executive agencies (CMC and GMC) by making the necessary adjustments to harmonize the laws of the different member states and submitting them to the respective Congresses. The Consultative Economic and Social Forum is a body that represents the various socioeconomic sectors of the member nations. The forum is an opportunity for the socioeconomic sectors to convey proposals and concerns into Mercosur institutional channels.

The Technical Secretariat of Mercosur (SAM) is an operative body that provides services to the rest of Mercosur bodies. The SAM is a transformation of the initial Administrative Secretariat established by the Ouro Preto Protocol (The Ouro Preto Protocol established an Administrative Secretariat; SAM). Its main duties are to function as the official archive for the Common Market, to publish the regulations generated by Mercosur bodies, to provide information on the internalization by Party States of those norms, and to provide logistical support to Mercosur bodies. The Secretariat is located in Montevideo, Uruguay.

**Decision-Making in Mercosur**

According to the Ouro Preto Protocol, decisions generated by Mercosur bodies must be made by consensus and in the presence of all Parties (Ouro Preto Protocol, Art. 37). Given the inter-governmental character of Mercosur bodies, there are three different avenues for decision-making and for dealing with issues related to Mercosur implementation (Ruiz, 2000):
• The presidents of Mercosur countries during a Presidential Summit, or the CMC, adopt a political decision. The GMC adopts the necessary resolutions to carry out that decision by either issuing concrete measures or by instructing a Work Subgroup to analyze the subject and produce recommendations about it. Recommendations are analyzed by the GMC and, if accepted, adopted as a resolution to implement the political decision.

• The GMC presents a recommendation about a specific issue to the CMC. If approved, it is transformed into a decision and sent to the Work Subgroups to produce recommendations about how to implement it. Recommendations generated by the Work Subgroups are analyzed by the GMC and, if accepted, adopted as a resolution to implement the decision.

• A recommendation elaborated by a Work Subgroup or Specialized Forum is presented to the GMC. If the issue is in its competence, the GMC decides on its adoption or rejection; otherwise, the recommendation is sent to the CMC for approval. This same scheme applies to recommendations generated from the CCM, the Joint Parliamentary Committee, and the Consultative Economic and Social Forum.

Norms generated from Mercosur bodies (i.e., Decisions, Resolutions, and Directives) are mandatory for Party States, and they have the obligation to incorporate them to their respective national juridical frameworks. Excepted from the internalization requirement are rules directed to regulate aspects related to the internal functioning of Mercosur (see Mercosur Decision CMC 23/00). The same exception applies if the norm generated by Mercosur bodies already exists in the legislation of the Party State. For those norms that have to be internalized, Parties have the duty to notify the SAM when the measure has been internalized. The regulation enters into force simultaneously in all Party States 30 days after the last Party internalizing it has notified the SAM of doing so (Ouro Preto Protocol, Art. 40).
Dispute Resolutions

Settlement of disputes in Mercosur is conducted according to the procedures established in the Olivos Protocol on Dispute Resolutions.26 The Protocol applies to disputes arising from controversies among Party States on the interpretation, application or lack of implementation of: (i) the Treaty of Asuncion, (ii) the Ouro Preto Protocol, (iii) the additional protocols and accords celebrated under the aegis of the TA, and (iv) the norms generated by Mercosur decision-making bodies. According to the Olivos Protocol, disputes arising among Party States can be solved following the procedures established in it, or they can be presented before the World Trade Organization (Article I of the Olivos Protocol). Once the forum has been chosen, Parties are banned from resorting to the other forum on the same subject. The mechanism designed in the Olivos Protocol for dispute resolutions consists of a system of progressive options to solve a controversy. When a dispute among Party States arises, they either can follow all the stages described below, skip one or several of the initial steps, or proceed directly to the arbitral procedures.

Facing a dispute, Party States can enter into direct, diplomatic negotiations aimed at solving the controversy. If after 15 days no solution has been reached, the GMC intervenes and has 30 days to offer a recommendation to settle the divergence. If one of the Party States does not accept the GMC recommendation, it has the option of calling for

26 The Olivos Protocol was approved by the CMC in its III Extraordinary Meeting of February 18 2002, and entered into force on February 10, 2004. Previously, dispute resolutions in Mercosur had been solved according to the procedures established under the Brasilia Protocol on Dispute Settlement, accorded by the Party States on December 17, 1991. The Olivos Protocol has maintained most of the procedures established in the Brasilia Protocol for solving disputes. However, a major introduced change has been the replacement of the Ad-Hoc Arbitral Panel prescribed in the Brasilia Protocol by a Permanent Revisory Arbitral Panel. Ruling issued by this Permanent Revisory Arbitral Panel can be used as precedent in latter dispute resolutions, introducing a kind of “light supranationality” in the integration process.
the setting up of an Ad Hoc Arbitral Tribunal to consider the matter. Once constituted, the arbitral Tribunal analyzes the allegations presented by the parties in dispute, and has 60 days to issue an Initial Ruling for settling the subject under consideration. The Initial Ruling must be endorsed by the majority of the Tribunal, is mandatory for the Party States and must be obeyed within 30 days of its release. Nonetheless, if Party States are not satisfied with the decision, they can request clarifications to the Permanent Revisory Arbitral Tribunal, but the request must be restricted to legal matters addressed during the controversy and to the legal interpretations of the ruling (Article XVII of the Olivos Protocol). The Permanent Revisory Arbitral Tribunal has 30 days to issue a Final Ruling that either can confirm, modify, or revoke the verdicts of the Initial Ruling. The Final Ruling has prevalence on verdicts issued in the Initial Ruling and cannot be appealed. Similar to the Initial Ruling, the Final Ruling is adopted by majority in the Tribunal, is mandatory to Party States, must be obeyed within 30 days of its release, and has the legal status of “issue decided”. Although Party States may request clarifications on the content of the ruling and on how to comply with it from the arbitral Tribunal, the clarifications cannot change or modify the Final Ruling.

If the losing Party State does not comply totally or partially with the ruling, the beneficiary Party State of the arbitral procedure is entitled to apply compensatory

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27 The Ad Hoc Arbitral Panel is comprised of three members: a president from a country that is not part to the dispute, and a panelist from each one of the countries part of the dispute. Members to the Arbitral Panel are selected from a roster of potential panelists provided by each Party State.

28 The Permanent Revisory Arbitral Panel is comprised of five members. Each Party State nominates a panelist to serve the Panel for a period of two years that can be renewed for another two-year period. The fifth panelist is chosen unanimously by the Party States to serve for a non-renewable three-year period. If the controversy involves two Party States, the Panel will be comprised of three members: a president, who will be randomly selected from the panelist citizens of countries not part of the dispute, and a panelist from each one of the countries party to the dispute. If the controversy involves more that two Party States, the Panel will be comprised the five permanent members.
measures up to a year after the Tribunal ruling was issued. Compensatory measures may include suspension of concessions or obligations, which must be directed to the same sector involved in the controversy. If such an option were not feasible or practical, compensatory measures can be applied in another sector. If one of the involved Party States considered the compensatory measures unsatisfactory or not proportional to the consequences of not complying with the Tribunal rulings, it can contest the measures before the Arbitral Tribunal and request a definition on the topic by the Tribunal. The Arbitral Tribunal will have 30 days to issue a final ruling on the matter.

The Olivos Protocol also provides an avenue for legal or physical private persons to initiate claims related with the application of legal and administrative measures by Party States resulting in commercial discrimination. The claims must be presented to the National Section of the GMC of the Party State where the legal or physical person has located its residency. The person making the claim must provide elements to justify the initiation of a settlement dispute procedure by the National Section of the GMC. Based on that information, the National Section of the GMC can accept or reject the claim. If accepted, consultations with the National Section of the GMC of the Party State allegedly in violation are conducted to solve the issue. If after 15 days no agreement has been reached, the National Section of the GMC of the affected Party State is entitled to raise the claim to the GMC. The GMC must address the claim in its first regular meeting after the claim has been presented to it, and must accept or reject (by consensus) the claim.

29 Claims can be presented if a legal or physical person considers that the application of legal and administrative measures by a Party State result in trade discrimination, trade restriction or unfair competition in violation of the TA, the Ouro Preto Protocol, the additional protocols and accords celebrated under the aegis of the TA, and the Decisions, Resolutions, and Directives issued by Mercosur decision-making organs. Article XXXIX of the Olivos Protocol.
based on the information presented by the National Section of the affected Party State. If the GMC accepts the claim, it calls for the establishment of a group of experts, which has 30 days to issue a report on the matter under dispute. The report issued by the group of experts can consider the claim either warranted or unjustified. If the claim is found unjustified, the GMC concludes the procedures and dismisses the case, although the affected Party State can resort to initiating the arbitral procedure described for the settlement of disputes among Party States. If the claims are found lawful, the affected Party State can request the application of corrective measures or the cancellation of the legal or administrative measure causing the dispute. If the request for corrective action by the affected Party State was unsuccessfully conformed after 15 days of its presentation, the affected Party State can resort to initiating the arbitral procedure. To follow the stages described previously, the report issued by the Group of Experts must have been adopted by unanimity. However, when the group of experts cannot agree on a report by unanimity, the option to solve the dispute by negotiations through the GMC is closed and the affected Party can resort to the arbitral Tribunal procedure.

**Mercosur Negotiations with Other Countries and Economic Blocs**

Since the completion of the transition period at the end of 1994, negotiations have been conducted with other Latin American countries aimed at expanding Mercosur. Under the aegis of the ALADI legal framework, several ALADI member countries have negotiated accords of economic complementation with Mercosur and, in doing, so they have become Associated Members to the Common Market. In 1996, Chile (Accord on

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30 ALADI countries signing Accords of Economic Complementation with Mercosur are eligible to become Associated Members to the Common Market. To do so, they must request to the CMC be admitted under such a category and also must subscribe to the Ushuaia Protocol on Democratic Governance. The status of Associated Member allows participation in the meetings of the executive organs of Mercosur (CMC and
Economic Complementation between Mercosur and Chile, protocolized under ALADI as Acuerdo de Alcance Parcial ACE No. 35) and Bolivia (Accord on Economic Complementation between Mercosur and Bolivia, protocolized under ALADI as Acuerdo de Alcance Parcial ACE No. 36) established free trade agreements with Mercosur and became Associated Members, joining the free trade area, but not the common external tariff or the planned institutionalization of the Common Market. Likewise, Peru became an Associated Member in mid 2003 (Accord on Economic Complementation between Mercosur and Peru, protocolized under ALADI as Acuerdo de Alcance Parcial ACE No. 58). More recently, Mercosur signed an agreement (Accord on Economic Complementation between Mercosur and the CAN, protocolized under ALADI as Acuerdo de Alcance Parcial ACE No. 59) with the Community of Andean Nations (CAN) establishing a free trade area between both economic blocs. As a result, Venezuela, Ecuador, and Colombia became Associated Members to Mercosur in December 2004. 

In addition, steps toward further economic cooperation between Mercosur and Mexico have been initiated. A Framework Agreement was signed in 2002 to create a free trade area between both Parties (Accord on Economic Complementation between Mercosur and Mexico, protocolized under ALADI as Acuerdo de Alcance Parcial ACE No. 54), although no deadline for its realization has been defined. Nonetheless, negotiations have advanced for establishing a complementary trade agreement on the

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GMC), as well as in Working Subgroups, Groups Ad Hoc, and Specialized Forum (See Mercosur Decision CMC 18/04).

31 Although Bolivia and Peru are members of the CAN, they are not included in the ACE No. 59 since they have already signed free trade agreements with Mercosur.
automobile sector (Accord on Economic Complementation between Mercosur and Mexico, protocolized under ALADI as Acuerdo de Alcance Parcial ACE No. 55), which is currently under implementation. Furthermore, in December 2005 Venezuela formally requested to become a full member of Mercosur and a timetable to do so was established (see Mercosur Decision CMC 29/05). On July 5 2006, Venezuela became the fifth full member of Mercosur, adopting the TA and establishing a four-year transition period for adopting Mercosur CET.

In addition to the agreements detailed above, numerous initiatives to liberalize trade with several countries and trade blocs are currently under discussion. In December 1995, an agreement was signed with the European Union indicating the intention to create a free trade zone in the near future and to facilitate cooperation on issues related to commerce, technology, and investments (see General Accord on Inter-regional Cooperation between the European Community, its member states, and Mercosur). Several rounds of negotiations have been conducted, but no progress in the trade arena has been made. Currently, the negotiations are in a stalemate after both Parties considered each other’s proposals on trade liberalization as insufficient.

Parallel to these developments, Framework Agreements to negotiate the formation of free trade areas were signed with South Africa in 2000 (see Mercosur Decision CMC 62/00), India in 2003 (see Mercosur Decision CMC 09/03), Egypt in 2004 (see Mercosur Decision CMC 16/04), and Israel in 2005 (See Mercosur Decision CMC 22/05). Moreover, Mercosur signed a Protocol of Understanding on Trade and Investment (see Mercosur Decision CMC 14/97) with Canada in mid 1997 to establish common rules for negotiations in those areas, and concluded a Preferential Trade Agreement with the South
African Customs Union (SACU) in late 2004. Mercosur has recently also initiated contacts to establish trade negotiations with CARICOM member countries, China, Cuba, Morocco, Pakistan, Panama, Singapore, and South Korea (see Proceedings of the XXV, XXVI, and XXVII Meetings of the CMC). Finally, Mercosur countries have participated in the ongoing negotiations to create a Free Trade Area for the Americas (FTAA) from Alaska to Tierra del Fuego, negotiations in which they have sometimes adopted positions as a bloc, but are currently in a deadlock.
CHAPTER 4
THE ENVIRONMENTAL DIMENSION IN MERCOSUR INTEGRATION PROCESS

Introduction

A thorny issue in the design and implementation of trade liberalization agreements has been the treatment of the trade and environment nexus and, within it, the role of free trade as a tool to achieve sustainable development. The issue arises as a consequence of the different views held by free trade advocates and environmentalists on how to approach the environmental dimension in a trade liberalization process (Ryan, 1998; Onestini, 1999; Yu et al., 2002). Broadly speaking, free trade advocates consider that a trade liberalization process involves only the design and implementation of commercial policies, and that environmental issues must be considered in relation to their effects in facilitating access to markets. Environmentalists, in turn, consider that the environmental dimension must be an integral part of the trade liberalization process, and that commercial policies must be made compatible or subordinated to environmental concerns. In this regard, the concern is not with trade itself, but with unregulated trade that may exacerbate environmental problems if no complementary policies are implemented to assure that trade benefits are not reached at the expense of high environmental costs.

The picture presents further complications in developing countries where policymakers perceive the inclusion of environmental measures in trade agreements as a form of “green protectionism,” and fear that the potential commercial benefits to be obtained from trade can be curtailed by unjustified non-tariff barriers disguised as environmental
measures. This is not to say that policy-makers in developing countries are not concerned with the potential negative effects on the environment caused by the growth in trade. However, the view maintained by government officials, including those from Mercosur countries, is that goals associated with economic growth and trade expansion have pre-eminence over environmental ones (see CEPAL, 1995). Therefore, the way through which different trade liberalization processes try to reconcile the tension between those two positions determines how the environment is conceived and institutionalized (or not) into the process, and defines the framework in which trade and environmental policies relate to each other.

This chapter analyzes the institutionalization of the environmental dimension into Mercosur integration process, understanding institutionalization as the process by which bureaucratic organizations and rules and practices are created and adopted to constrain activities and shape expectations (Haas et al., 1993). In this sense, it is of interest to analyze not only the creation and evolution of environmental bureaucratic structures in the integration process, but also the effectiveness of the Mercosur environmental norms to protect the environment. Hence, the chapter is organized in two sections. The first section illustrates the development of the environmental agencies inside Mercosur and analyzes their mandates and scope of action to define and influence public policy toward the environment. The second section examines the Mercosur environmental legislation and assesses its capabilities to provide protection to the environment.

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32 This position was maintained by several Latin American countries during the different negotiation rounds for the FTAA, particularly Argentina and Brazil, that refused to include the environment as part of the free trade negotiation agenda.
The Incorporation of the Environment in Integration Process of Mercosur

Unlike other recent regional economic initiatives that considered the environment from the onset of negotiations—such as NAFTA\(^{33}\)—negotiations for implementing the Common Market centered on providing more open conditions for trade and were carried out at a faster pace and intensity than discussions on other non-commercial issues, including the environment. However, there has been a gradual incorporation of the environmental dimension into the integration process over time. Such incorporation has been the result of the will of representatives from the Party States’ governmental environmental agencies that have been advocates for the inclusion of the environment in the negotiation agenda of Mercosur. As such, the incorporation of environmental concerns in Mercosur has been conducted in steps, with each step representing a more significant role of the environment in the integration process. In spite of those efforts, the environmental dimension in Mercosur is still a marginal, although growing, topic in the integration process. To illustrate this point, what follows is an analysis of the evolution of the incorporation of the environmental dimension within the institutional process of Mercosur (Figure 4-1).

The Environment in the Treaty of Asuncion

During the negotiations that led to the 1991 Treaty of Asuncion (TA), the environment was not included in the agenda as a relevant topic for consideration. The main efforts of Mercosur negotiators were directed toward designing agreeable economic policies leading to the establishment of a Common Market, and concerns for the

\(^{33}\) The NAFTA included, as part of the agreement, a sideline accord on the environment containing precise objectives regarding the environment along with a list of duties to be accomplished by the Parties, and provided for the creation of a Commission on Environmental Cooperation to prevent negative impacts caused by trade liberalization reforms on the environment.
environment were approached in declarative terms rather than the operative instructions provided in the Treaty for dealing with commercial matters. The Treaty only mentions
the environment in its Preamble where, among the objectives of the integration process, it is expressed that the would-be Common Market should pursue economic development with social justice while protecting the environment.\textsuperscript{34} Although this declaration is part of the compromises assumed by the Parties in establishing the Common Market, it does not create specific rights and duties regarding the environment. In addition, because of the commercial focus of the treaty, it did not provide for a structure to coordinate trade and environmental issues, nor did it include representatives from the Party State environmental agencies in the executive bodies of Mercosur.

This approach was a marked difference from that of other regional economic integration initiatives that were being negotiated at the same time. For example, NAFTA included as part of the agreement a side accord on the environment, which contained precise objectives regarding the environment. In addition, NAFTA supplied a list of duties to be accomplished by the Parties, and provided for the creation of a Commission on Environmental Cooperation to prevent negative impacts caused by trade liberalization reforms on the environment. None of those instruments were present in the TA. This difference in the Mercosur approach meant that although the TA recognized the protection of the environment as one of its policy objectives, the institutionalization of the environmental dimension into the integration process was left to the good will of the decision-making bodies.

\textsuperscript{34} Treaty of Asuncion, Preamble: “[the formation of a Common Market]…constitutes a vital prerequisite [for their country members] for accelerating their processes of economic development with social justice; understanding that this objective must be achieved by making the most efficient use of available resources, preserving the environment, improving physical links, coordinating macroeconomic policies, and ensuring the complement between the different sectors of the economy, based on the principles of gradualism, flexibility, and balance.”
Despite those shortcomings, the Treaty does not prevent the possibility of incorporating environmental concerns into the economic integration process. It is agreed that the Treaty of Asuncion provides the general policy principles to guide the integration process, and requires subsequent agreements to make those principles operational (Barraza and Jardel, 1998; Díaz-Labrano, 1998; Ruiz, 2000; Porrata-Doria, 2005). As such, the TA allows for future inclusion of those issues that, according to the executive bodies of Mercosur, are relevant for achieving the objectives pursued in the integration process. Moreover, and according to principles of international law, the principles stated in the Preamble form part of the context of the Treaty and constitute a guide for the formulation of policy leading to the Common Market (Drnas, 1996; Porrata-Doria, 2005). Consequently, the policy objective stated in the Preamble of creating a Common Market while preserving the environment provides the legal foundation for the progressive addition of the environmental dimension into the integration process observed in later years.

During the initial stage of the integration process, however, the lack of precise and operative references to the environment in the body of the Treaty determined that environmental matters did not receive any special consideration, nor were they placed as a distinct issue in the Mercosur implementation agenda (Novara, 1994). As a result, environmental issues related to trade were dispersed in several Work Subgroups (Technical standards, Land transport, Sea transport, Agricultural policy, and Energy

According to the 1986 Vienna Convention on the Law of International Treaties, Art. XXXI, “1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose. 2. The context for the purpose of the interpretation of the treaty shall comprise, in addition to the text, including its preamble and annexes:…” All Mercosur country members are signatories of the Vienna Convention and must abide by its principles regarding the interpretation of the wording of international treaties signed by them.
policy), which had the task of identifying environmental measures that could constitute barriers to commerce and analyzed them only in connection with their role in impeding trade. This circumstance represented a shortcoming for assuring that trade liberalization policies would be compatible with sustainable development, and meant that commercial issues had predominance over environmental ones.

**A Late and Incomplete Beginning: the Specialized Forum on Environment**

The first step toward the institutionalization of the environment in the Mercosur integration process was the creation of the Specialized Forum on Environment (*Reunión Especializada de Medio Ambiente, REMA*) in June 1992. The creation of REMA was coincident with the establishment of the Las Leñas Chronogram during the II Presidential Meeting (see “Cronograma de Medidas de Las Leñas”, Decision CMC 1/92), and responded to the realization by the Mercosur decision-making bodies of the inter-sectoral nature of environmental issues present in the chronogram and the need to coordinate their analysis among the Work Subgroups. The REMA received instructions from the CMC and the GMC, elaborated recommendations to be raised to the GMC for approval, was made up of representatives from environmental agencies of the Party States, and was supposed to hold meetings once every three months (REMA met five times until its replacement by the SGT6 on Environment in 1995). The constitution of the REMA faced some initial resistance from production sectors that saw the inclusion of the environment in the Mercosur agenda as a source of potential conflict with their commercial interests (Laciar, 2003). One indication of this situation was that the first REMA meeting was held in November 1993, almost a year and a half after its creation.

The mandates assigned to the REMA were somehow contradictory. The general objectives for the REMA were to analyze the existing environmental regulations of the
Party States and to formulate recommendations to the GMC to protect the environment, as well as to coordinate tasks and actions with those WS considering environmental issues (See Resolution GMC 22/92). The specific mandates, however, were constrained almost exclusively to trade-related matters. They confined the REMA to contribute—in environmentally related issues—to the establishment of fair conditions for trade by identifying and removing environmental measures that could result in unjustified barriers to commerce. Moreover, there was no mention among the specific objectives of an instruction to assess the potential negative environmental impacts caused by the growth of trade resulting from the liberalization process implemented during the transition period. Consequently, the restrictive nature of the specific objectives assigned to REMA determined that although its initial mandate was to deal with issues of environmental protection in a broad sense, its actions were limited to purely commercial matters. As a result, the REMA was left with the difficult task of promoting an environmental agenda in a context where environmental issues were perceived by the GMC as non-tariff barriers, and commanded its analysis only in relation to their contribution or obstruction to trade.

From that perspective, the REMA worked on the detection of asymmetries in the environmental legislation of the Party States. To do so, it conducted an assessment on the environmental norms of the Party States that included: (i) identification, compilation and analysis of environmental laws and their corresponding norms for enforcement; (ii) identification of priority issues related to environmental legislation that were not being

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36 Specific objectives for the REMA: “(1) to contribute in the establishment—in environmentally related issues—of adequate conditions of competitiveness between Party States; (2) to adequate conditions of external competitiveness for products originated in Mercosur.” REMA/Acta 1/93.
analyzed by the different WS; and (iii) identification, compilation, and analysis of environmental norms applicable in border areas. The most important result attained by the REMA in this regard was a complete portrait of the legal and institutional structure of the environmental sector in each member country.

The main task assigned to the REMA, however, was the analysis of measures of environmental characters identified as non-tariff barriers to trade (NTB) that were considered for elimination by the GMC. The REMA was assigned for analysis 16 NTB that had to be eliminated or justified before December 31, 1994 (see Resolution GMC 39/94). These measures covered a wide array of topics, including imports of wildlife products and hazardous materials and wastes and exports of forestry products. There was no consensus inside the REMA about their elimination or justification, and two separate recommendations were submitted to the GMC. Even so, the assignment of non-tariff barriers for analysis to the REMA represented an important step in incorporating environmental concerns into the Mercosur decision-making process, as the process of harmonization of environmentally-related NTBs had previously been conducted without the participation of an environmental body.

One of the most important achievements of the REMA was the formulation of a document containing eleven principles for guiding environmental policy in Mercosur: “Basic Guidelines for Environmental Policy” (see Basic Guidelines on Environmental Policy, Directrices Básicas en Materia Ambiental; Resolution GMC 10/94). The principles included norms on the use of permits and licenses for activities harming the

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37 The REMA elevated two proposals of recommendations. One proposal was elaborated by Brazil, in which all NTBs were environmentally justified. The other proposal was elaborated by Argentina, Paraguay, and Uruguay, in which all but one measure (restriction No. 213) were to be maintained. REMA/Acta 5/94.
environment, the inclusion of environmental costs in the computation of total production costs of traded goods, and the need to develop clean technologies to minimize waste, among others. The character of the principles was programmatic and tried to create the basis for the formation of future Mercosur environmental regulations. By establishing minimum objectives to be attained by Mercosur in terms of environmental policy, the document intended to develop a sense of responsibility and compromise toward the environment between Party States. The translation, however, of the principles into concrete initiatives was troublesome because of their lack of deadlines and procedures for achieving their stated objectives (Novara, 1994). Nonetheless, they represented an attempt to formulate a genesis of an environmental policy in Mercosur.

In terms of the evolution of the institutionalization of the environment in Mercosur, the creation of the REMA represented the first concrete step to integrate environmental and trade policies. The REMA inserted the environment in the agenda of Mercosur and provided an institutionalized forum for its discussion. However, the GMC restricted the REMA scope of actions to those that would create “fair conditions for trade.” Furthermore, the REMA did not break with the tenet guiding the Mercosur policy-making process that environmental issues must be analyzed only in connection to their role in impeding trade.

**Getting Onboard: Creation of the Work Subgroup on Environment**

Efforts to further integrate trade and environmental policies gained momentum with the Declaration of Taranco\(^\text{38}\) by the Ministers of Environment of the Parties in June

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\(^{38}\) On June 21, 1995, the Ministers of Environment of Mercosur member countries held a meeting at the Taranco Palace, in Uruguay, to discuss several issues regarding the trade-environment nexus in the integration process. The discussed issues included: (i) advances of the REMA, (ii) environmental regulations in Mercosur, (iii) norms related to ISO 14.000, (iv) environmental effects of the Paraguay-
1995. In the Declaration, the Ministers called for the inclusion of the environment at the highest level of discussion in Mercosur. In response to this concern, the REMA was transformed into the Work Subgroup No 6 “Environment” (Subgrupo de Trabajo No. 6 “Medio Ambiente”, SGT6) in August 1995 (see Resolution GMC 20/95), when—as mandated by the Ouro Preto Protocol—the new configuration of the GMC at the end of the transition period was established.

The creation of the SGT6 had two immediate repercussions. On one hand, it granted the environment the same hierarchical status—at least in terms of the Mercosur organizational structure—rendered to trade and commercial issues in the integration process. Furthermore, it provided a new and more important institutional space for incorporating environmental issues in Mercosur. In this sense, the SGT6 constituted a technical body advising the GMC on environmental initiatives, which meant a significant improvement over the mostly temporary and ad-hoc nature of the REMA. On the other hand, it allowed a centralized and more unified approach to deal with issues involving trade and the environment. Previous to the creation of the SGT6, environmental issues were dispersed among several Work Subgroups. With the creation of the SGT6, that situation started to be reverted and the SGT6 became the central office for environmental

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Parana Hidrovia project, (v) coordination of actions regarding shared ecosystems, (vi) coordination of position regarding international environmental agreements and (vii) incorporation of environmental costs in production processes. From the analysis of the mentioned issues, it was agreed to elevate a recommendation to Mercosur executive organs calling for the need to transform the REMA into a technical group on environmental matters.

39 In Mercosur structure, the specialized meetings are established as temporary conferences with a restricted mandate, which are abolished once they finished their work.
matters in Mercosur. Nonetheless, some environmentally-related issues, such as sanitary and phytosanitary measures and technical standards, were kept under the realm of other work subgroups, although the SGT6 had to be consulted when policy initiatives for those topics were being developed.

The general mandate given to the SGT6 represented an extension of that given previously to the REMA. The general objectives for the SGT6 were to formulate and design strategies and policy initiatives to ensure the protection of the environment, guaranteeing at the same time fair conditions for trade. These objectives had to be achieved following the Directrices on environmental policy developed by the REMA and the principles on sustainable development enunciated by the 1992 UN Conference on Environment and Development. Its specific objectives included: (i) promotion of actions to achieve sustainable development, (ii) preparation of studies, actions, and practices to prevent contamination and environmental degradation, (iii) promotion of efficient and cost-effective environmental measures and, (iv) prevention of measures to restrict or distort trade (see SGT6/Acta 1/1995, Annex III).

The work mechanics of the SGT6 was organized through a list of “tasks to be negotiated” for advancing the integration process (Pautas negociadoras, PN); according to Resolution GMC 20/95, Art. 2, the PNs had to be proposed by the SGT6 and approved

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40 During its first meeting, the SGT6 asked the GMC to instruct the rest of the Work Subgroups about the need to coordinate the analysis of any topic regarding the environment with the SGT6. See Proceedings SGT6 I Meeting, 18–19 X, 1995.

41 General objective for the SGT6: “To formulate and propose strategies and guidelines to guarantee the protection and integrity of the environment of the Party States in a context of free trade and of consolidation of the Customs Union, assuring, at the same time, fair conditions of competitiveness, having as principles the Basic Guidelines on Environmental Policy approved by GMC Resolution 10/94 and the principles of sustainable development from the 1992 UN Conference on Environment and Development.” SGT6/Acta 1/1995, Annex III.
by the GMC. The PNs represented long-term strategic objectives for the SGT6, and they could be modified by the GMC according to the evolution of the integration process. The PNs, in turn, were implemented through annual work plans (*Planes anuales de trabajo, PT*) that also had to be approved by the GMC. The norms and initiatives generated by the SGT6 regarding the implementation of the PNs had to be raised to the GMC for consideration and approval. This work structure, common to all WS, determined that the GMC—composed by the ministers of finances and foreign affairs of the Party States—would be the ultimate body defining the Mercosur environmental policy. Consequently, the actions and recommendations generated by the SGT6 would be constrained and subordinated to the views held by the GMC members on the trade-environment nexus.

In its first meeting held in October 1995, the SGT6 developed a list of twelve PNs, with its respective objectives and deadlines of completion, to guide its actions during the coming years. The GMC approved seven of the twelve proposed PNs in December 1995. Another PN was added in 1998 (see Resolution GMC 7/89) when an oil spill in a Brazilian refinery on the Iguazu River threatened to reach the Iguazu Falls and contaminate the lower Parana River Basin, which is shared by Argentina and Uruguay, and prompted negotiations to develop a policy instrument to deal with unexpected environmental emergencies (Laciar, 2003). Although the list of PNs would be modified in the future (see below), the eight PNs constituted the work plan and realm of action of the SGT6 during the period 1995–2002, and defined the scope of the interactions between

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42 The five tasks proposed by the SGT6, and not approved by the GMC, included: (i) reforms to the custom code to strengthening border controls on environmental topics, (ii) coordination of positions in international forums involving trade and environment issues, (iii) cooperation on environmental protection with the European Union, (iv) development of a common strategy on Mercosur fisheries, and (v) procedures for the international movement of agro-toxics. SGT6/Acta 1/1995, Annex III; see Resolution GMC 38/95.
trade and environmental policies in the integration process during those years. The eight assigned PNs were as follow:

1. **NON-TARIFF BARRIERS.** To analyze non-tariff barriers related to the environment and proceed to their harmonization or elimination;

2. **COMPETITIVENESS.** To create fair trade conditions on those issues involving environmental matters and to include environmental costs into production processes;

3. **NORMS ISO 14000.** To participate in the definition and elaboration of the norms and to promote their adoption in Party States;

4. **ENVIRONMENTAL POLICY INSTRUMENT.** To develop an instrument to guide the integration process’ environmental policy;

5. **ENVIRONMENTAL INFORMATION SYSTEM.** To establish an information system among the Party States aimed at coordinating actions on environmental matters;

6. **MERCOSUR GREEN LABEL.** To create an environmental label to certify environmentally-friendly products produced/originating in the region;

7. **SECTORAL ISSUES.** To coordinate positions and initiatives with other Work Subgroups on topics involving environmental matters; and

8. **ENVIRONMENTAL EMERGENCIES.** To establish a mechanism for coordinating actions among Party States to prevent environmental disasters.

Some aspects of the work plan of the SGT6 regarding the PNs are worth mentioning. First, most of the PNs assigned to the SGT6 were still focused on commercial matters as they were mainly dealing with potential environmental barriers to trade (i.e., PNs 1, 2, 3, and 6). Moreover, the remaining assigned PNs were not directly linked with the eleven principles enunciated in the *Directrices*, as they should have been according to the general objective of the SGT6. Second, there were some conspicuous absentees in the list of PNs assigned to the SGT6 regarding the trade-environment nexus. Despite the fact that Mercosur countries were notoriously rich in natural resources and derived a large proportion of their exports on primary products, no PN was assigned on developing common strategies for the sustainable use of natural resources or for
preventing their degradation due to expansion of trade. Also absent from the list were PNs related to the co-management of shared ecosystems and border areas, or to the coordination of positions and policy initiatives in international environmental fora. Furthermore, three of the five PNs rejected by the GMC were related to those mentioned aspects (see SGT6/Acta 1/1995/Annex III). Finally, and in spite of the omissions mentioned above, the inclusion of PN 4 in the work plan of the SGT6 indicated some interest by Mercosur executive bodies in having a certain framework for the development of an environmental policy for Mercosur. Nonetheless, the initial work plan assigned to the SGT6 showed that the GMC continued to consider the environment only from the perspective of its potential impacts on hindering trade, and confined the role of the SGT6 to advance environmental initiatives related almost exclusively to facilitate trade.

The work of the SGT6 that resulted from the assigned PNs achieved mixed results in terms of generating initiatives to protect the environment since relevant aspects of the trade-environment nexus were not pursued by Mercosur executive bodies. Following is an account of the main results achieved by the SGT6 during the 1995–2002 period. Regarding the analysis of the non-tariff barriers (NTB), the SGT6 continued the examination initiated by the REMA of trade measures of environmental character that had to be eliminated or harmonized. Besides the 16 initial non-tariff barriers assigned previously to the REMA, the SGT6 was assigned another seven related to imports and exports of wildlife and timber products and sub-products, imports of toxic wastes, imports of agro-toxics (certain pesticides and herbicides), imports of products affecting the ozone layer, and norms regulating the level of particle emissions by imported cars (Resolution GMC 32/95). The analysis of the NTBs conducted by the SGT6 resulted in
the total justification of 21 norms and the partial justification of the remaining two (see Chapter 5).

In terms of competitiveness and the environment, the SGT6 has worked on developing a joint project between Mercosur and the GTZ (German Development Agency) to promote the adoption of clean technologies in small and medium enterprises in the four countries. The project consists of providing training on environmental management and clean technologies to personnel from those industrial sectors considered as highly contaminating, such as leather, paper, and metallurgy. The project was approved by the GTZ in middle 2002 and is currently in its implementation stage (see CMC Decision 2/02, “Project on Competitiveness and the environment: promotion of clean technologies for small and medium size enterprises.”)

The development of norms ISO 14.000, in turn, was a thorny issue ultimately abandoned by the SGT6 because of internal divergences on their potential effects for the competitiveness of local industries (see SGT6 Proceedings for years 1996–1999). A similar fate was suffered by the creation of a Mercosur Green Label. Another of the PNs developed by the SGT6 during the period was the implementation of an environmental information system of Mercosur (Sistema de Información Ambiental del Mercosur, SIAM). With partial support from the United Nations Environmental Program, the SIAM has been under development since 1996. The SIAM consists of a website containing information on the proceedings of the SGT6 and on environmental regulations implemented by Mercosur member countries. The system is supposed to be maintained by the Mercosur Secretariat and should include links to national environmental agencies
from Party States; however, it has suffered a series of delays due to lack of funding and is still not fully operational.

The most relevant initiative generated by the SGT6 during this period was the drafting of the environmental legal instrument for Mercosur. As mandated by PN 4, the SGT6 started in April 1996 to negotiate the legal instrument to guide the Mercosur environmental policy, which was finally approved by the GMC in 2001. (A detailed account of its development and scope is presented in the next section.) Another legal instrument drafted by the SGT6 during the period was an agreement on Environmental Emergencies (*Protocolo Adicional al AMMAM sobre Emergencias Ambientales del Mercosur, PAEAM*). The PAEAM established guidelines of action for facing environmental emergencies in the region, commanding the exchange of information and the elaboration of contingency plans to avoid trans-boundary environmental damages. Furthermore, a list of potential environmental emergencies based on the nature of the economic activities in the region was identified, and focal points for each country were established along with strategies of action to deal with those potential environmental emergencies. The PAEAM was approved by the CMC in 2004 (see CMC Decision 14/04), but has not entered into force yet.

In spite of the rather limited agenda assigned to the SGT6 by the GMC described above, the environmental agency tried to expand its scope of action by including other environmental topics for discussion in its meetings, such as illegal trade of timber, management of solid wastes in ports of entry, disposal mechanisms for used tires, and management of hazardous agrochemicals, among others. The SGT6 also made efforts to coordinate—with varied results—positions and initiatives with other work subgroups and
ad-hoc groups on issues that involved environmental aspects, such as the Guarani Aquifer or the Ecosur Project. The proceedings of the meetings held by the SGT6 during the 1995–2002\textsuperscript{43} period showed as well that the WS acted as a forum for the exchange of information among its members on environmental developments occurring in the region and in the international arena. Although these actions by the SGT6 did not translate into public policy, they created significant social capital in the process (Hochstetler, 2003) that played an important role in later years.

A situation worth mentioning regarding the SGT6 during this period was its confirmation as a WS under the aegis of the GMC. In June 2000, the program “Re-launching of Mercosur” was implemented to move the integration process from the impasse Mercosur was suffering since the beginning of 1999 (see Chapter 3). One of the objectives of the re-launching program was to assess the structure and function of the bodies under the aegis of the GMC and the CCM (see CMC Decision 26/00). As a result of the assessment, the structure of the GMC was modified at the end of 2000 and several advisory bodies (i.e., work subgroups, specialized meetings, \textit{ad-hoc} groups) were eliminated or reorganized. In the case of the SGT6, the work subgroup was maintained as one of the technical advisory bodies of the GMC (see CMC Decision 59/00). According to Laciar (2003), this decision had important repercussions for the Mercosur environmental policy because it showed the interest of the bloc in maintaining the topic as part of the integration process. Nevertheless, the re-launching program did not bring significant changes to the SGT6, because its objectives and the assigned PNs remained the same. Moreover, the subsequent crisis suffered by Mercosur during 2001–2002

\textsuperscript{43} Between October 1995 and November 2002, the SGT6 held 24 Ordinary and four Extraordinary meetings, respectively.
immobilized the entire agenda of the integration process and placed the SGT6 in a standstill situation.

The general balance of the incorporation of the environmental dimension in the integration process during the 1995–2002 period was below expectations. The transformation of the REMA into the SGT6 did not translate—in spite of the efforts of the environmental WS—into the formulation of a comprehensive environmental policy for Mercosur. Rather, the lack of autonomy of the SGT6 to implement environmental initiatives and the narrow commercial view regarding the trade-environment nexus held by the GMC determined that there were no significant plans during the period to make Mercosur an instrument to facilitate sustainable development in the region. Even the Mercosur environmental framework accord, the most important environmental policy instrument elaborated during the period, felt short of representing a full attempt in that sense.

However, it is fair to say that those outcomes were not independent of the general dynamics of the integration process during those years. The crisis involving Mercosur between 1999 and 2002 created an unfavorable context for the integration process, making difficult the promotion of a comprehensive environmental agenda (see Chapter 3). However, despite those shortcomings, the environment was recognized as one of the policy dimensions of Mercosur negotiations, representing an advance on the status and scope of action it held under the REMA. Moreover, the legal instruments created during the period and the social capital developed by the SGT6 through those years of negotiations provided the foundation for the expansion of the environmental dimension seen in recent years.
Toward a Comprehensive Environmental Policy for Mercosur?

The revitalization of the integration process initiated at the end of 2002 provided a new context for the Mercosur environmental agenda. The modifications in the procedures and functions of the advisory bodies to the GMC implemented during the program “Re-launching of Mercosur” determined the need to update the PN for the different work subgroups. Consequently, the GMC instructed the SGT6 to propose new PNs, a task that the environmental WS developed with two needs under consideration. On one hand, there was the need to move the scope of action of the SGT6 toward a more environment-oriented agenda after several years of focusing mainly on commercial matters. On the other hand, there was the need to improve the position of Mercosur in order to fulfill the compromises assumed by the Party States regarding regional and international environmental initiatives, particularly those emerging from the 2002 Johannesburg Plan of Implementation of the World Summit on Sustainable Development (PIWSD) and the 2002 Latin American and Caribbean Initiative for Sustainable Development (LACISD). As a result, the new PNs proposed by the SGT6, and approved by the GMC, maintained four of the initial task assigned to the SGT6 in 1995 and added six more (see GMC Resolution 45/02). The following is a description of the PNs with its associated objectives (numbers are provided as they are listed in GMC Resolution 45/02):

1. **Non-tariff barriers.** Similar to that from 1995;

2. **Competitiveness and environment.** Similar to that from 1995;

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44 The document was elaborated during the First Special Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean, held on 31 August 2002 in Johannesburg, South Africa, as part of the World Summit on Sustainable Development. The proposal for action identified in the Initiative form the basis for future activities in the region in terms of sustainable development initiatives.
3. **SECTORAL ISSUES.** Similar to that from 1995;

4. **IMPLEMENTATION OF THE AMMAM.** To implement, through different instruments and strategies, the Environmental Accord considering the four thematic areas listed in its Annex;

5. **INSTRUMENTS AND MECHANISMS TO IMPROVE ENVIRONMENTAL MANAGEMENT.** To identify topics and to elaborate proposals aimed at improving management of the environment to assure the sustainable development of the region;

6. **ENVIRONMENTAL INFORMATION SYSTEM.** Similar to that from 1995;

7. **THE ENVIRONMENT AS A SOURCE OF OPPORTUNITIES IN THE FRAMEWORK OF SUSTAINABLE DEVELOPMENT.** To formulate initiatives on sustainable development oriented to generate employment and economic opportunities;

8. **PROTECTION AND MANAGEMENT OF THE NATURAL RESOURCE BASE FOR ECONOMIC AND SOCIAL DEVELOPMENT;**

9. **ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS SUBSTANCES AND CHEMICALS.** To compile information on hazardous chemicals, to improve control procedures, and to exchange information and practices on the topic among Party States; and

10. **INTERNATIONAL ENVIRONMENTAL AGENDA.** To accompany the development of the international environmental agenda by exchanging information on national positions and on the implementation of international environmental accords.

The new PNs developed by the SGT6 were related to topics associated traditionally with the agenda of sustainable development, and some of them were directly derived either from the LACISD (i.e., PNs 5 and 7) or from the PIWSD (i.e., PNs 8 and 9). In practical terms, these new PNs constituted a mix of some PNs that could easily be translated into relatively concrete, operative actions (i.e., PNs 8, 9, and 10), some PNs that represented wide mandates that allowed the SGT6 ample room for maneuvering in their implementation (i.e., PNs 4 and 5), and one PN that represented a general principle rather than a task to be negotiated and implemented by the SGT6 (i.e., PN 7). These new long-term strategic objectives for the SGT6 represented a marked departure from the
previously trade-oriented PNs and opened up the scope for using the environmental WS as a tool to coordinate policy initiatives related to sustainable development among its members.

Coincident with the new context to reinvigorate the integration process emerging in 2003 (see Chapter 3), there were two developments that moved the Mercosur environmental agenda forward after the modest advances achieved during the previous years. The first one of such developments was the creation of the “Meeting of Ministers of Environment of Mercosur” (Reunión de Ministros de Medio Ambiente de Mercosur, RMMAM) in December 2003. The creation of the RMMAM was preceded by a joint declaration of the Ministers of Environment of Mercosur in October 2003, which called for the consolidation of a strategy of sustainable development for the integration process, and set the tone regarding the orientation of an environmental policy of Mercosur for the coming years (Declaration of the Ministers of Environment of Mercosur, Montevideo, Uruguay, October 9, 2003). The Ministers emphasized the relations existing among environment, economic growth, and social development, and indicated the need for Mercosur to apply an integrated approach to reduce poverty, protect the environment and improve the quality of life of the people of its member countries. The declaration also identified environmental issues of common interest for the Party States and established a set of non-binding principles and guidelines to promote clean production in Mercosur countries (Principles of Clean Production for Mercosur, Montevideo, Uruguay, October 9, 2003). In the declaration, the Ministers delineated the architecture for Mercosur environmental policy as based on the principles established in the Mercosur environmental framework agreement, along with the guidelines enunciated in the Agenda
21, the Implementation Plan of the 2002 World Development Summit, and the Plan of Action of the Latin American and Caribbean Initiative for Sustainable Development. Finally, the Ministers urged the creation of a political forum for the environment to achieve objectives of sustainable development in Mercosur.

Both the Ministers’ declaration and the creation of the RMMAM had clear policy implications in terms of the role of the environment in the overall integration process. Although the SGT6 was in a position of proposing environmental policy initiatives, its role was fundamentally that of a technical, advisory body to the GMC. Therefore, and until that moment, the environmental policy of Mercosur had been conducted exclusively by the GMC without any direct involvement of the political authorities representing the environmental issues from the Party States. This situation was in sharp contrast with other areas of the integration process that had already instituted their minister meetings—such as Agriculture, Justice, Interior, or Health, among others—in which the political authorities from the specific area were defining the policy for their sectors and advising the GMC. Consequently, the creation of the RMMAM changed the situation and implied not only the existence of a political forum for articulating and coordinating environmental initiatives at the highest level of Mercosur, but also a higher instance for promoting those initiatives.

Furthermore, the creation of the RMMAM signified an implicit approval by Mercosur authorities (i.e., the CMC and the GMC) for the orientation of the Mercosur environmental policy laid out in the Ministers’ declaration, and added an impulse to introduce initiatives promoting sustainable development in the region into the integration process. Moreover, it opened the door to replace the mostly trade-related focus that had
dominated the Mercosur environmental agenda up to that moment for a more environment-related one.

The second development was the entry into force of a Mercosur framework accord in June 2004 (see next section). The agreement provided a legal framework to design and execute an environmental agenda for Mercosur. To that point in time, the environmental agenda implemented by the SGT6 had been characterized by isolated initiatives that did not respond to a region wide environmental policy formulated in a comprehensive and structured manner. The entry into force of Mercosur framework accord prompted the SGT6 to elaborate a strategic plan for implementing the principles enunciated in the environmental agreement (*Plan Estratégico de Implementación del Acuerdo Marco sobre Medio Ambiente*; see Proceeding of V SGT6 Extraordinary Meetings). The strategic plan established priorities for the implementation of those principles of the Mercosur framework accord that were not being carried out by other environmental accords to which the State Parties were members (see next section). It consisted of concrete activities, expected results, and deadlines for the four thematic areas (i.e., sustainable management of natural resources, quality of life and environmental planning, instruments of environmental policy, and environmentally-sustainable production activities) comprising the environmental agenda of Mercosur as defined in the annex of the environmental accord.

The strategic plan, in turn, constituted the foundation for an Agenda on Sustainable Development for Mercosur (*Agenda para el Desarrollo Sustentable del Mercosur, ADSM*; see Proceeding of III RMMAM Ordinary Meetings, Annex III.) elaborated by the RMMAM. The Agenda represented a strategic vision for Mercosur as well as a road map
to achieve objectives of sustainable development. The focus of the Agenda was to develop norms that would facilitate the implementation of initiatives on sustainable development in areas of common interest for Mercosur countries. In operative terms, the Agenda defined a set of areas considered as priority in terms of negotiation and implementation by the RMMAM and the SGT6. The Agenda included the following high priority areas of common interest: (i) shared water resources, (ii) biodiversity, (iii) management of hazardous chemical and domiciliary wastes, (iv) air quality, (v) clean technologies and production methods, and (vi) environmental goods and services. For each of the listed areas, the Agenda provided instructions for its negotiation and established the norms and policy instruments to be accomplished in each case.

The creation of the RMMAM and the entry into force of the Environmental Accord transformed the dynamics of the environmental dimension in Mercosur. First, the institutional role of the SGT6 was expanded by including topics related to sustainable development in its agenda, and by acquiring a more proactive role in generating environmental initiatives. Furthermore, the structure of the SGT6 was enlarged to cope with the increase in the workload through the creation of several ad-hoc groups on biodiversity, wildlife management, and environmental goods and services, among others. Second, the higher hierarchical status of the RMMAM (as compared to that of the SGT6) added more “institutional weight” to the environmental initiatives being raised to the GMC, and provided for a more direct channel to negotiate them. (In the past, the initiatives were raised to the GMC through the SGT6, which had limited powers to push them.) Last, several policy initiatives were developed and sent to the GMC for approval, including: (i) a set of guidelines on environmental management and clean production to
complement the program on commercialization chains of Mercosur (Proposal for Decision CMC on Complementación del programa Foros de Competitividad, Directrices de Gestión Ambiental y Producción Más Limpia. Proceeding of I RMMAM Ordinary Meetings, Annex III), and (ii) a proposal for an accord to develop a Mercosur policy on environmental management of wastes and on post-consumption responsibility (Proposal for Decision CMC on Acuerdo sobre Política del Mercosur de Gestión Ambiental de Residuos Especiales de Generación Universal y Responsabilidad Post-Consumo; Proceedings of I RMMAM Extraordinary Meetings, Annex IV.) Moreover, by May 2006 several initiatives were under development and in the process of being sent to the GMC for approval, including (i) a strategy for biodiversity conservation in Mercosur (See Declaration on Estrategia de Biodiversidad del Mercosur; Proceeding of I RMMAM Extraordinary Meetings, Annex III), (ii) a protocol on environmental management of shared water resources, and (iii) a protocol on air quality.

The assessment of the recent developments involving the environmental dimension of Mercosur clearly showed a shift in its scope of action toward issues related with sustainable development and a marked dynamism in the generation of policy initiatives in that direction. This dynamism, in terms of generation of policy initiatives, was a sharp contrast with the rather modest performance in previous years, when the Mercosur environmental body was characterized by a marked institutional weakness and the environmental agenda was confined to mostly commercial matters. Both external (such as the commitments assumed in the 2002 Johannesburg Summit and the LAC Initiative on Sustainable Development), as well as internal circumstances (reinvigoration of the
integration process since 2003), provided a favorable atmosphere to facilitate the main developments described above.

**Mercosur Environmental Norms System**

All policy needs a norms system to provide a legal framework for legitimizing its implementation. In Mercosur, the environmental norms system consists of an environmental framework agreement, providing the broad legal guidelines for an environmental policy in Mercosur, and a set of dispersed norms that provide some degree of environmental protection. Because Mercosur lacked until recently a legal instrument to guide the Mercosur environmental policy, the environmental norms system of the integration process is still poorly developed and has insufficient norms for direct application. The following is an examination of the Mercosur environmental norms system and its effectiveness to provide for environmental protection.

**Environmental Framework Accord for Mercosur**

The instrument that provides the legal foundation for the development of the environmental policy in the integration process is the Environmental Framework Accord for Mercosur (*Acuerdo Marco sobre Medio Ambiente del Mercosur, AMMAM*). The Framework Accord is the result of complicated negotiations conducted by the SGT6 that lasted more than five years. Initially, the task was oriented to develop an Additional Protocol to the Treaty of Asuncion on Environment, which constituted an expanded version of the eleven principles expressed in the *Directrices* elaborated by the REMA, and included far-reaching positions on numerous environmental topics, such as

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45 Mercosur norms consists of “Original Right” (*Derecho Originario*) represented by the TA and its additional and complementary protocols, which do not include rights and duties, and “Derived Right” (*Derecho Derivado*) represented by norms that make operational the principles established by the former (see Chapter 3).
environmental impact assessments, eco-labeling, natural resource management, and biosafety, among others.

This approach, however, encountered resistance among Mercosur member countries. On one hand, its condition of “additional to the TA” was objected to because such a character would make it an extension of the TA, and part of the original source of law of Mercosur (see Chapter 3). Therefore, and according to the POP (Articles I and XLI, Ouro Preto Protocol), if a party decided to withdraw from the environmental protocol, it would be _ipso iure_ withdrawing from the TA as well. This potential situation determined that the condition of “additional to the TA” of the environmental protocol were considered to be too extreme by Mercosur policy-makers given the level of disagreement at that time on many aspects of the integration process, including the role of the environment in the entire process (Laciar, 2003). Moreover, the different implications that the condition of “additional to the TA” would have on the internal legal order of the Party States was worrisome for some Mercosur members—particularly Argentina. In the case of Brazil and Uruguay, their national constitutions did not state that international treaties had primacy over national laws and therefore, a posterior internal law could override provisions established in the additional protocol. That was not the case of Argentina and Paraguay, where their respective national constitutions established the supremacy of international treaties over internal laws. In consequence, Argentina expressed reservations on the degree of obligation that the condition of “additional to the TA” would create among the Party States, and hence, that this situation could translate into potential commercial disadvantages for that country at the moment of its implementation (Laciar, 2003).
On the other hand, the environmental protocol was regarded by Mercosur decision-making bodies as too rigid and excessively regulatory, creating aspects that were considered to have the potential to generate barriers to trade and go against the spirit of the TA (Devia, 1998 cited by Cicaré and Mussio, 2002). Along these lines, the inclusion in the protocol of regulations invoking the precautionary principle, particularly when applied to biosafety and genetically modified organisms,46 was opposed by Argentina. The argument was that the inclusion of those topics in the protocol could result in non-tariff barriers for its intra- and extra-Mercosur trade given the existing disparities in the environmental legislation among the Party States47 (Drnas, 2000; Valente, 2001; Hochstetler, 2003; Laciar, 2003). Facing those resistances—and after having two proposal for an additional protocol to the TA rejected by the GMC—the SGT6 elaborated an environmental legal instrument for Mercosur under the juridical nature of an “Accord”, which was not referenced as additional to the TA (for a detailed account of the inside negotiations leading to the Accord, see Laciar, 2003).

The Framework Accord was less ambitious in terms of its environmental regulatory scope than the previous additional protocol, but it was politically acceptable by Mercosur decision-making bodies (M. Laciar, personal communication, 2002).48 The Framework Accord was finalized by the SGT6 in April 2001 (see Recommendation SGT6 1/01, IV Extraordinary Meeting, March 13–14, 2001) and approved by the CMC during its XX

46 Argentina ranks second behind the United States in terms of agricultural surface cultivated with genetically modified organisms (Chudnovsky, 2004).

47 Brazil presented a more advanced and developed environmental legislation than Argentina, although its enforcement was weaker. Therefore, Argentinean products would have to follow Brazilian standards, which could result in negative economic effects for Argentina’s economy (Drnas, 2000).

48 Mirta Laciar is the main chief negotiator for Argentina to the SGT6 of Mercosur. She has been in that post since middle 1996.
Meeting, held in Asuncion, Paraguay in June 2001 (see Decision CMC 2/01). The Framework Accord entered into force in mid-2004, 30 days after the last instrument of ratification was deposited with the SAM in May 2004; Argentina ratified the Accord on January 15, 2004 by National Law 25841; Brazil on July 24, 2003 by Legislative Decree No. 333; Paraguay on January 28, 2003 by National Law No. 2068; Uruguay on January 12, 2004 by National Law No. 17712.

The AMMAM is a short framework agreement consisting of eleven articles, which contain the objectives, principles and instruments to develop an environmental policy for Mercosur rooted in the concept of sustainable development. As a framework agreement, it is of general scope in nature in the sense that it provides common recommendations but does not regulate specific situations. As such, the AMMAM will require the future development of complementary norms to make its principles operational. Accordingly, the AMMAM can be characterized as a soft law agreement (Esain, 2004), since it does not introduce specific obligations for the Party States on the level of environmental protection they must achieve while implementing Mercosur.

The policy objectives pursued by Mercosur countries in reaching an environmental agreement for the integration process are stated in the Preamble of the Accord. The Preamble highlights the commitment made by Party States to cooperate in the protection of the environment and in the sustainable use of natural resources to achieve sustainable development in Mercosur. It also indicates that commercial and environmental policies must be made complementary, recognizing in this way the need to consider environmental objectives in the formulation of trade policies. Furthermore, the Preamble includes several statements of overarching principles related to cooperation in the
implementation of international environmental agreements and the precepts on sustainable development established in Agenda 21, and the importance of the participation of the civil society in the promotion of sustainable development. The Preamble culminates in the declaration that the signatories are “convinced of the importance of a legal framework to facilitate the effective protection of the environment and the sustainable use of the natural resources in member countries” (Preamble, Acuerdo Marco sobre Medio Ambiente del Mercosur). The policy objectives enunciated in the Preamble are concordant with the spirit of the UN Conference on Environment and Development, and those expressed in different instruments of the WTO, as well as other international commercial and environmental fora. According to Laciar (2003), this coincidence indicated the purpose of Mercosur policy-makers in making the environmental policy objectives of the integration process compatible with those already agreed upon in the international trade-environment agenda.

The specific goal of the AMMAM is to provide the guidelines for environmental protection and sustainable development in Mercosur through the articulation of the economic, social, and environmental dimensions (Article IV, Acuerdo Marco sobre Medio Ambiente del Mercosur). To do so, the Accord establishes that the environmental principles guiding Mercosur actions regarding the environment are those derived from the 1992 Rio Conference on Environment and Development (Article I, AMMAM). Therefore, those principles represent the backbone of the Mercosur environmental policy delineated in the AMMAM. Accordingly, the Accord mandates that Party States must develop a norms system based on the 1992 Rio Principles and oriented to: (i) promote environmental protection and sustainable use of natural resources (Principles No. 2 and 3
of 1992 Rio Conference), (ii) incorporate the environmental dimension in sectoral policies according to the principles of gradualism, flexibility, and balance (Principle No. 4), (iii) complement commercial and environmental policies, and avoid the adoption of unjustified measures to restrict trade (Principles No. 11 and 12), (iv) promote effective participation of the civil society (Principle No. 10), and (v) promote the internalization of environmental costs (Principle No. 16; Article III, AMMAM). The Accord also indicates the compromise of Party States to analyze the application of those principles from the 1992 UN Rio Conference that have not been the subject of other international treaties (Article II, AMMAM).

The mechanism underscored in the AMMAM for making operative the principles mentioned above is the cooperation among Party States. On one hand, parties must cooperate in the implementation of international environmental agreements (Article V, AMMAM). Such cooperation may include the adoption of common policies for environmental protection and natural resource management, the presentation of joint declarations, and the exchange of information on national positions in international forums.

On the other hand, cooperation also is extended to the analysis of the environmental problems faced by the subregion (Article VI, AMMAM), and may include a wide range of actions to be conducted by Party States, including: (i) the exchange of information on environmental regulations, procedures, and policies, as well as on environmental emergencies, (ii) the development of environmental policies based on both regulatory and market instruments, (iii) the harmonization of domestic environmental legislation, (iv) the adoption of clean and environmentally-friendly technologies, (v) the
expansion of scientific research, (vi) the promotion of environmental education, and (vii) the identification of sources of financing for capacity building in Party States. In case a controversy arises on the application, interpretation, or lack of implementation of any of the norms derived from the Accord, the problem is resolved through the system of dispute resolution for Mercosur (Article VIII, AMMAM).

The content of the AMMAM reveals a programmatic approach to develop an environmental policy for Mercosur. The basic tenet behind this programmatic approach is to avoid language in the AMMAM that could lead to conflicts among the parties, given the asymmetries in the environmental legislation exhibited by Mercosur countries (Valente, 2001; Laciar, 2003). Therefore, the programmatic approach eludes the incorporation of provisions representing specific environmental commitments by Party States, leaving the level of environmental protection undetermined.

This approach is in marked contrast with that of NAFTA, the other major economic integration agreement in the Americas. The North American Agreement of Environment Cooperation of NAFTA includes specific environmental provisions that are required from Party States—such as preparing reports on the state of the environment, among others—which is not the case in the AMMAM. However, the programmatic approach of the AMMAM does not prevent the future incorporation of specific environmental obligations for Mercosur countries. They can be developed when the additional operational norms to implement the principles of the agreement are negotiated by the

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49 The North American Agreement on Environmental Cooperation (NAAEC) establishes that each country must prepare and make public reports on the state of the environment, develop procedures for environmental emergencies, promote environmental education, conduct environmental assessments when required, promote the use of economic instruments to achieve environmental goals, maintain high levels of environmental protection, effectively enforce environmental laws, ensure interested persons access to remedies for violations of environmental laws, and ensure that procedural guarantees are put in place for judicial and quasi-judicial proceedings. NAAEC, Articles 2 to 7. (See Blum, 2000).
Party States. Nonetheless, the wording resulting from the programmatic approach leads to a lack of definition in many areas of the Framework Accord, which negotiators of the SGT6 will have to face at the moment of creating specific regulations to enact the principles established in the agreement.

The most relevant lack of definition is related to the absence of specific obligations regarding the level of environmental protection pursued by member countries. This situation does not create the incentive for Party States to effectively enforce its laws through properly governmental actions, nor does it encourage the adoption of higher environmental standards. There is also a lack of definition regarding the assessment of trade effects on the environment, or on the need to periodically assess the status of the environment in Party States. Therefore, there is no systematic way to know if the trade and environmental policies being enacted are effectively promoting the sustainable development of Mercosur. There is also no clear indication of the extent, and the mechanisms, for the involvement of the public in the protection of the environment. In light of the secondary role given by Mercosur policy-makers to environmental matters in the past, the lack of definition in the AMMAM of issues of the type discussed here is likely to be troublesome. Ultimately, these issues must be dealt with without considering the environment as an unwelcome companion for the integration process. Otherwise, the environmental regime for Mercosur could become a “tiger without teeth.”

Nevertheless, and in spite of the potential shortcomings, the Framework Accord does represent a major step in creating a comprehensive environmental policy in

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50 The participation of the civil society in the protection and handling of environmental matters is encouraged in several parts of the Accord. See Preamble and Art. 3, inc. e) *Acuerdo Marco sobre Medio Ambiente del Mercosur.*
Mercosur. It provides the integration process with a legal instrument that formally establishes the need to make trade and environment policies compatible. More importantly, it makes available a legal foundation on which to develop an environmental norms system to provide legitimacy to Mercosur environmental policy.

**Environmental Rule Making**

One of the relevant aspects for the institutionalization of the environment in Mercosur is the development of comprehensive rules for environmental protection. In this sense, the design of regulations related to the environment in the integration process has not been the exclusive domain of the environmental agency of Mercosur (i.e., the REMA or the SGT6). From the beginning of the integration process—and before the creation of the SGT6 in particular—the tasks of different organs of Mercosur included aspects associated with the environment (see Drnas, 2000), which resulted in the creation of norms that incidentally provided for environmental protection. As a result, norms that refer to the environment in Mercosur are composed of those regulations mentioned previously plus regulations elaborated by the environmental body of Mercosur directed primarily to protect the environment.

The first group includes norms on: (i) transport of hazardous substances and products (Decision CMC 2/94 on Agreement on Transport of Hazardous Merchandises in Mercosur; Decision CMC 14/94 on Transport of Hazardous Products in Mercosur, Decision CMC 15/94 Agreement on Multimodal Transport in Mercosur), (ii) cooperation on control of illegal trade activities (Decision CMC 10/00 Complement to the General Plan for Cooperation and Coordination in Regional Security on Environmental Legal Activities; Decision CMC 12/00 Complement to the General Plan for Cooperation and Coordination in Regional Security on Illegal Trade in Nuclear and/or Radioactive
Materials in Mercosur), (iii) energy policy (Resolution GMC 57/93 Policy Guidelines for the Energy Sector in Mercosur), (iv) limits on emissions and noises for cars and heavy trucks (Resolution GMC 128/96 Technical Standards for Emissions of Pollutants and Noises for Cars; Resolution 29/97 Technical Standards for Emissions of Pollutants for Heavy Vehicles of Cycle “Otto”), (v) sanitary, phytosanitary, and zoosanitary requirements (Decision CMC 6/96 Accord on the Application of Sanitary and Phytosanitary Measures of the WTO),\(^{51}\) and (vi) sanitary management of wastes in ports of entry. The second group includes norms on: (vii) general guidelines on environmental policy (Resolution GMC 10/94 Basic Guidelines on Environmental Policy; Decision CMC 2/01 Environmental Agreement for Mercosur), (viii) promotion of clean technologies (Decision CMC 3/02 Agreement on Project for Environmental Management and Clean Production in Small and Medium Enterprises), and (ix) environmental emergencies (Decision CMC 14/04 Additional Protocol to the Environmental Agreement for Mercosur on Environmental Emergencies.)

A closer review of the norms mentioned above shows several patterns. First, there are no operative rules so far enacted by Mercosur decision-making bodies associated with the implementation of the Environmental Framework Accord. Although this situation is related to the fact that the accord entered into force recently, it means that none of its principles have been made operational. Second, some of the norms—such as the case of (ii), (iii) and (viii)—contain provisions of general scope regarding a topic with environmental connotations and provide broad guidelines to direct actions in favor of the environment. However, they are not intended for preventing potential negative

\(^{51}\) Besides Decision CMC 6/96, there are several norms on sanitary requirements for transport and trade of bovines, horses, and small animals, and vegetative materials, semen, and other reproductive materials.
environmental effects due to an increase in trade. Finally, the most developed set of
environmentally-related norms are those associated with sanitary and phytosanitary
requirements that have an indirect connection with environmental protection (see Chapter
5). Excluding the Environmental Framework Accord for the above-mentioned reasons,
the existing measures have, in a sense, contributed to the environmental protection in
Mercosur, although they were generally limited, and represented isolated and
uncoordinated efforts. Helping to create this situation has been the predominantly
commercial focus of the integration process. This approach, however, has made the
creation of norms a process subordinated mainly by the goal of removing barriers to trade
among Party States. Consequently, the primary focus of norm creation in Mercosur so
far has been commerce and not the environment. The reality is that the development of
norms of specific environmental character in Mercosur at this moment is in its infancy.

A circumstance affecting the development of the environmental policy—as well as
all sectoral policies in the integration process—has been the sluggish, and sometimes lack
of, internalization of Mercosur norms by Party States. Norms issued by Mercosur bodies
(i.e., CMC, GMC and CCM) are mandatory for the Party States. However, they must be
internalized by the parties before becoming effective (see Chapter 3). The reason for this
internalization is the lack of instituted supranationality caused by the intergovernmental
character of Mercosur. Consequently, Mercosur norms are mainly voluntary, and not
legally binding if they are not internalized by the Party States.

Unfortunately, the process for the internalization of norms in Mercosur, as defined
by the Ouro Preto Protocol, presents certain deficiencies\(^{52}\) that have required successive

\(^{52}\) Among the deficiencies indicated for the internalization procedure established in the Ouro Preto Protocol
are: (i) lack of penalties for a Party States if it fails to internalize a Mercosur norm, (ii) lack of uniform
clarifications over time, and which have not been completely resolved yet (Pena and Rozemberg, 2004). As a consequence, only about 50% of the norms generated by Mercosur bodies that require internalization have been internalized (Pena and Rozemberg, 2004).

The internalization of environmental norms has not been different from the general situation described above. Overall, the process has lacked agility, particularly when norms requiring legislative approval are involved. For example, three years passed between the approval of the Environmental Accord for Mercosur by the CMC and its entry into force. But the lack of agility in the internalization process, although important, is not nearly as relevant as the overall internalization application. The cumbersome characteristics underlying the internalization process are such that it is unclear which of the Mercosur norms are effectively in force and which are not; this aspect is clearly demonstrated by the recent instructions given to the Party States by the CMC to provide a status update of the internalization of Mercosur norms (see for example, Decision 7/03 on Direct Application of Mercosur Norms on the Internal Juridical Order of Party States).

The situation described above undermines the effectiveness of the application of current environmental initiatives and represents a potential obstacle for making effective the additional norms that need to be developed and made operational in support of the policy principles established in the AMMAM. Nevertheless, the problems—and the solutions—associated with the internalization of Mercosur norms are more related to the criteria for the juridical mechanism of internalization within the Party State, and (iii) lack of clear criteria for selecting the type of national norm to be used for the internalization (Pena and Rozemberg, 2004).

53 Mercosur norms that do not require internalization are those directed to regulate the internal functioning of Mercosur. See Decision CMC 23/00.
strategic decisions made by Party States regarding the creation of supranational institutions than to procedural modifications, although those decisions will have environmental repercussions as well.

**Concluding Remarks**

Although Mercosur was born as a commercial integration process without taking the environment into consideration, an environmental dimension has emerged over time. The incorporation of environmental dimensions into the integration process, however, has not been easy. The primary commercial focus of Mercosur made the environment a minor issue for policy development, one that had to be considered only from the perspective of its potential role as an obstruction to market access. It has been only recently that that conception has started to change among Mercosur policy-makers, and policy initiatives more focused on the environment have begun to be developed. In this regard, the last couple of years have seen a significant takeoff in the development of institutional mechanisms, work plans, and policy statements to fully institutionalize the environmental dimension into the integration process. Still, as the recent conflict on the construction of paper plants along the Uruguay River between Argentina and Uruguay is showing, the work of Mercosur environmental bodies has not expanded into public policies shaping environmentally responsible practices by private and governmental actors. This is not surprising, however, given the secondary place of environmental policy in the integration process, the limited power of the Mercosur environmental agency, and the state of infancy of environmental norms.

These developments, however, cannot be considered in isolation of the general evolution of the integration process. The different stages Mercosur has gone through in its institutional development (i.e., transition period, imperfect customs union) have
influenced the focus of the environmental dimension. For example, during the transition period and until the early 2000s, the principal goal of the integration process was the removal of obstacles to commerce among Party States. As a consequence, the focus of the environmental dimension during those years was mostly centered on the analysis and harmonization of non-tariff barriers of environmental character. On the same token, the degree of advance in (or lack of) the negotiations involving the overall integration process has influenced the ability of the Mercosur environmental agency to introduce and promote initiatives centered mainly on the environment. The long negotiations involving the Environmental Framework Accord serve as an illustration for this point. In a sense, the observed degree of institutionalization of the environmental dimension in Mercosur is a reflection of the current state of development of the entire integration process.

With the obvious differences in origin and level of economic development, the incorporation of the environmental dimension in Mercosur presents certain resemblances to the first stages in the evolution of the environmental policy in the European Union. According to Torres Ugena (1989), during the first stage of the EU environmental policy—ranging from the Original Treaties in 1965 until the Unique European Act in 1986—the environmental measures were subordinated to commercial objectives and directed to harmonize legislation among Party States to facilitate trade. It is with the inclusion of a chapter on “Environment” in the Unique European Act of 1986 that the environment became a structural part of the policy of the Community, and a process of creation of comprehensive norms directed to environmental protection was initiated.

The resemblance between Mercosur and the EU described above, however, stops there. In contrast to the EU, the lack of supranational institutions in Mercosur has
determined that environmental initiatives, as well as any other sectoral initiative in Mercosur, must be negotiated and adopted by consensus among the Party States. Although this strategy of integration is suitable when discussing commercial matters related to trade liberalization (for a discussion, see García Peluffo, 2003), it presents serious limitations for the coordination and enforcement of the operational environmental norms associated with the Environmental Framework Accord. Without a supranational authority, Party States do not have an incentive to pursue environmental protection when there is a comparative advantage not to do so (Blum, 2000). For example, they can maintain lax environmental regulations to attract foreign direct investment (FDI), as the case of the Hidrovia project (to attract FDI was one of the key strategic reasons followed by the four member countries in establishing Mercosur; see Hochstetler, 2002) and the construction of the paper plants along the Parana River seems to confirm. Nonetheless, all the formal means to articulate trade and environmental protection policies, having as their goals the generation of outcomes consistent with a strategy of sustainable development in Mercosur, have been developed and are already in place. It is now in the hands of Mercosur decision-making bodies (i.e., the CMC and the GMC) to advance the process.
CHAPTER 5
ENVIRONMENTAL REGULATORY EFFECTS OF MERCOSUR IN ARGENTINA

Introduction

By most accounts, multilateral trade liberalization agreements are essentially a set of agreed upon rules governing trade between countries. These trade rules may impose direct substantive restrictions that may affect existing, as well as future, domestic environmental regulations (Ford Runge, 1994; Trachtman, 2000; UNEP, 2005). Consequently, the effects of applying trade rules emanating from a trade liberalization agreement dealing with environmental regulatory instruments have been termed “regulatory effects” (Fauchald, 2000). One example of regulatory effects is when environmental norms are subject to elimination because they have been found discriminatory under a trade liberalization agreement, and thus, in violation of the Most Favored Nation and National Treatment principles (as required, inter alia, by GATT Articles I and III). Another example is when countries involved in a trade agreement negotiation are required to harmonize their respective environmental norms on sanitary and phytosanitary standards, usually in reference to internationally agreed upon guidelines to be consistent with the WTO; the provisions in both the WTO Agreement on the Application of Sanitary and Phytosanitary Measures and the WTO Agreement on Technical Barriers to Trade require members to use relevant international standards to be “WTO consistent”.

The interest in assessing the regulatory effects caused by the implementation of trade liberalization agreements has grown considerably in the last decade due to NAFTA
implementation and WTO formation. Such interest has been centered on concerns that trade liberalization may undermine the ability of governments to take action to protect their national environment (Esty, 1994; Hoberg, 2001). Those concerns are related to suspicions that: (i) environmental standards could be harmonized on the basis of the lowest common denominator, resulting in a “race to the bottom” to avoid losing comparative advantage; (ii) environmentally “dirty” industries would move to countries with less stringent regulations, creating pollution havens; (iii) more stringent environmental regulations will not be introduced for fear of losing comparative advantage creating a “chilling effect”; and (iv) trade rules will have preeminence over environmental provisions to comply with multilateral agreements that have trade implications (Esty, 1994; Jhonstone, 1999; Hoberg, 2001).

In recent years, however, the focus has shifted to assessing regulatory effects in order to reduce potential conflicts between trade liberalization policies and environmental policies, and to generate win-win situations (Trachtman, 2000). In other words, the assessment is carried out to strengthen the ability of governments to enact and implement environmental policies while achieving the goals of the trade agreement (OECD, 2000). Thus, the assessment of regulatory effects of trade agreements on environmental instruments includes the effects of new trade rules on the implementation and enforcement of domestic environmental regulation, on the domestic implementation of

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54 Several empirical studies have been done in those areas. Dean (1992) tested the hypothesis that more stringent environmental regulations resulted in loss of competitiveness and industrial flight to pollution havens. No empirical evidence was found to support that hypothesis. Low and Yeats (1992) examined the pattern of international industrial location to determine the extent of environmentally “dirty” industry migration between 1965 and 1988. They concluded that the cost of compliance with environmental standards was a small portion of the total costs and probably not a significant portion for explaining industry migration, although they did not dismiss that environmental policies may had influenced location decisions.
obligations caused by multilateral environmental agreements, and on the country’s ability to address environmental problems in the future (Faulchad, 2000).

There are multiple methodological difficulties associated with assessing the regulatory effects mentioned above (for a review, see Faulchad, 2000 and Trachtman, 2000), and few studies have been conducted on the subject. Partial reviews of some regulatory effects have been conducted on NAFTA (Canadian Government, 1992; CEC, 1999) and the European Union (Task Force, 1990; Weder and Ziegler, 2002). In the case of Mercosur, however, no attempts have been made in that regard. Given the potential of the commercial norms derived from the TA to encourage the abolishment of national environmental legislation that is contrary to its objectives (see below), it is important to examine how the implementation of Mercosur is affecting the environmental policies and regulatory frameworks of its member countries.

This chapter explores the environmental regulatory effects of Mercosur in Argentina. Three questions are analyzed. First, what changes have been caused by Mercosur in the ability of the government of Argentina to implement environmental policies? Second, is the harmonization of non-tariff barriers under Mercosur weakening existing Argentinean environmental regulatory instruments? Third, are Mercosur trade rules constraining the implementation of multilateral environmental agreements to which Argentina is party? The chapter is organized as follows. First, the changes in the environmental institutional and administrative framework occurring in Argentina since the implementation of Mercosur are examined. Second, the process in Mercosur associated with the liberalization of non-tariff barriers to environmental-related trade is analyzed. Third, the process of harmonization caused by Mercosur on domestic health,
safety, and environmental standards is analyzed. Finally, the treatment given to multilateral environmental agreements (MEA) in Mercosur is analyzed, and a proposal to solve potential inconsistencies between Mercosur and the implementation of MEAs to which Argentina is party is presented.

The Environmental Institutional Framework of Argentina

There was no national environmental agency in Argentina at the time of the signing of the Treaty of Asuncion. Administration of natural resources and environmental issues was divided among several governmental offices, which were under the aegis of ministries whose mandates were not primarily environmental conservation, such as the Ministry of Economics or the Ministry of Public Health. Moreover, the environmental legislation was composed of a myriad of norms covering different sectoral aspects of several natural resources—such as water, soil, energy, mining, wildlife, and forestry—(see Devia, 1996), which had been enacted without following a planned environmental policy.

To overcome the situation and to develop and coordinate an environmental policy for the country, the National Environmental Secretariat (*Secretaría de Estado de Medio Ambiente*) was created at the end of 1991. The National Environmental Secretariat reported directly to the President and had the equivalent rank of a ministry (National Decree 2419/1991). Although the environmental secretariat was created relatively shortly after the launching of Mercosur, this did not have any influence in prompting its creation. According to Hopkins (1995), two national environmental disasters—an oil spill and a volcanic eruption—resulted in mounting public pressure in favor of the creation of a national environmental agency. During its first years of existence, the environmental secretariat was quite effective in creating an inclusive and unified
environmental agenda, and in introducing the “environmental issue” to the public and the business sectors (Rodriguez, 1998). However, the actions of the environmental secretariat during the 1990s have been criticized on grounds that the agency prioritized issues related to the international environmental agenda, such as climate change, while ignoring more pressing national environmental problems such as deforestation and urban pollution, among others (Hochestetler, 2002, 2003).

At the end of 1999, there was a change of administration in Argentina, which introduced modifications in the administrative structure of the national government. As a consequence, the National Environmental Secretariat lost its ministerial-like status and was moved into the newly created Ministry of Social Development and Environment as one of its many secretariats. This change in status had two immediate repercussions. On one hand, it implied that the environment was no longer an issue to be considered at the highest level of policy decision in the country (under the previous status, the Secretary of Environment was a member of the national cabinet, and as such, participated in the presidential cabinet meetings.) On the other hand, environmental issues were mingled with other unrelated policy areas—such as sports or social policies, among others—which lowered its profile and clouded its agenda. Since that change in 1999, the environmental secretariat has been renamed several times, and in 2002 it was moved to the aegis of a different ministry; currently, the environmental secretariat is called “Secretariat of Environment and Sustainable Development” (Secretaría de Ambiente y

55 In December 1999, Mr. Menen, who had been in office for two consecutive periods, was replaced by Mr. de la Rúa as the new elected president of Argentina.

56 The newly created Ministry of Social Development and Environment was composed of five secretariats: Social Policies, Social Action, Sports and Recreation, Social Development, and Sustainable Development and Environmental Policy (the previous national environmental secretariat.)
Desarrollo Sustentable) and is located under the aegis of the Ministry of Health and Environment. It is noteworthy that while the core objectives and attributes of the environmental secretariat (independently of its denomination and administrative location) have remained roughly the same since 1999, there has been no mention in those objectives and attributes of the role and competence of the secretariat related to Mercosur, despite the fact that the head of the environmental secretariat is the primary official representing the Argentine government in the SGT6 (see Chapter 4).

Besides the creation of a national environmental agency, there have been two other important developments regarding Argentine environmental politics in the last decade: the 1994 Constitutional Reform and the passing of the General Environmental Law (*Ley General del Ambiente*) in 2002. The 1994 Constitutional Reform grants constitutional status to environmental issues. Before the reform, the Argentine Constitution did not include any specific mention to conserve or protect the environment (Devia, 1998). The reform introduces several principles regarding environmental protection, as well as criteria for defining areas of environmental jurisdiction among the local, the provincial, and the federal state (Sabsay and Di Paola, 2002). In the reformed constitution, three articles refer specifically to the environment and provide definitions regarding its protection and management. Article 41 recognizes the right of the people to a healthy and balanced environment, and the state’s duty to preserve it. The same article introduces the concept of environmental damage and acknowledges the role of the national government in establishing “minimum thresholds” (*presupuestos mínimos*) of environmental protection in the country. Article 43 establishes the right to initiate legal actions if the government or a private person violates the recognized right to protect the
environment. And finally, Article 124 declares that the provinces have authority over the natural resources located in their jurisdictions. The General Environmental Law, in turn, contains the objectives, principles, and instruments defining the national environmental policy of Argentina. The Environmental Law is a derivation of the new constitutional status of the environment and makes clarifications on some of the environmental principles established in the reformed constitution mentioned above. One of the most important features of the law is the definition of what constitutes a minimum threshold for environmental protection. As defined by the Environmental Law, a minimum threshold for environmental protection is a “norm that grants a common environmental protection for the entire country, and has the goal of imposing the necessary conditions to assure environmental protection.” This definition combines both the concept of a standard and of a policy (Sabsay and Di Paola, 2002), and provides a legal anchor to coordinate environmental policy in the country, as shown below.

The environmental principles introduced in the Constitution and the subsequent definitions supplied by the Environmental Law have changed the legal landscape to provide environmental protection in the country. Because Argentina is organized under a federal system of government, the provinces have authority over their natural resources, and are entitled to define their own level of environmental protection. Nevertheless, the new legal context determines that: (i) thresholds established by the national government through national environmental norms would be the common minimum level of environmental protection to be provided in the country, (ii) provinces may impose—by enacting complementary norms—higher levels of environmental protection than the minimum thresholds established by national norms, and (iii) the local provincial
administrative and judicial authorities are in charge of applying and enforcing both the national and the provincial environmental legislation.

The new environmental legal context has clear implications for the application of Mercosur environmental norms in Argentina. Because Mercosur is an intergovernmental organization composed of representatives from the national governments (see Chapter 3), a norm issued by Mercosur bodies has the character of a national norm once it has been internalized in the legal system of Argentina. As such, and according to the General Environmental Law, it represents a minimum threshold for environmental protection in the country. Because of Argentina’s federal regime described above, it is mainly in the realm of the provinces to apply and enforce a Mercosur norm. Consequently, there are different possible scenarios regarding the level of environmental protection provided by a Mercosur norm. If the standard in the provincial environmental legislation is lower than the minimum threshold provided by the Mercosur norm, then the Mercosur norm induces an improvement in the legal environmental system of the province. If the standard in the provincial environmental legislation is higher than the minimum threshold provided by the Mercosur norm, there are two options for the province, either to maintain its own higher standard or to lower the standard to the level provided for in the Mercosur norm.

Except for sanitary and phytosanitary standards, Mercosur has yet to develop specific norms for environmental protection (see below and Chapter 4); thus it is not possible to identify which of the scenarios proposed above could occur. Provinces in Argentina exhibit ample differences in the level of environmental protection provided by their environmental norms, as well as in the enforcement capabilities of such legislation (Devia, 1998). Consequently, this situation suggests that the effect of Mercosur norms on
the level of environmental protection in Argentina will depend on the current level of environmental protection of the individual provinces.

**Harmonization of Non-tariff Barriers**

The liberalization of non-tariff barriers to trade (NTBs) constitutes one of the main policy instruments for the implementation of the Common Market. Article V of the Treaty of Asuncion commands that commercial liberalization should comprise the elimination of tariffs along with the elimination of non-tariff restrictions to the circulation of merchandises, and of any other equivalent measures that obstructs trade. The Treaty specifies that “restriction” is any administrative, financial or monetary measure employed unilaterally by a Party State that obstructs reciprocal trade or makes it difficult. In analyzing the treatment given to NTBs of environmental nature in the Common Market, it is important to provide certain definitions regarding the harmonization of NTBs implemented in Mercosur. From Mercosur norms, NTBs have been distinguished among those measures of non-tariff character that will be subjected to a process of harmonization and those non-tariff restrictions that will be eliminated. The process of harmonization involves either the harmonization of the measure or the justification of the measure. The harmonization of the measure implies the adoption of a common approach regarding its subject by Mercosur countries. The common approach does not necessarily mean the development of a unique norm for all countries, although the adoption of a unified regulation has been the most common case in many areas, particularly with sanitary, phytosanitary and zoosanitary standards. However, all harmonized measures become part of Mercosur norms and must be internalized by member countries. In the case of the justification of the measure, no legal action has to be taken by Mercosur countries; thus, the non-tariff measure remains in place. The elimination of the measure,
in turn, implies the removal of the regulation from the country’s norms body. Based on the interpretation provided above, the NTBs in Mercosur are classified according to the following criteria:

- Norms to be eliminated: a national restriction that is in opposition with Article V of the Treaty of Asuncion and is not exempt under the categories of ALADI Article L (see below), its harmonization is not viable, and its justification has not been accepted by the other Party States. In that case, the measure constitutes a restriction to trade and must be eliminated.

- Norms to be harmonized: when a national measure is in contradiction with Article V of the Treaty of Asuncion, but it can be exempt under the categories of ALADI Article L, and a unified approach is adopted by all Party States after it has been analyzed by the corresponding technical bodies, the measure is considered harmonized. The harmonized measure becomes part of Mercosur derived norms.

- Norms to be justified: when a national measure is in contradiction with Article V of the Treaty of Asuncion, its exemption under ALADI Article L has been properly supported by the corresponding country, and the explanation has been accepted by the rest of the Party States, the measure becomes justified and remains in place.

Measures of environmental character identified as NTBs were assigned first to the REMA, and from 1995 onward, to its successor, the SGT6. The REMA was a “late comer” in the process for the liberalization of NTBs in Mercosur during the transition period. Unlike the other work subgroups, which had been accompanying the liberalization process coordinated by the WS No. 1 on Customs Issues since 1992, the REMA started to examine the assigned NTBs in October 1994. For their analysis, the REMA adopted the tenet that countries could not adopt obligations under Mercosur that would imply a reduction in the environmental protection already in place in their respective environmental regulations. Therefore, the REMA established the principle that environmental measures under review could be upgraded but not diminished.

After the transition period, the REMA was transformed into the SGT6 (see Chapter 4), and this body continued with the examination of the NTBs assigned to the REMA.
The SGT6 developed a procedure for analyzing the NTBs that included the criteria established by the REMA, and exhibited certain resemblance with the WTO guideline for examining trade measures in multilateral environmental agreements (Laciar, 2003). The procedure consisted of several steps, including: (i) verification if the NTB was primarily of environmental character, and related to either the implementation of a MEA ratified by the country or to the implementation of domestic legislation directed to protect human, animal, or plant life or health; (ii) identification of the administrative body enforcing the non-tariff measure, and (iii) examination of the hierarchy of the norm establishing the restriction (Proceedings of the II Extraordinary Meetings of the SGT6, Buenos Aires, Argentina. May 8–10, 1996). Based on those steps, the NTBs were classified as subject to harmonization or elimination.

The ALADI Exception

The TA commands the elimination of non-tariff restrictions with the exception of those stipulated in ALADI (Treaty of Asuncion. Annex I, Article II (b)) under Article L of the 1980 Treaty of Montevideo. ALADI Article L provides general exceptions to the obligations contained in the liberalization program commanded in the TA. It excuses otherwise illegal actions under the TA directed to protect public moral and security, to preserve national heritage, and to limit commerce in certain military and nuclear materials, among others. The inclusion of ALADI Article L in the TA responds to the fact that Mercosur is part of the ALADI legal framework as part of the Accord on Economic Complementation No. 18 (ACE 18). Therefore, Mercosur trade norms must follow ALADI general provisions. The inclusion of that Article in the text of the TA has important environmental repercussions. The provision in ALADI Article L(d) has been one of the main instruments employed by the SGT6 for analyzing trade measures of
environmental nature subject to Mercosur commercial harmonization program, as will be shown below.

Although it does not mention the environment directly, ALADI Article L, section (d), offers a basis for deviating from the TA in favor of the environment. Specifically, ALADI Article L(d)\textsuperscript{57} provides an exception for those trade restrictions that result from the adoption of measures directed “to protect human, animal, or plant health or life.” This provision is less restrictive than the exception included in GATT Article XX(b),\textsuperscript{58} since it does not require environmental policies with trade implications to pass the test of being “necessary” as a condition for the measure to be consistent with the TA. Therefore, ALADI Article L(d) provides an exception for a broad range of environmental measures affecting trade among Mercosur member countries.

In accordance with the instruction received from the GMC, the SGT6 has conducted the harmonization\textsuperscript{59} of NTBs of environmental character under the tenet of avoiding the creation of conditions for unfair intra-Mercosur trade (CMC Decision 3/94 and GMC Resolution 32/95). To do so, one of the main criteria adopted by the SGT6 for fulfilling that instruction has been whether the environmental measure is related to the implementation of domestic legislation directed to protect human, animal, or plant life or

\textsuperscript{57} ALADI Article L(d), “No rule in this Treaty will be interpreted as an impediment for the adoption and implementation of measures directed to:…protect human, animal, or plant life or health.”

\textsuperscript{58} GATT Article XX (b) of General Exceptions to the application of the “most favored nation” and “national treatment” principles holds that the GATT should not prevent “the adoption or enforcement by any contracting party of measures:….necessary to protect human, animal or plant life or health.”

\textsuperscript{59} The meaning of harmonization used in Mercosur is wider than the commonly applied definition of being the process of making different standards compatible. The harmonization of NTBs in Mercosur involves the elimination (removal) of unjustified non-tariff restrictions, the harmonization (making compatible the measure among the countries) of non-tariff measures, and the justification (keeping the measure without modification) of non-tariff measures (See Pagliieri and Sanguinetti, 2000).
health. In other words, the provision of ALADI Article L(d) provides the basis for justifying—or not—an existing domestic environmental measure in contradiction with Article V of the TA. Until now, the provision has been invoked for the environmental justification of 16 out of 23 NTBs analyzed by the SGT6. From the analysis of the decisions taken by the SGT6 on the harmonization of NTBs, it can be inferred that the SGT6 has made a wide interpretation of ALADI Article L(d) to include a broad range of environmental and conservation actions under its exceptions. Furthermore, it has been the main exception invoked to justify Argentinean NTBs, as will be demonstrated below.

**Environmental Measures Corresponding to Argentina**

Four environmental measures to date have been identified for Argentina as NTBs subject to harmonization. Three measures are related to the regulation of wildlife imports and exports (Measures Nos. 51, 153, and 212), and the remaining measure is related to the banning of imports of toxic wastes (Measure No. 211). Below is a description of the measures and the basis adopted by the SGT6 for invoking their justification.

**Wildlife measures**

**Measure No. 51.** The measure commands the intervention and previous authorization of the National Customs Administration for exporting live specimens of flora and fauna, as well as their products and sub-products (Resolution ANA 2513/93). The measure is related to the application of the National Wildlife Law 22421 and was an environmentally-justified invocation to the exemption under ALADI Article L, section (d) of the 1980 Treaty of Montevideo, which holds that Parties to ALADI should not be prevented from taking actions directed to protect human, animal, or plant health or life.

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60 The other principle has been if the NTB is related to the implementation of a multilateral environmental agreement. See Proceedings SGT6 II Extraordinary Meetings.
Measure No. 153. This measure regulates the application of the National Wildlife Law 22421 regarding wildlife imports, and the application in Argentina of the Convention on International Trade in Endangered Species (CITES). Specifically, the measure prohibits imports of products and sub-products, manufactured or not, from endangered native wildlife species. The measure also prohibits exports of native wildlife species listed under CITES Appendix I, and specifies that exports of native wildlife species listed under CITES Appendix II will be conducted and regulated under CITES norms (SAyG Resolution 144/83). The first portion of the measure was an environmentally-justified invocation of the exemption under ALADI Article L, section (d) of the 1980 Treaty of Montevideo, which holds that Parties to ALADI should not be prevented from taking actions directed to protect human, animal, and plant health or life. The second portion of the measure was an environmentally-justified invocation because the norm was directed toward a domestically implemented regulation that emanated from an international convention (CITES) to which the country was party and adhered to by Law 22344.

Measure No. 212. This measure regulates certain aspects of the application of the National Wildlife Law 22421. Specifically, the measure prohibits imports from those native wildlife species whose products and sub-products are difficult to distinguish from native wildlife species that are either endangered or protected in Argentina (Resolution SAGyP 53/91). The measure was an environmentally-justified invocation of the same

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61 The Convention on International Trade in Endangered Species classifies species under trade in three Appendixes. Species listed in Appendix I have their international trade banned. Species listed in Appendix II have their international trade regulated through an import/export permit scheme. Finally, species listed in Appendix III have their international trade unregulated but monitored.
exemption under ALADI Article L, section (d) of the 1980 Treaty of Montevideo referred to in Measure No. 153.

**Toxic wastes measures**

**Measure No. 211.** The measure prohibits the importation of all kinds of toxic and hazardous wastes (National Decree 181/92). The measure was an environmentally-justified invocation of because the norm was directed to domestically implement a regulation emanated from an international convention (Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal) to which the country was party and adhered to by Law 23922.

**Harmonization of Health, Safety, and Technical Standards**

Although sanitary and phytosanitary measures (SPS) do not refer explicitly to the environment, their application is related to the ability to protect wild flora and fauna from exotic pests and diseases, and the ability to regulate the use of pesticides and contaminants. Therefore, the level of sanitary and phytosanitary protection chosen by Mercosur member countries for the harmonization of SPS has direct environmental implications. The harmonization of SPS in Mercosur has been conducted under the tenet that they should not constitute an unjustified obstacle to intra-regional trade in products of animal and vegetal origin, and has followed international recognized principles on the subject. Specifically, Mercosur has adopted—without amendments—the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (ASPS) as the regulatory basis of the subject. The ASPS Agreement contains the basic rules for the

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62 CMC Decision 6/96. In April 1994, Argentina, Brazil, Paraguay, and Uruguay signed and ratified the accords, including the ASPS, leading to the formation of the WTO. The four countries, however, had previously negotiated and adopted the 1993 Mercosur Sanitary and Phytosanitary Accord. Consequently, and to avoid having two different legal instruments on the same topic, Mercosur member countries adopted
establishment of food safety and animal and plant health standards. The ASPS Agreement recognizes the member’s rights to adopt SPS measures with the conditions that: (i) they should not create unnecessary obstacles to trade, (ii) they should not arbitrarily or unjustifiably discriminate between members where similar conditions exist, and (iii) they should not represent a disguised restriction to commerce (WTO ASPS Agreement, Article II). According to the Agreement, governments must base their national measures for food safety on the FAO/WHO Codex Alimentarius, for animal health on the guidelines of the Office International des Epizooties, and for plant health on the recommendations of the FAO International Plant Protection Convention. Countries retain the right to adopt sanitary and phytosanitary measures that would be more stringent than those recommended by the Agreement, if they are scientifically justified (WTO ASPS Agreement, Article III (3)). On the same token, the goal of greater equivalence among the SPS measures of the parties does not require countries to lower the level of sanitary and phytosanitary protection that they would consider appropriate to their national conditions. Moreover, the Agreement requires that the parties accept the measures of other parties as “equivalent” only if the importing party’s appropriate level of protection is achieved by the exporting party’s measure (WTO ASPS Agreement, Article IV).

In Mercosur, the harmonization of SPS has been conducted by the WorkSubgroup No. 8 on Agricultural Policy (SubGrupo de Trabajo Nro 8 “Política Agrícola”, SGT8). The work of the SGT8 has resulted in the creation of numerous regulations on the subject issued by Mercosur organs, including: sanitary and zoosanitary requirements for the WTO ASPS as the general norms on the subject. The 1993 Mercosur Sanitary and Phytosanitary Accord was based on the same international standards included in the WTO ASPS.
exchange of live animals in the region;\textsuperscript{63} quarantine standards and procedures,\textsuperscript{64} requirements for veterinary labs (Resolution 73/99 Requirements for laboratories involved in the diagnosis of animal diseases), livestock semen banks and the production of livestock embryos;\textsuperscript{65} phytosanitary norms for intra- and extra-Mercosur trade in seeds and products of vegetal origin;\textsuperscript{66} quality of phytosanitary products;\textsuperscript{67} sanitary control systems,\textsuperscript{68} and the estimation of active residuals in agrochemicals (Resolution 74/94 Maximum amounts of biocides in garlic, onions, and strawberries). A distinctive feature associated with these regulations is that they have become Mercosur norms and thus, must be internalized by Mercosur member countries. The internalization, in turn, implies that harmonized SPS measures overrule the existing domestic norms on the subject.

\textsuperscript{63} Resolution GMC 30/03 Zoosanitary requirements for the trading of cattle destined to reproduction; Resolution GMC 31/03 Zoosanitary requirements for the trading of cattle destined to fattening; Resolution 32/03 Zoosanitary requirements for the trading of cattle destined to slaughterhouses; Resolution 42/05 Zoosanitary requirements for the trading of goats; Resolution 51/01 Zoosanitary requirements and certificates for the exchange of goats and sheep among Mercosur countries; Resolution 19/97 01 Zoosanitary requirements and certificates for the exchange of pigs among Mercosur countries.

\textsuperscript{64} Resolution 49/05 Procedures for approving quarantine treatments; Resolution 50/05 Quarantine treatments for Mercosur; Resolution 21/97 requirements to be fulfilled by animal quarantine units; Resolution 61/92 General principles on vegetal quarantine.

\textsuperscript{65} Resolution 16/05 Zoosanitary requirements for the exchange of livestock semen; Resolution 17/98 Zoosanitary requirements for the importation of animal semen, embryos, and fertile eggs from third countries; Resolution 46/96 Regulatory framework for the treatment of the genetics of livestock animals.

\textsuperscript{66} Resolution 27/03 Criteria and guidelines for the assessment and recognition of propagation materials; Resolution 77/00 Equivalency in the denomination of seeds; Resolution 51/05 harmonized phytosanitary requirements for several types of fruits and vegetables; Resolutions GMC 60/97 and GMC 69/98 Standards and procedures to be followed by seed labs.

\textsuperscript{67} Resolution 49/96 Requirements for the free circulation of phytosanitary products; Resolutions GMC 49/96, GMC 156/96 and GMC 71/98 List of active substances and their formulations. Resolution GMC 73/94 Technical requirements for the evaluation of active substances in agrochemicals.

\textsuperscript{68} Resolution 48/05 Integrated system of phytosanitary measures for the management of risk in Xanthomonas in citrus; Resolution 60/99 Principles, guidelines, criteria and parameters for recognizing equivalencies in SPS; control systems; Resolution 77/98 Mutual recognition and equivalencies of SPS control systems; Resolution 44/96 Criteria and guidelines for developing phytosanitary certification standards; Resolution 43/96 Criteria for the characterization of plagues.
Technical standards are related to process and production methods (PPM), and encompass the methods for extraction and use of natural resources as well as the methods for the processing and the manufacturing of products (Jackson, 1998). The associated environmental effects of the PPM are derived from the techniques and resources used in the production process as well as with the characteristics of the final product (Ryan, 1998). The approach taken by Mercosur for the harmonization of technical standards has been similar to the one applied to SPS measures and has followed international recognized principles on the subject. In this case, the harmonization of technical standards in Mercosur has been conducted under the principles of the WTO Agreement on Technical Barriers to Trade (TBT) (CMC Decision 58/00 Adoption of the WTO Agreement on Technical Barriers to Trade). The agreement is designed to ensure that technical regulations and standards are not used for protectionist purposes (WTO, 2006). The TBT Agreement allows countries to take measures to ensure that their standards of environmental protection are met as long as they comply with the requirements of non-discrimination and transparency, and do not constitute unnecessary obstacles to trade. The TBT Agreement is complementary to the SPS Agreement and addresses those standards and regulations not included by the latter.

Mercosur has produced significant amount of norms to harmonize technical characteristics of products in the form of Mercosur Technical Regulations (Reglamentos Técnicos Mercosur), which are mandatory for the Party States. These Technical Regulations are general specifications for defining a product technically—such as its definition, composition and ingredients, physical measures (weight, volume, length, if applicable) and labeling—which do not have direct environmental incidence. As a
consequence, there has not been a significant development in the harmonization of norms of environmental character with incidence on the PPM of the products. The few technical standards with environmental incidence that have been harmonized are mostly related to good practices for the fabrication of medicaments (Resolution GMC 61/00 Good practices for elaboration and control of medicines), and to hygienic and sanitary conditions and good practices to be observed in food factories. Until now, the most relevant technical standards related to PPM of environmental incidence are the establishment of maximum limits for the emission of pollutants by cars and heavy trucks (Resolution GMC 128/96 Technical standards for emissions of pollutants and noises by cars; Resolution GMC 29/97 technical standards for the emissions of pollutants by heavy vehicles of “Otto cycle”). The limits established are based on those of the European Union and are updated regularly. These standards are relevant in the case of Argentina, because there were no previous norms on the subject.

In Mercosur, there have been some attempts to promote the harmonization of PPM rules through the approach of eco-labeling and the application of ISO 14000 norms. Among its initial duties, the SGT6 developed a Green Label for Mercosur and elaborated ISO 14000 norms (see Chapter 3). However, those initiatives were abandoned by the SGT6 due to internal divergences among the countries over the potential repercussions of the competitiveness of their industries. Nonetheless, Mercosur has signed a cooperation accord with the Mercosur Association on Normalization (Asociación Mercosur de Normalización; see Decision CMC 6/04). The objective of the cooperative accord is to coordinate Mercosur bodies in the harmonization of technical norms, which are adopted voluntarily, to be applied by ISO representatives in the four countries. Although the
regional commerce of products certified under ISO 14000 is limited, the number of industries and enterprises having certified systems of environmental management has grown considerable in Argentina during the last decade. In early 1995, there was only one enterprise certified under ISO 14000 (Schaper, 1999). By May 2006 that number had grown to 118 enterprises (IRAM database).  

**Multilateral Environmental Agreements**

Trade restrictions are the means employed for enforcing compliance in some international environmental agreements (MEAs). Although trade restrictions are not the only—nor necessarily the most efficient—policy instrument to employ in MEAs, it is understood that they can play an important role in certain cases (Esty, 1994). Of the approximately 200 multilateral environmental agreements in force, about 20 include provisions that affect trade (WTO database, 2006). For example, the CITES Convention bans trade of endangered wild species of flora and fauna and restricts commerce of threatened ones. Other MEAs, such as the Basel Convention, impose trade restrictions in certain products and prohibit trade with nonparties. As Mercosur country members are parties to several MEAs containing trade provisions, a possible source of conflict arises between the trade measures contained in those MEAs and the provisions for the commercial liberalization commanded by the TA and its derived norms.  

Below is an analysis of the treatment given by Mercosur to the MEAs.

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69 IRAM is the Argentine Institute for Normalization in charge of the ISO certification in Argentina. IRAM is a member of the International Standard Organization. (www.iram.com.ar).

70 Although the discussion here is focused on Mercosur, the issue of compatibility between trade provisions in MEAs and WTO rules is currently being analyzed in the WTO’s Trade and Environment Committee.
Mercosur’s Effect on MEAs

There is no mention in the TA, its additional protocols and agreements, the AMMAM, or in the norms issued by Mercosur decision-making bodies, as to whether trade obligations under international environmental agreements prevail over any inconsistency with Mercosur, or if unilateral trade sanctions to enforce MEAs are compatible with Mercosur. Although the Mercosur Environmental Accord mentions that Mercour member countries “will cooperate in the completion of the international environmental agreements to which they are party” (Mercosur Environmental Accord, Article V), there is no specific indication that in case of contradictions between the implementation of the TA and a MEA, the latter will prevail.

This lack of definition is troublesome since Argentina, Brazil, Paraguay, and Uruguay are members to numerous MEAs that contain explicit, as well as implicit, trade provisions. Particularly troublesome is the position vis-à-vis Mercosur of five MEAs to which Argentina, along with the other Mercosur member countries, is party—that include explicit trade provisions: the Washington Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, the CITES Convention, the Basel Convention, The Montreal Protocol on Substances that Deplete the Ozone Layer, and the Rotterdam Convention on the Prior Informed Consent for Certain Hazardous Chemical and Pesticides in International Trade (not yet in force). The trade provisions specified in those five conventions are in direct contradiction with the commercial liberalization program mandated by the TA in its Article 5. For example, among the provisions for

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71 Mercosur countries are also parties to the Rome International Plant Protection Convention, which contains explicit trade provision involving vegetal material. Since the provisions arising from the Rome Convention are incorporated into the WTO SPS Agreement, agreement that has been ratified by Mercosur countries, they are consistent with the TA (see section on sanitary and phytosanitary measures).
preventing a species from becoming extinct, the CITES Convention regulates the trade of that particular species (CITES Convention, Articles I through V).

The potential inconsistencies between Mercosur and the MEAs described above are not trivial. On one hand, there are the legal obligations engendered by the MEAs and the trade restrictions that member countries are required to use to implement/enforce the MEAs. On the other hand, there are the legal obligations engendered by Mercosur and the trade liberalization programs that member countries are required to carry out under the TA for implementing the Common Market. One question immediately leaps to mind. Will obligations brought about by the implementation of the MEAs have preeminence on Mercosur (used here to indicate all sources of law for the Common Market as established by Art. 40 of the Outo Preto Protocol)\textsuperscript{72} trade provisions? The criteria adopted by the SGT6 for considering those non-tariff measures that constitute domestic regulations directed to implement a MEA as environmentally justified seem to indicate a positive answer to the posed question. For example, Measure No. 212 prohibits the importation of all kinds of toxic and hazardous waste in Argentina (National Decree 181/92). The measure was environmentally justified by the SGT6 invoking that the norm was directed to domestically implement a regulation emanated from an international convention (Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal) to which the country was party and adhered to by Law 23922.

\textsuperscript{72} Under this definition, Mercosur includes the TA and its additional protocols, and the derived norms from Mercosur decision-making bodies. (See Chapter 3, section on Juridical Aspects of Mercosur.)
The definitions taken by the SGT6 in that regard, however, are based on procedural guidelines adopted by the work subgroup and not on a specific Mercosur norm, and therefore, open to challenge. Despite the fact that there have been no disputes on the trade provisions contained in a MEA in Mercosur, the inconsistency between the mandate of Article V of the TA and the implementation of MEA still remains and constitutes a potential source of conflict. This may be the case, particularly, as Mercosur expands and more South American countries become full or associated members, and the integration process between Argentina, Brazil, Paraguay, and Uruguay deepens.

A Possible Course of Action

A good starting point for analyzing a possible course of action for solving the inconsistency discussed above is to review the ideas proposed to tackle the same problems in other trade agreements, such as the GATT/WTO and the NAFTA. In the sphere of the GATT/WTO, three ideas have been put forward. One idea is to apply the priority or “last in time rules” principle (lex posterior), as reflected in Article 30 of the Vienna Convention on the Law of Treaties. When treaty obligations on the same subject are in conflict, the priority principle determines that the last established obligation in time would prevail. A point has been made, however, that this principle would not necessarily apply in the case of MEAs and trade agreements, since the treaties involved are not on the same subject (Esty, 1994). Another idea is the application of the “lex specialis” principle. This principle states that if all parties to a treaty conclude a more specialized treaty, the provisions of the latter prevail over those of the former. For example, trade measures that have been agreed upon by parties to a MEA could be regarded as “lex

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73 The sources of law for Mercosur norms are: the TA and its additional protocols and agreements, and the Decisions, Resolutions, and Directives issued by Mercosur decision-making bodies (see Chapter 3).
specialis” and prevail over provisions in a trade treaty—even if the agreed measures are inconsistent with WTO rules (WTO, 2002). This interpretation of the principle is not definitive, and uncertainties remain regarding its application when non-parties are involved (WTO, 2002). A final idea is to provide an interpretation of GATT Article XX with reference specifically to international environmental agreements (Esty, 1994).

In the case of NAFTA, potential contradictions between that trade agreement and the MEAs were solved by granting protection to the latter over NAFTA. During negotiations, all three countries decided to retain their existing rights and obligations under the multilateral environmental and conservation agreements to which they were party. That right was made explicit under Article 40 of the North American Agreement on Environment Cooperation (NAAEC) that granted protection to all MEAs to which NAFTA members were party. Moreover, Article 104 of the NAFTA Agreement stated that in the event of any inconsistency between NAFTA and trade obligations set out in the MEAs, the latter takes precedent over the former.

The approach implemented by NAFTA represents a precedent that could be adapted to handle the contradictions between the MEAs and the TA in Mercosur. The Common Market Council, the highest decision-making body in Mercosur, could issue a Decision granting protection to those MEAs having trade provisions to which Mercosur members are party. The measure could be justified by arguing that the MEAs are directed to protect human, animal, and plant health or life. Thus, the exemption established in ALADI Article L could be invoked. Under this approach, the measure solves the inconsistency between the MEAs and Mercosur and does not violate WTO rules, since ALADI Article L follows the exemptions indicated in GATT Article XX.
Remarks on Mercosur’s Regulatory Effects

The implementation of Mercosur has not shown signs of having decreased the ability of Argentina’s government to implement environmental policies, nor is there evidence of Mercosur having led to an increase in the level of environmental protection. The significant institutional and legal changes regarding the environment that have occurred in the country during the last 15 years were not prompted by Mercosur or related to Mercosur decisions, although they have clear implications for the application of Mercosur’s norms in the country.

On the same token, the harmonization process of NTBs having environmental elements conducted by Mercosur has not shown signs of altering the existing Argentinean environmental regulatory framework. The SGT6 has environmentally justified all Argentine NTBs, as well as almost all of those corresponding to the other three Mercosur countries; this seems to indicate that the Mercosur commercial liberalization process is not affecting negatively the existing level of environmental protection in its member countries. Moreover, the justification of those environmental measures appears to indicate that they represent the minimum level of environmental protection to be provided by Mercosur. Since the SGT6 has established the tenet for harmonizing NTBs that countries cannot adopt obligations under Mercosur that would lead to a reduction in the environmental protection already in place in their respective environmental regulations (IV REMA Proceedings, 5–7 October 1994), the justification of those measures may imply that further environmental regulations developed by Mercosur on those areas can be upgraded but not diminished. On Mercosur’s effects on the MEAs, there is also no evidence that Mercosur is preventing the adoption of Argentinean regulations associated with implementing the obligations caused by MEAs to which the
country is a party. Nonetheless, the inconsistency between the command in Article V of
the TA and the application of trade rules associated with the implementation of MEAs
still remains a source of potential conflict.
CHAPTER 6
ENVIRONMENTAL TRADE-RELATED EFFECTS OF MERCOSUR ON ARGENTINA’S AGRICULTURAL SECTOR

Introduction

There is no simple pattern to the relationship between trade and the environment, and to the effects that trade liberalization policies have on the environment. The impacts of trade liberalization policies on the environment depend upon a variety of factors, such as the country’s economic history, the way trade liberalization is conducted, the exchange rate policies, and the way institutions and policies deal with market failures (Potier, 1997; Lee and Kirkpatrick, 2000; OECD, 2000; UNEP, 2005). Accordingly, trade flows and trade liberalization policies have, at least, four types of physical and economic impacts on the environment: (i) scale effects, (ii) composition effects, (iii) technological effects, and (iv) geographical effects.\(^{74}\) The scale effect is related with the increase in the volume of exports provoked by trade liberalization, since trade liberalization removes/diminishes tariff and non-tariff barriers to trade and facilitates access to other countries’ markets. A higher volume of exports does not necessarily mean environmental deterioration, because the environmental effect will depend on the sustainability of the use made of the natural

\(^{74}\) The literature mentions the following effects: scale, composition, product, technology, and structure (see Grossman and Krueger, 1991; OECD, 1994; Lee and Kirkpatrick, 2000; 2000; Potier, 1997; and UNEP, 2005; among others). There is, however, considerable variation in their definitions, in the sense that what constitutes a certain effect for one author does not coincide with the definition adopted for the same effect by another author. In addition, most of the trade-related effects are defined and assessed in terms of the manufacturing sector, since they were developed mainly for analyzing trade liberalization policies involving industrialized countries. Considering the previous reasons and the focus of this chapter on the environmental effects of Mercosur on the agricultural sector of Argentina, a categorization functional to Mercosur’s reality is developed using the OECD categorization (1994) as a general reference. The OECD categorization considers three effects: scale effect, composition effect, and technological effect.
resource being traded (Miguel and Núñez, 2001). The assumption, however, is that increases in volume can be used as a proxy to estimate the physical environmental impact of the traded activity.

The composition effect is given by shifts in production and in the make up of exports. This effect is related to the specialization of the exporting sector on the exploitation of those resources in which the country has a comparative advantage. The environmental consequences of the composition effect are related to the contribution of “environmentally sensitive” products to total exports. Environmentally sensitive products are those based on: (i) intense use of natural resources, (ii) degrading or contaminating processes, and (iii) high energy requirements. Trade may lead to environmental improvements if the proportion of environmentally sensitive products in the make up of exports diminishes as a response to the demand of green consumers in the importing countries or to take advantage of an existing environmentally friendly production system. Trade, however, may also lead to an environmentally “dirtier” specialization if the traded goods are based on production patterns involving the most polluting or natural resource intensive activities.

The technology effect points to changes favoring the adoption of certain technologies to further develop comparative advantages. Technology effects stem from the way in which trade affects technology transfer and the production process used to make traded goods (UNEP, 2005). Trade may facilitate access to environmentally friendly production practices and technologies, reducing the negative environmental effects of the growth in production. However, a process of endogenous technological capacity is required for a country to take advantage of technological transfers
(Chudnovsky, 2004). On the other hand, trade may also promote environmentally harmful technologies if they produce goods at a lower private cost than those produced with environmentally friendly technologies, and no policy of internalization of environmental costs exists.

Finally, the geographical effect refers to the ecological characteristics of the region originating the exports, in terms of its resiliency for processing wastes and pollutants, and for absorbing disturbances. As ecosystems vary in their capabilities to assimilate and recover from human-induced changes, the same productive activity may have different environmental repercussions according to the ecological fragility of the ecosystem involved. For example, trade expansion may promote farming in an area well suited for agriculture, which, if properly managed, can be made sustainable without decreasing the quantity and quality of the natural resources in the area. Trade expansion may also, however, promote farming in marginal, ecologically fragile areas, which may lead to an unsustainable process and irreversible ecological changes.

Bearing this conceptual framework in mind, the key question addressed by this Chapter is what kind of environmental impacts have the implementation of Mercosur brought on Argentina’s agricultural sector. Before proceeding on tackling this issue, a cautionary note is necessary. Because of the multiple direct and indirect links between trade and the environment, it is not the intention of this study to provide a positive or negative relationship of causality between Mercosur and the environment. Rather, the objective is to present and analyze the empirical evidence available on the transformations—in function of their environmental characteristics—operated in those agricultural sub-sectors, which have seen their exports under Mercosur expanded.
Because availability of data on environmental indicators is scarce, and sometimes of constrained reliability (or directly inexistent), the approach for the study is to use information on the environmental characteristics associated with the production methods of the agricultural goods exported under Mercosur. Therefore, and although it is not possible to give a precise estimation of the environmental effects of implementing Mercosur on the conservation of natural resources in Argentina, the study constitutes a first approximation to explore several aspects related to the environmental characteristics of those agricultural sub-sectors associated with Mercosur.

The chapter is organized as follows. First, a description of the evolution of economic policies in Argentina since 1990 is offered to provide a context in which Mercosur has been carried out. Special reference is made to those measures affecting international trade and the agricultural sector. Second, the role of Mercosur in Argentina’s trade expansion since the 1990s is examined to assess its importance as a market for Argentina’s exports. Third, the different trade-related environmental effects associated with Mercosur implementation on Argentina’s agricultural sector are explored. The analysis of trade-related effects is focused on exploring the issue as to whether the expansion in trade in the agricultural sector associated with Mercosur implementation is linked with negative land use changes and practices. The Chapter concludes with a discussion of the links between Mercosur and natural resource conservation in Argentina, and points out areas in need of future research.

**Evolution of Economic Policies in Argentina since 1990**

The signing of the TA in March 1991, creating Mercosur, coincided in time with the launching of an economic program directed to liberalize the Argentinean economy. The implementation of the liberalization program greatly reduced the influence of the
State in the economy, and resulted in significant economic growth, drastic reduction of inflation, increases in capital inflows and investments, and major increases in unemployment between 1991 and 2001. In addition, there was a significant increase in exports and imports during that period. The liberalization program was abandoned in early 2002 after generating the most profound socio-economic and political crisis in Argentina’s history. It was replaced by a new economic policy, which reverted to some of the initiatives of the previous liberalization program and gave the State a more active role in the economy. Under the economic policy implemented since the middle of 2002, the Argentine economy reassumed its growth, and some of the country’s socio-economic indicators improved significantly. Furthermore, exports grew to historical records. In spite of the changes in economic policy implemented in the last years, the emphasis on exports as a driver for economic development has been a constant of Argentina’s economic policies since 1990. In order to better understand the role of Mercosur in Argentina’s recent trade expansion as well as its effects on the country’s environment, the following is a review of the evolution of Argentina’s economic policies since the early 1990s.

**The Convertibility Plan**

At the end of the 1980s, the Argentinean economy was in disarray. It showed negative growth (average of -1.3% GDP between 1985 and 1989), suffered from episodes of hyperinflation, and exhibited fiscal and current account deficits (Stallings and Peres, 2000). Facing such a situation, a program of economic liberalization was put in place in April 1991 to end inflation and resume economic growth. The economic liberalization program was adopted in the context of similar macroeconomic reforms taking place in the Latin American countries during the late 1980s–early 1990s. The program was
characterized by an export-led development strategy, the emphasis on the role of the market in the allocation of resources, and the widespread privatization of state-owned enterprises (see Edward, 1995; Stallings and Peres, 2000; World Development Special Issue, 2000).

The economic liberalization program—known as the Convertibility Plan (*Plan de Convertibilidad, PC*)—consisted of a currency board with a new monetary unit, and a wide program of economic deregulation. The newly created monetary unit, the peso, could be freely converted into dollars at a fixed exchange rate of one peso to one dollar. The exchange rate was maintained through a series of monetary measures established by the Convertibility Law 23928/91. The main measures included the need for the Argentinean Central Bank to have reserves, in gold and currency, equivalent to 100% of the monetary base and the prohibition to the Central Bank to finance deficits incurred by the Treasury. Besides the purpose of providing a mechanism for maintaining the convertibility of one peso to one dollar, the monetary measures described above were intended to provide credibility in the plan by establishing, by law, the conditions for the long-term permanence of those economic measures and to reduce uncertainties about the future (Reca and Parellada, 2001). The creation of the new monetary unit was complemented with the implementation of a wide scale deregulation program. The program included the deregulation of the internal markets in goods, services and capital, the elimination of numerous regulatory agencies, the privatization of services and state-owned enterprises, and the liberalization of international trade (Barsky and Gelman, 2001; Ghezán et al., 2001).
Trade policies under the PC resulted in a combination of unilateral liberalization and the acceleration of the implementation of Mercosur. In concert with the launching of the PC, tariffs on imported goods were sharply reduced in 1991. Between 1993 and 1994, tariffs for imported capital goods were reduced to zero to promote technological modernization in the country. This unilateral liberalization was coupled between 1991 and 1994 with the automatic periodic reduction of intra-regional tariffs associated with Mercosur’s transition period (from 1995 on, Mercosur’s external common tariff was applied to imported goods, see Chapter 3.) The trade liberalization initiatives under the PC, however, were carried out without complementary policies to allow small and medium enterprises (SMEs) to adjust to the new economic environment (Ferrer, 2004; Chudnovsky, 2004). Although there were some governmental initiatives to foster innovation directed to SMEs during the second half of the 1990s, they were not enough to counteract the uneven effects of trade liberalization (Chudnovsky, 2004).

The PC further liberalized the capital account and the regime for foreign investment. This resulted in an increase in the flow of foreign investment, which became quite significant during the 1990s. Particularly relevant was the flow of foreign direct investment (FDI), which increased from US$ 1.8 billion in 1990 to US$ 10.4 billion in 2000. FDI was first channeled to the privatization of State-own enterprises and then to the take-over of many domestic private firms in the tradable and non-tradable sector (Chudnovsky, 2004).

The PC and the Agricultural Sector

Several measures of the PC associated with the liberalization of internal markets and of international trade were particularly relevant from the perspective of the agricultural sector (for comprehensive analyses of the measures associated to the PC
directed to the agricultural sector, see the works by Obschatko [1997], Gezhan et al. [2001], and Reca and Parellada [2001]). Historically, the Argentinean government had applied import tariffs and export taxes as a source of revenue, and since the middle of the century, used import tariffs as a form of industrial protection associated with the implementation of the import substitution model (Bulmer-Thomas, 1994). The application of export taxes, particularly to agricultural products, had distorted the price received by domestic producers and acted as a disincentive to produce for external markets (Sturzenegger et al., 1990). The PC eliminated most export taxes for agricultural products, except for sugar, soybeans and tobacco.

By the same token, the program eliminated most of the agricultural regulatory agencies. The elimination had the double effect of liberalizing markets and diminishing the tax burden to producer (since producers paid specific taxes directed to finance the regulatory agencies). In addition, import tariffs were reduced significantly. The reduction in import tariffs, along with an overvalued exchange rate, stimulated significant imports in capital goods and production inputs, such as agricultural machinery and agrochemicals. Those imports allowed the “modernization” of the agricultural sector, and the incorporation of more intensive agricultural production technologies (Chudnovsky at al., 1999). The implementation of these measures had a significant effect on the agricultural sector (see below). The measures lowered production costs, increased

75 The list of agricultural regulatory agencies eliminated includes: Junta Nacional de Carnes y Granos, Fondo de Promoción de la Actividad Láctea, Instituto Forestal Nacional, Mercado de Concentración Pesquera, Instituto Nacional de Actividad Hípica, Corporación Argentina de Productores de Carne, Mercado Nacional de Hacienda de Liniers, Comisión Productora y Comercializadora de Yerba Mate, Mercado Consignatario Nacional de Yerba Mate, and Dirección Nacional del Azúcar. Only two agricultural regulatory agencies were maintained: Instituto Nacional de Vitivinicultura and Fondo Nacional del Tabaco.
the price received by producers, and acted as a strong stimulus for increasing production destined to the external market (Barsky and Gelman, 2001).

**Abandonment of the PC**

The combination of the structural reforms associated with the PC to fight inflation produced impressive economic growth rates between 1992 and 1998 (except for a brief recession during 1995 associated with the “Tequila” effect). In spite of those achievements, there were some indications that the development model being implemented needed some adjustments. First, Argentina incurred fiscal and trade deficits that were financed by increasingly borrowing abroad; this borrowing doubled the foreign debt between 1991 and 1999. Second, high interest rates were kept to attract foreign capital (real interest rate were above 8%), which had the effect of denying access to credit to small and medium firms and curtailed their possibility of adjusting to the new economic environment, sending them to bankruptcy. Third, the privatization of state-owned enterprises and the economic restructuring provoked high structural unemployment. Fourth, although the Convertibility Law was successful in fighting inflation and in generating a favorable (and stable) environment for attracting foreign investment, it severely constrained the government for applying counter cyclical policies. In addition, it led to an overvalued exchange rate that made Argentinean exports progressively more expensive and uncompetitive vis-à-vis the rest of the world. The combination of those factors made the Argentinean situation increasingly brittle and vulnerable.

The emerging structural problems with the PC mentioned above, along with the Russian crisis, sent the Argentine economy into recession in the last quarter of 1998. This situation was further complicated by the Brazilian devaluation of January 1999 and
a decrease in the price of commodities, which put Argentina on the way to a profound economic recession that lasted until the first semester of 2002. The negative economic growth occurring in the last quarter of 1998 generated an increasing need to finance the fiscal and trade deficits by borrowing abroad. As the debt-to-GDP ratio increased, local and foreign creditors demanded higher interest rates. At the same time, the overvalued peso made exports uncompetitive, particularly in the Brazilian market, which was the largest market for Argentina’s exports at that moment. Between 2000 and 2001, several operations were implemented with the help of the international lending institutions to finance the fiscal and trade deficits and sustain the peso. However, the constant need for financing led to a vicious circle in which creditors in pesos demanded higher interest rates to cover for the risk of devaluation. The higher interest rates increased the risk of default leading foreign lenders to demand higher interest rates to cover risk. This vicious cycle exploded in December 2001, when Argentina technically defaulted on its debt and abandoned the currency board by devaluing its currency in early 2002.

**Current Economic Argentinean Landscape**

The significant fall in GDP experienced by the Argentine economy during 2001 (-15.1%) combined with the effects of the devaluation of the peso harshly reduced imports and led to a trade surplus (US$ 16.7 billion) the following year. After a stormy first half of the year, in which unemployment and poverty levels reached historical records, a new economic policy started to be delineated by the end of 2002. This new economic policy was the opposite of the PC, in the sense that it was based on a flexible exchange rate and a more active role of the State in the economy. Therefore, the new economic policy was anchored mainly on: (i) maintaining an undervalued, managed flexible exchange rate to make Argentina’s exports competitive in the international
market, (ii) controlling the level of government spending to maintain a fiscal surplus, (iii) maintaining a high level of reserves to prevent “runs” against the peso and to fulfill obligations related to the external debt, and (iv) controlling inflation by establishing agreements with the private sector to maintain prices. In terms of sectoral policies, export taxes (retenciones) were reinstated in several exporting sectors, including the agricultural sector, and several measures to control volatility in the flow of foreign investment were implemented. Under the current economic policy, the Argentine economy has grown at an average rate of nearly 9% per year since 2003, inflation has remained relatively low (11.5% in 2005), unemployment has been reduced to less than 10%, and exports have grown 35.5% since 2003, reaching a historical high of US$ 40 billion in 2005.

**The Role of Mercosur in Argentina’s Exports**

The participation of Mercosur countries as a destination of Argentina’s exports has grown in importance over time (Figure 6-1). Mercosur replaced the European Union as the largest market for Argentina’s exports in 1994, and has remained in that position since then. Furthermore, Brazil has been the main destination for Argentina’s exports since 1991, and has received—on average—81% of the total Argentinean exports to Mercosur. Nonetheless, the growth of Argentina’s exports to Mercosur has been uneven, showing a dramatic decrease after the Brazilian devaluation of early 1999, although exports have started to recuperate since 2004. Following is a more detailed analysis of the evolution of Argentina’s exports to Mercosur during the 1986–2005 period. Between 1986 and 1990, the value of exports to Mercosur grew from US$ 700 to US$ 1800 million, in current values, mainly due to the implementation of the commercial protocols associated with the Integration Program signed between Argentina and Brazil in 1986.
(see Chapter 3). Following the signing of the TA in 1991, exports to Mercosur countries increased steadily until the Brazilian devaluation of January 1999, reaching a maximum of US$ 9.6 billion in 1997. During the 1991–1998 period, Argentina’s exports to Mercosur increased almost fourfold, and grew at a higher rate than exports to the rest of the world, 18.7% versus 7.4%, respectively. The expansion in exports to Mercosur was particularly significant after 1994, and was mainly favored by the elimination of tariff and non-tariff barriers, by the intra-regional trade, and by the strong growth of the Brazilian economy.

![Graph showing Argentine exports to Mercosur, the rest of the world, and total in current US$. Period 1986–2005.](image)

After the Brazilian devaluation, however, Argentinean exports to Mercosur began to decrease, reaching a low of US$ 5.5 billion in 2003. The Brazilian devaluation generated a significant appreciation of the Peso vis-à-vis the Real (32% in 1999). This appreciation could not be corrected because the currency board associated with the PC did not allow Argentina to adjust the Peso to the changes in the currency value of its
commercial partners. This situation made Argentina’s exports more expensive in the Brazilian market, which resulted in a diminution of 25% in the value of exports to Mercosur in 1999. Interestingly, the decrease in exports to Mercosur was not matched by those to the rest of the world between 1999 and 2003. Exports to the rest of the world grew at an annual rate of 10.7% during the same period, while exports to Mercosur diminished at an annual rate of 6% at the same time. Furthermore, the participation of Mercosur in Argentina’s total exports decreased from 30.1% in 1998 to 15.6% in 2003. Yet, Mercosur was the main single destination, and Brazil the largest single partner for Argentina’s exports during those years.

The Argentine crisis of 2001 and the ensuing devaluation of the Peso in early 2002 allowed a convergence in the exchange rates between Brazil and Argentina. This development, coupled with the recovery of the economic activity in Argentina initiated in 2003 and the strong growth of the Brazilian economy during the last two years, resulted in a recuperation of Argentine exports to Mercosur. In 2005, exports to Mercosur increased 36% from its level in 2003, and grew at a similar rate of exports to the rest of the world, 15.3% and 15%, respectively. Nonetheless, since 1999 there has been a shift in the significance of Mercosur as a destination for Argentina’s exports. In a context of growing Argentinean exports (they reached a historic high of US$ 40 billion in 2005), Mercosur accounted for only 15.6% of total exports in 2005. This situation indicated that although Mercosur remained the main single market for Argentina’s exports, its relevance as a destination for Argentinean exports has decreased in recent years.

Environmental Effects of Mercosur on Argentina’s Agricultural Sector

This section explores the trade-related environmental effects of implementing Mercosur on Argentina’s agricultural sector. To do so, the approach employed by UNEP
(1999) to assess environmental impacts of trade liberalization on management of natural resources is adapted to fit Mercosur’s conditions. The adapted approach consists of two interlinked steps: (i) identifying those agricultural products that have had their exports to Mercosur significantly expanded, and (ii) analyzing the transformations in the relationship between agricultural production techniques associated with those agricultural commodities and the environment, which have occurred along with the implementation of Mercosur.

In the analysis below, the four environmental trade-related effects of implementing Mercosur on Argentina’s agricultural sector are explored, but it is understood that there are various economic and social elements that come into play to define the effects of Mercosur on the environment. Moreover, in the analysis it is also understood that the scale and composition effects are intertwined and may be mitigated by technological effects; while the geographical effects are influenced by the other effects. In this regard, it is noteworthy to recognize that the interaction between Mercosur and the environment is complex, dynamic, and non-linear; and that the four environmental trade-related effects are linked with different factors associated with larger economic contexts and conditioned by them (for example, the level of the exchange rate may promote/discourage technological transfer, see Chapter 2).

**Agricultural Exports to Mercosur**

The volume of agricultural products,\textsuperscript{76} excluding fisheries, exported by Argentina to Mercosur countries showed two distinctive trends in the last two decades (Figure 6-2).

\textsuperscript{76} For the objective of this study, the definition of agricultural products was considered in a broad sense as those products contained in Chapters 1-24, 41, 44, 47, 51, and 52 of the Mercosur Common Trade Nomenclature (MCTN). That is, any good with a MCTN code beginning with those digits is considered an agricultural product; excluded, however, were fishery products in Chapters 3 and 16 of the MCTN. The
Beginning in the second half of the 1980s, agricultural exports to Mercosur countries started to grow steadily. Particularly after 1988, due mainly to exports of wheat to Brazil under the stipulations of the Program on Economic Integration and Cooperation signed between Argentina and Brazil in 1986, which established a compromise of Brazil of buying 900,000 ton/year of wheat from Argentina. The growth in the volume of agricultural exports accelerated notably during the 1990s, mostly after the signing of the TA. During Mercosur’s transition period (1991–1994), agricultural exports to Mercosur showed a rapid expansion, growing 13.5% annually, while those to the rest of the world exhibited a declining trend. After 1995, agricultural exports to Mercosur slowed down, and grew at a lower pace than those to the rest of the world. They decreased in 1999 after the Brazilian devaluation of January that year, but recuperated the following year reaching a maximum of 12 million tons in 2000, equal to 22.6% of the total volume of Argentina’s agricultural exports for that year.

Considering the entire decade, the volume of agricultural exports to Mercosur increased tenfold between 1989 and 2000. After 2000, however, the volume of agricultural exports to Mercosur showed a declining trend, reaching 7.2 million ton in 2004. This reduction coincided with the descent in the relative importance of Mercosur as a market for Argentinean exports experienced after the Brazilian devaluation of 1999 described previously. Nonetheless, the volume of agricultural exports to Mercosur in 2004 was more than twice that in 1990, before the creation of Mercosur.

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volume for the agricultural commodities reported in the analysis was composed of the summation of the volumes of all those products that share the same resource as a basis for the commodity. For example, under the heading of wheat were included those categories referring to exports of wheat grains plus those of wheat flour.
The composition of Argentine agricultural exports to Mercosur has been represented by a diverse basket of agricultural products composed mainly of cereals, wood products, horticultural products, oilseeds, fruits, dairy products, cotton, and beef (Table 6-1). In spite of the diversity, the exports have been overwhelmingly dominated by wheat, which represented between 60% and 70% of the total volume of exports to the Common Market since 1991.

![Graph showing the evolution of Argentine agricultural exports to Mercosur, the rest of the world, and total between 1986 and 2004.](image)

**Figure 6-2.** Evolution of Argentine agricultural exports (in metric tons) to Mercosur, the rest of the world, and total between 1986 and 2004.

Even so, the composition of the remaining exported agricultural commodities to Mercosur has showed some relevant shifts over time. There has been a dramatic decrease in the relevance of corn in the last few years, after being the second most important agricultural commodity exported to Mercosur during the 1990s. In contrast, barley and wood products have increased their importance over time, and have become the second and third most important exported commodities to Mercosur, respectively, during the same period. Other commodities, however, have shown an uneven behavior since the creation of Mercosur. For example, exports of dairy products, rice, cotton, fruits (i.e.,
apples and pears), and some horticultural commodities (i.e., dry beans and onions) expanded considerably during most of the 1990s, but they have declined in recent years.

Table 6-1. Argentina’s exports in average volume of selected agricultural commodities to Mercosur (in metric tons), and participation of the commodity in the total Argentina’s agricultural exports to Mercosur (in percentage); Wood p. = Wood products; 1990–2004.

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<tbody>
<tr>
<td></td>
<td>MT</td>
<td>MT %</td>
<td>MT</td>
<td>MT</td>
</tr>
<tr>
<td>Wheat</td>
<td>1,807,687</td>
<td>57.5</td>
<td>3,470,744</td>
<td>60.4</td>
</tr>
<tr>
<td>Corn</td>
<td>489,027</td>
<td>15.6</td>
<td>894,083</td>
<td>15.6</td>
</tr>
<tr>
<td>Apples</td>
<td>127,107</td>
<td>4.0</td>
<td>69,311</td>
<td>1.2</td>
</tr>
<tr>
<td>Wood p.</td>
<td>104,616</td>
<td>3.3</td>
<td>22,219</td>
<td>0.4</td>
</tr>
<tr>
<td>Barley</td>
<td>73,600</td>
<td>2.3</td>
<td>99,809</td>
<td>1.7</td>
</tr>
<tr>
<td>Pears</td>
<td>61,842</td>
<td>2.0</td>
<td>50,894</td>
<td>0.9</td>
</tr>
<tr>
<td>Beans</td>
<td>41,173</td>
<td>1.3</td>
<td>29,234</td>
<td>0.5</td>
</tr>
<tr>
<td>Milk</td>
<td>34,100</td>
<td>1.1</td>
<td>29,539</td>
<td>0.5</td>
</tr>
<tr>
<td>Beef</td>
<td>32,216</td>
<td>1.0</td>
<td>16,359</td>
<td>0.3</td>
</tr>
<tr>
<td>Soybean</td>
<td>31,084</td>
<td>0.9</td>
<td>308,755</td>
<td>5.3</td>
</tr>
<tr>
<td>Sunflower</td>
<td>20,146</td>
<td>0.6</td>
<td>28,974</td>
<td>0.5</td>
</tr>
<tr>
<td>Onions</td>
<td>9,922</td>
<td>0.3</td>
<td>84,101</td>
<td>1.5</td>
</tr>
<tr>
<td>Garlic</td>
<td>9,522</td>
<td>0.2</td>
<td>20,242</td>
<td>0.4</td>
</tr>
<tr>
<td>Mate</td>
<td>4,506</td>
<td>0.1</td>
<td>7,070</td>
<td>0.1</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1,717</td>
<td>0.1</td>
<td>4,046</td>
<td>0.1</td>
</tr>
<tr>
<td>Rice</td>
<td>0</td>
<td>0.0</td>
<td>170,230</td>
<td>3.0</td>
</tr>
<tr>
<td>Potatoes</td>
<td>0</td>
<td>0.0</td>
<td>9,672</td>
<td>0.2</td>
</tr>
<tr>
<td>Cotton</td>
<td>0</td>
<td>0.0</td>
<td>29,061</td>
<td>0.5</td>
</tr>
<tr>
<td>The Rest</td>
<td>297,330</td>
<td>9.5</td>
<td>423,872</td>
<td>7.4</td>
</tr>
<tr>
<td>Total</td>
<td>3,141,078</td>
<td>100.0</td>
<td>5,742,057</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: based on data from INDEC.

Although the volume of exports of many agricultural products has shown oscillations over time, Mercosur has been the main destination for Argentine exports for several of its agricultural commodities (more than 50% of the total Argentine export for each commodity; Table 6-2). Furthermore, for barley, potatoes, onions, and rice, Mercosur has been the destination of more than 80% of the total exports during certain years. Given the expansion in production of those commodities observed during the recent years (see below), this situation strongly suggests that Mercosur has played a
major role in that expansion. One noteworthy aspect, though, of the composition of Argentine agricultural exports to Mercosur has been the lack of relative importance of the Common Market as a destination for Argentina’s soybean exports. Soybeans and its derivatives (i.e., soybean oil and pellets) have constituted the most important export commodity for Argentina since the early 1990s (Argentina is the third largest producing country of soybeans, and the leading export country of soy oil and soy flour in the world.) Although soybean products (mainly soy oil) have represented up to 5% of Argentine agricultural exports to Mercosur, they have represented less than 1% of the total Argentine soybean exports between 1990 and 2004.

Table 6-2. Agricultural commodities for which exports to Mercosur represented more than 50% of Argentina’s total export of the selected agricultural commodity (presented in Table 6-1); reported values are averages (in percentage) for the period, in parenthesis maximum percentage for the period; 1990–2004.

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<tbody>
<tr>
<td>Wheat</td>
<td>30.5</td>
<td>60.8 (70.4)</td>
<td>62.1 (72.6)</td>
<td>57.4 (66.9)</td>
</tr>
<tr>
<td>Milk</td>
<td>24.0</td>
<td>71.1 (81.3)</td>
<td>79.6 (83.2)</td>
<td>47.3 (78.4)</td>
</tr>
<tr>
<td>Barley</td>
<td>56.3</td>
<td>52.2 (93.9)</td>
<td>79.5 (95.0)</td>
<td>89.3 (94.8)</td>
</tr>
<tr>
<td>Rice</td>
<td>0.0</td>
<td>86.7 (89.7)</td>
<td>68.7 (82.4)</td>
<td>74.8 (98.2)</td>
</tr>
<tr>
<td>Potatoes</td>
<td>0.0</td>
<td>15.8 (23.0)</td>
<td>43.5 (91.6)</td>
<td>81.3 (90.8)</td>
</tr>
<tr>
<td>Onions</td>
<td>40.0</td>
<td>83.9 (90.0)</td>
<td>86.5 (94.0)</td>
<td>79.0 (82.0)</td>
</tr>
<tr>
<td>Garlic</td>
<td>34.5</td>
<td>43.0 (67.6)</td>
<td>70.3 (95.5)</td>
<td>67.4 (73.0)</td>
</tr>
</tbody>
</table>

Transformations in the Argentine Agricultural Sector Linked to Mercosur

During the 1990s, the agricultural sector of Argentina experienced a marked transformation with a significant intensification of production in almost all agricultural sub-sectors (cereals, oilseeds, milk, cotton, and horticultural products, among others). The structural reforms and agricultural sectoral policies associated with the implementation of the PC, coupled with the incorporation of new technologies—particularly with the incorporation of genetically modified seeds and the widespread use
of fertilizers and herbicides—resulted in a substantial growth in agricultural production (Obstchatko, 1997; Barsky and Gelman, 2001). For example, production of grains (cereals and oilseeds) more than doubled between 1990/91 and 2004/05 (from 38.2 million tons to over 84 million tons), while the area under cropping increased (mainly at the expense of livestock) from 20.1 million hectares to 29.1 million hectares in the same period.

Although Mercosur has not been the main driver for the above-described changes, it played the role of a magnifier by providing market opportunities for several agricultural commodities, which acted as incentives to increase production for exports directed to the Common Market. Following is an examination of wheat and dairy products, two agricultural commodities that underwent significant technological and productive transformations during the last decades, and for which Mercosur represented its main destination (more than 50% of the total exports of Argentina). For other commodities for which Mercosur represented the destination of more than 50% of the total Argentine exports (namely barley, rice, potatoes, onions, and garlic), the evolution of the cultivated area and the production levels are examined to provide an indication of their relevance in terms of land use and the potential environmental repercussions of their expansion.

**Transformations in the production of wheat**

Wheat—along with corn, soybean, and sunflower—is one of the four most important export agricultural commodities for Argentina. In turn, the country is one of the main world producers, together with Canada, USA, and Australia. Wheat is grown in several regions of Argentina, particularly in the Pampas (Figure 6-3). During the last five years, annual production has been above 10 million MT; of this production the internal market consumes 4.5–5.5 million MT, while the rest is exported. The production of
wheat in Argentina has increased substantially since the mid-1980s. The total tonnage of the 2005/06 agricultural season was 63% larger than the tonnage in the 1986/87 season (Figure 6-4).

Figure 6-3. Area cultivated with wheat in Argentina.

The sustained increase in production has occurred even in the face of erratic international prices (Figure 6-4), and has been associated with a moderate expansion in the cultivated area and the substantial improvement in production per unit area (yields). The area cultivated with wheat has grown at an uneven pace during the last twenty years. Between 1986 and 2006, the cultivated area went from 5.6 million hectares to 6.3 million hectares (a 10% increase), with a peak of 7.4 million hectares in 1997. This increase has been the result of the expansion in cultivation, particularly since the 1997/98 agricultural
season, especially to the North Western Region\textsuperscript{77} of the country, which previously was considered marginal from the agro-ecological point of view for producing wheat (Figure 6-3). In the particular case of the North Western Region of Argentina, the expansion in the area cultivated with wheat has increased fivefold (from 107,000 hectares to 512,000 hectares) during the 1986–2006 period. The expansion of wheat to these marginal areas has been mainly at the expense of replacing pasturelands and other crops. Moreover, it has been made possible by the incorporation of improved varieties of wheat seeds genetically adapted to marginal agro-ecological conditions (Chudnovsky et al., 1999; Barsky and Gelman 2001).

Figure 6-4. Argentina’s total wheat production, and fob prices for wheat in Argentine ports. Period 1986/87 to 2004/05.

On the same token, production per unit area (yields) has increased substantially (63\%) during the last twenty years, and has grown at an annual rate of 2.4\% (Figure 6-5). This increase in yields has been associated with several changes in the pattern of wheat

\textsuperscript{77} The North Western Region of is composed of the following provinces: Catamarca, Chaco, Jujuy, Salta, Stgo del Estero, Tucumán, La Rioja, and Formosa. Wheat can be cultivated only in the first six provinces.
production related to the use of fertilizers, no-tilling farming practices, and supplementary irrigation. Traditionally, extensive agricultural production in the country was based on a rotational system between crops and livestock to replenish the fertility of the soils; in the case of wheat the rotational system consisted of four years of agriculture followed by six years of pastures (Satorre and Slafe, 1999).

Figure 6-5. Total cultivated area and yields for wheat. Period 1986/87 to 2004/05.

However, in the last twenty years, the traditional rotational system has been progressively abandoned, as double cropping of wheat-soybean showed rates of return up to three times higher than that of wheat-beef (Obstchatko, 1997). The cycle of continuous agriculture resulted in soil erosion and fertility losses, and prompted the need to introduce technological innovations, which included the application of fertilizers and the implementation of no-tilling farming practices.

Although there are no precise historical records on the amount of fertilizers applied to different crops in the country, some estimates indicate that no more than 10% of the area under wheat cultivation was fertilized prior to the 1990s. The reforms introduced by
the Convertibility Plan, particularly the reduction in import tariffs, allowed a significant reduction in the price of fertilizers (more than 20% in real terms) and facilitated its widespread use (Reca and Parellada, 2001). Since then the area under fertilization has increased to about 70% of the cultivated area. However, fertilization is applied almost exclusively in the traditional wheat-producing region of the Pampas, while only 10% of the area under wheat cultivation is fertilized in the marginal areas of the North Western Region of the country. In both regions, the level of fertilizers applied has been moderate (average amount of 40 kg/ha/year of N and 26 kg/ha/year of P) and has served to replenish the nitrogen and phosphorous deficiencies in the systems.

In spite of the positive environmental transformations described above, the implementation of supplementary irrigation in wheat—as well as in many other extensive crops, particularly corn—in the Pampa Region has generated environmental concerns in recent years. The Pampa Region—which encompasses the provinces of Buenos Aires, La Pampa, Santa Fe, and Cordoba—accounts for more than 90% of the total area under wheat cultivation in the country. The region is characterized by a high variability in rainfall, a situation that increases the risk for extensive un-irrigated crop productions. During the last ten years, however, supplementary irrigation based primarily on subterranean aquifers has been introduced in the region to cope with this limitation (Reca and Perellada, 2001). And although there are no available statistics regarding the rate of use of water for irrigating extensive crops and the extension of the areas irrigated under different crops for the entire country, according to the 2002 National Agricultural Census during that year there were in Buenos Aires province 166,500 hectares under irrigation. Nonetheless, several studies indicate technical and economic potential of supplementary
irrigation in wheat and corn (Salinas et al., 2004), and some estimates suggest that up to two million hectares of extensive crops could be under irrigation by the year 2025 (La revista del riego, 2006). Moreover, sales of irrigation equipment have grown steadily since the middle 1990s, and represented one of the most dynamic sectors of sales for agricultural machinery in 2004 (Persoglia, 2004). It is worth noting, however, that although the hydrological characteristics of the aquifers in the region have been studied, their recharging capacity is unknown (Chudnovsky et al., 1999). Thus, the use of subterranean aquifers to irrigate extensive crop areas has raised some environmental concerns because subterranean aquifers are the source of drinking water for most of the cities in the region. Furthermore, the lack of information on the rate of use of subterranean aquifers for irrigating crops and of norms regulating its use represents a potential threat to the sustainability of the resource (Chudnovsky et al., 1999).

**Transformations in the dairy subsector**

Since the early 1990s, the dairy subsector experienced major transformations in production. The transformations were particularly relevant for dairy farms located in the Pampas Region of the country (Figure 6-5). As a result, milk production almost doubled during the nineties, increasing from 5,900 million liters in 1991 to more than 10,400 million liters in 1999, representing an annual growth rate of 6.1%. Internal consumption grew from 200 liters per capita in the 1980s to 230 liters in 2000, and exports went from about 200,000 liters/year during the 1985–1990 period to an average of 1.3 million liters/year between 1995 and 2000.

Instrumental in these developments was the expansion of aggregated internal demand generated by the stabilization program and the opening of the Brazilian market because of the implementation of Mercosur. The reduction of inflation and the increase
in the consumers’ income during the first half of the 1990s led to a strong growth of the internal demand that stimulated production. The expansion in demand encouraged significant investment in technologies to increase production.

Figure 6-6. Milk-producing areas in Argentina.

In addition, exports to Mercosur, especially to Brazil, were encouraged by the preferential treatment given to member countries after the establishment of the external common tariff (ECT). While intra-regional trade was free of duties after 1994, the ECT for dairy product ranged from 14.5% to 27%. This situation favored Argentine exports in the Brazilian market. Brazil was the main destination of dairy products during the nineties, absorbing between 68% and 80% of the Argentine exports. In the 2000–2003 period, production decreased substantially (23%) as a consequence of the economic crisis suffered by the country during those years. After 2003, production increased again, reaching 10 million liters in 2005. During the last five years, exports have been in the
order of 350,000 liters/year, 20% below the average exports during the 1995–1999 period. However, Mercosur—and particularly Brazil—has decreased its relevance as a destination for the Argentine dairy exports, receiving less than 25% of the total exports in the last two years.

In spite of the changes described above, the increase in production observed during the last decade was related to a strong process of intensification of production. The traditional production system based on natural and improved pastures was replaced by a more intensive one characterized by the introduction of genetic material for high-yield animals, widespread use of pasture fertilization and animal concentrates, and incorporation of capital goods to improve milk handling and animal feeding. The adoption of this new technological package helped to solve fodder deficits during the winter, thereby reducing seasonality, while increasing overall volume. The lowering of import tariffs for capital goods and an overvalued peso helped in the incorporation of the new technological package, as a large portion of it was centered—directly or indirectly—on imported technologies.

The implementation of more intensive production systems has raised environmental concerns about three aspects. First, the effects of the incorporation of imported genetic materials (2 million pills of semen were imported in 1998 alone) on the domestic stock have not been evaluated. Besides the risk of genetic erosion, high-yielding animals are prone to require more frequent sanitary treatments, which implies application of higher quantities of chemicals whose residues may affect the quality of milk.

Second, the intensification has been conducted in a context of reduction in the number of dairy farms (-50% since 1991, see below) and an increase in the stock
(15.4%). The resulting increase in the amount of animals/area may be causing soil erosion by trampling in areas devoted to supplementary feeding. Additionally, there is some evidence that fragile areas on dairy farms traditionally in pasture have been placed under permanent cropping (mainly for maize destined to fodder) with the consequent risk of soil degradation.

Third, the intensification has created increased demand for water; milk production demanded an additional 10 billion liters of water during 2005. The potential environmental effects of this increase are related to the demand on the aquifers and the discharge of the effluents generated by the dairy farms. Considering that the recharging capacity of the aquifers is unknown, if the demand for water keeps rising, the potential negative externalities of the mismanagement of the aquifers could be serious, ranging from lack of water in dairy farms (private cost) to lack of water in towns (social cost). Effluents from dairy farms, on the other hand, are usually disposed of in untreated form (there are no regulations on the subject) and remain in natural drainages or infiltrating into the ground. The environmental and sanitary impacts of these practices have not been measured, but it is possible that they are contaminating local aquifers and watercourses.

Another transformation occurring in the subsector has been the reduction in the number of dairy farms. Between 1988 and 2005, the number of farms decreased from 30,500 to 15,000. As the minimum profitable level of scale increased, small, family-based dairy farms were forced to abandon the dairy business. As a result, primary production is currently dominated by medium and large dairy farms, which are highly productive (more than 5,000 liters/day), with high levels of intensification and sophisticated entrepreneurial management.
Other relevant agricultural commodities for Mercosur

Barley. Production of barley in Argentina has shown an uneven but growing trend since 1985, averaging a production of 900,000 MT in the last two agricultural seasons (Figure 6-7). Because barley in Argentina is destined almost exclusively to produce malt, the increase in beer consumption in Argentina and the demand of malt from the Brazilian beer industry have promoted its cultivation in recent years. Similar to wheat, the sustained increase in production has occurred even in the face of erratic international prices (Figure 6-7), and has been associated with a significant expansion in the cultivated area and a substantial increase in yields (Figure 6-8). The area cultivated with barley expanded more than fourfold in the last twenty years, increasing from 60,000 hectares during the 1986/87 agricultural season to 275,000 hectares during the 2004/05 season. Most of the expansion in the cultivated area has occurred in Buenos Aires province, which accounted for more than 90% of the total cultivated area in the country (Figure 6-9).

Because barley is often used in rotations with wheat, no-tillage farming practices have been introduced in its cultivation (no data on areas under barley cultivation with no-tillage farming practices were available at this time). Moreover, moderate levels of fertilization are generally employed in its cultivation. It is estimated that 50% of the area under barley cultivation is fertilized, with applications of 35 kg/ha/year of urea. Although supplementary irrigation in barley cultivation is sometimes used in the Southern portion of Buenos Aires province, it is based on riparian waters. All these indications suggest that the expansion in the production of barley is not having major negative environmental effects on the region’s natural resource base.
Figure 6-7. Prices and total production of barley in Argentina (1986/87 to 2004/05).

Figure 6-8. Total cultivated area and yields for barley (1986/87 to 2004/05).
Rice. This crop is cultivated in the North Eastern Region of the country, primarily in the provinces of Entre Ríos and Corrientes, which account for about 90% of the total area cultivated with rice in the country (Figure 6-10). After remaining relatively stable around 100,000 hectares during the 1985–1989 period, the area under cultivation with rice increased steadily during the 1990s, reaching 291,000 hectares in 2000 (Figure 6-11). Production oscillated around 400,000 MT during the 1985–1989 period and reached 1.6 million MT in 1999. This significant increase in production was fueled primarily by the access to the Brazilian market due to the implementation of Mercosur (Brazil accounted for more than 80% of the Argentine exports of rice during the period). However, the Brazilian devaluation of early 1999—along with other measures adopted by the Brazilian government to protect their market—motivated the exit of many small and medium
producers (SAGPyA, 2005), and a reduction in both the cultivated area and the total production during the following years (Figure 6-11 and Figure 6-12).

Figure 6-10. Area cultivated with rice in Argentina.

Figure 6-11. Total cultivated area and yields for rice. Period 1986/87 to 2005/06.
During the 2005/06 agricultural season, the cultivated area was around 165,000 hectares and the estimated production was 1.05 million MT, which represented a 43% reduction in area and a 37% decrease in production, respectively. According to the 2002 National Agricultural Census, areas previously under rice production were destined to soybean production after 1999. It is interesting to mention, however, that yields have shown an increasing trend, even in the presence of a reduction in the cultivated area, indicating a process of intensification during the last years. This intensification has been associated with the introduction of improved varieties of rice seeds from Brazil and Uruguay, and more efficient harvesting machinery (Reca and Perellada, 2001).

Figure 6-12. Total production of rice in Argentina. Period 1986/87 to 2005/06.

**Horticultural products.** Potato, onions, and garlic are cultivated under intensive conditions in Argentina by small and medium scale farmers. Figure 6-13 shows the evolution of the cultivated area for the three horticultural products, which has varied between 130,000 hectares and 160,000 hectares in the last twenty years. Potatoes are cultivated by small and medium farmers in several provinces of the Central and Northern
Regions of the country, although their production is concentrated in the provinces of Buenos Aires, Cordoba, and Mendoza (Figure 6-14).

The area under potatoes has shown marked oscillations over time, and has decreased in recent years. However, yields have risen steadily (24%) in the last twenty years from 21.1 MT/ha to 26.2 MT/ha. Total production has oscillated between 2.0 million MT and 3.4 million MT during the same period. It has been noted recently (mid-1990s) that potatoes have become an export commodity for Argentina, with Mercosur as the major destination. However, exports represent only 2–5% of the total production.

In the case of onions, the area under production has almost doubled since 1985, from 16,500 hectares to 29,300 hectares, with the provinces of Buenos Aires and Mendoza accounting for 70% and 20% of the total cultivated area, respectively (Figure 6-13 and Figure 6-14). Production and exports increased substantially between 1995 and 1999 (from 456,000 MT to 850,000 MT in the case of production, and from 184,600 MT to 413,000 MT in the case of exports) in response to the access to the Brazilian market, which was facilitated by the implementation of Mercosur. However, production and exports dropped 35% and 63%, respectively, in 2000 following the Brazilian devaluation of 1999. Since then, production and exports have increased steadily to 720,000 MT and 225,000 MT in 2004, respectively.

Finally, the area under garlic has grown considerably since the early 1990s (from 6,000 hectares to 15,000 hectares), with the provinces of Mendoza and San Juan accounting for more than 90% of the total cultivated area (Figure 6-13 and Figure 6-14). Although garlic represents a minute proportion of the total area under cultivation in the
country, its production is mostly oriented to external markets, considering that 50–70% of total production is exported.

![Graph](image)

Figure 6-13. Area under potato, onions, and garlic cultivation in Argentina. Period 1985/86 to 2004/05.

![Maps](image)

Figure 6-14. Main areas cultivated with potato (A), onions (B), and garlic (C) in Argentina.

In environmental terms, the concern with intensive horticultural productions is related to the use of agrochemicals because of their potential effects on human health and
biodiversity. Unfortunately, information on the use of agrochemicals (fertilizers and herbicides) in horticulture in Argentina is scarce, scattered among several governmental agencies and private sources, and difficult to access. However, a recent report on pest control in the Argentine agriculture indicated the presence of pesticides in water and mud in several horticultural areas (i.e., Valley of Rio Negro, oasis of Mendoza, Southern Santa Fe, and coastal area of Buenos Aires), although the amounts were below the international safe threshold values (Huerga and San Juan, 2004). Nonetheless, the lack of systematic information on the use of agrochemicals in horticultural areas and on their effect on the biota precludes a specific assessment of the consequences of the expansion in production on the environment.

**Major Commodities not Relevant to Mercosur**

Among the major commodities composing Argentine agricultural exports not relevant to Mercosur are soybean, corn, and sunflower. Soybean was introduced commercially in the country in the mid 1970s. Since then, the area under soybean cultivation has expanded considerably at the expense of pasturelands, areas devoted previously to other oilseeds, and native forests (the latter particularly in the Western portion of the Argentine Chaco Region). The significant growth in soybean cultivation in Argentina has been the result of a response to a strong increase in foreign demand. The existence of suitable natural resources for the cultivation of soybean in the country and the development of technical resources (such as the introduction of genetically modified seeds, agrochemicals, no-tillage farming practices, and know-how) facilitated the response to market signals (Obchastko, 1997; Reca and Perellada, 2001). Currently, soybean is the most relevant crop in terms of land use and exports in Argentina. During the 2004/05 season, some 14.5 million hectares were planted with soybean, which
represented almost half of the total area under cultivation in the country. In turn, exports from the soybean complex (seeds, oil, and pellets) represented about 13% of total Argentine exports in 2004.

Production of corn has been augmented considerably during the last thirty years. In the 1997/98 season, production reached 19 million MT in an area similar to that required in 1970 for producing 8 million MT (Reca and Parellada, 2001). During the 2004/05 season, 3.4 million hectares were planted with corn, with average yields of 7,400 kg/ha. The increase in production has been associated with a significant growth in yields resulting from technological innovations such as the use of improved and genetically modified seeds, use of fertilizers and herbicides, supplementary irrigation, and no-tillage farming practices (Obchastko, 1997; Barsky and Gelman, 2002; Reca and Perellada, 2001).

Sunflower is the second most important oilseed in the country behind soybean. The development of improved varieties promoted an important expansion in both cultivated area and production per unit area. During the 2004/05 season, some 2.0 million ha were under sunflower cultivation, which represented 11% of the total area under oilseed cultivation in the country. However, the area under sunflower cultivation has decreased in recent years, and has been replaced by soybean. Nonetheless, sunflower is an important component of Argentine agricultural exports as the country occupies the first place in the world as an exporter of sunflower oil.

**Concluding Remarks on Mercosur Trade-Related Effects**

The economic effects associated with the implementation of trade liberalization policies and Mercosur in Argentina have been significant. During the last 15 years, the Argentine economy underwent major changes characterized by a move to increase
production directed to external markets and a pronounced augment in overall exports. These changes have been particularly prominent in the agricultural sector, and have been made possible by the incorporation of new technologies promoted by trade liberalization and, for certain commodities linked to Mercosur, facilitated by the implementation of the Common Market. The new technologies (in terms of agricultural equipments, agrochemicals, and improved seeds, among others) that have entered the country have affected the manner in which agricultural production is conducted.

All these changes in the agricultural sector, in turn, are likely to have brought both positive and negative environmental impacts affecting soils, waters, and ecosystems. A quantitative assessment of the effects of implementing Mercosur on the environment is not possible here because of the lack of environmental indicators, the dynamic nature of both causal factors and effects, and the presence of countervailing forces. However, it is possible to make a qualitative appraisal of the implementation of the Common Market based on the data presented earlier to obtain an approximate picture of the environmental trade-related effects of Mercosur on Argentina’s agricultural sector.

**Scale Effects**

Looking at the scale effect in isolation from the other effects, it seems that as agricultural activities linked to Mercosur expand, environmental impacts increase. Although there have been technological advances that have tended to reduce environmental effects caused by the expansion in production (such as effective use of fertilizers and no-tillage farming practices), there are still negative potential environmental effects from increasing agricultural production as more pressure is put on natural resources. This is particularly the case when the expansion in production of some commodities requires more intensive use of certain natural resources (such as the case of
water use in wheat and dairy production), and marginal agro-ecological areas are destined to crop production.

The scale effect will likely augment in significance as exports linked to Mercosur continue to rise in the future. The incorporation of Venezuela as the fifth full member country of Mercosur adds a market of 26.5 million people with an average GDP per capita of US$ 2,470. Because Argentine agricultural exports are based on temperate commodities, they will be complementary to Venezuelan tropical agricultural production. This situation will create an additional incentive to increase production for exports, adding pressure to Argentina’s natural resource base.

**Composition Effects**

Argentina’s comparative advantage historically has been based on natural resources, and trade patterns have reflected this situation by focusing mainly on cultivated natural resources. In the case of Argentine agricultural exports to Mercosur, they have been represented by a wide array of agricultural products. However, seven commodities have had more than 50% of their exports directed to the Common Market (i.e., wheat, milk, barley, rice, potato, onions, and garlic). Moreover, and as a common denominator for all of these commodities, the volume of production has increased since the implementation of Mercosur. This strongly suggests that Mercosur has acted as a major incentive for increasing the production of these seven agricultural commodities.

The composition of Argentine agricultural exports to Mercosur does not appear to include environmentally sensitive products or to be based on a pattern of environmentally “dirty” specialization. The level of use of agrochemicals in crops and pastures, particularly fertilizers, is well below the level of use in other parts of the world—such as USA, the European Union, or South East Asia (see AACREA 2005)—and seems to have
had positive environmental effects by allowing the recuperation of soil fertility. In addition, the replacement of highly toxic herbicides—such as atrazine—by a more environmentally neutral herbicide (i.e., gliphosate) represents a shift that can be considered positive, although the long term effects of the widespread increase in the use of gliphosate on biodiversity may offset the current potential environmental benefits (for a discussion of potential negative effects of widespread use of gliphosate see Pengue, 2004).

**Technological Effects**

The trade liberalization policies associated with the Convertibility Plan during the early 1990s had clear and identifiable effects on technological factors; it allowed the transfer and implementation of environmentally friendly technologies, particularly for crop production. Most of the technological changes concerned the incorporation of less intrusive farming practices, such as no-tillage, and the use of fertilizers to replenish soil fertility. Moreover, there has been also a related transfer of environmental management methods as well as broader managerial skills associated with conservation farming practices.

In spite of those positive effects, some of the technological changes introduced during the last decade may be producing negative environmental consequences. The environmental effects of the expansion in crop irrigation in the Pampa Region are not well documented, but there seems to be the danger of a tendency toward an unsustainable pattern of exploitation of subterranean aquifers. Likewise, the expansion of agriculture in marginal agro-ecological areas (such as the case of wheat in the North Western portion of the country) raises concern on the generalized pressure on ecosystems, including erosion, desertification and loss of habitats and wild species. Thus, although the technological
changes introduced during the last decade can be considered as generally positive, the long-term environmental repercussions of some of them—namely, supplementary irrigation, increase in the use of agrochemicals, and expansion in cultivated area—are unknown (INTA, 2003) and deserve particular attention by policy-makers. However, it is noteworthy that the technological effects mentioned above have not been prompted by the implementation of Mercosur. In this regard, the role of Mercosur has been mostly as a facilitator; by creating market opportunities it stimulated the adoption of the technologies made available by the Convertibility Plan.

**Geographical Effects**

The role of Mercosur as a driver for land use change in Argentina seems to be limited and, in the best of the cases, restricted to expansions in the cultivation of wheat, barley, and rice. Changes in land use in recent years appear to have been more associated with the implementation of the structural reforms of the early 1990s and the dynamics of the international commodity market, particularly the soybean market. The role of Mercosur has been more typically as a magnifier by creating market opportunities, which have acted as signals to increase production. Considering the area cultivated for the different commodities linked to Mercosur in Argentina, their diverse “spatial scales” become apparent. Wheat, for example, presents a spatial scale measured in millions of hectares, barley and rice have a spatial scale of hundreds of thousand hectares, and the three horticultural commodities occupy a scale of tens of thousand hectares.

The distinction mentioned above has one important environmental consequence: the overall environmental impact of land use changes and production transformations associated with the commodities linked to Mercosur will depend on the “spatial scale” of the commodity under consideration. In other words, transformations associated with
wheat production do not have the same environmental magnitude—in terms of negative/positive land use changes—than do transformations associated with onion production, for example. This leads to the conclusion that, in terms of the geographical effects associated with land use changes, signals from Mercosur are relevant primarily for wheat, barley, and rice, and less significant in the case of the rest of the agricultural commodities.

In terms of the geographical effects, then, the expansion in cultivated area of wheat and rice at the expense of pasturals and non-disturbed areas may be generating negative environmental consequences. Although detailed data are not available, it would appear that the expansion in wheat cultivation in marginal agro-ecological areas of the Chaco Region in the North Western part of the country could be generating long-term damages to that ecosystem. The Chaco region is one of the most diverse and fragile ecosystems in the world, and it is also an area of global significance because, among other things, it is the habitat to numerous endangered species, such as the giant anteater (*Myrmecophaga tridactyla*). In the case of rice, the expansion in cultivated area appears to be at the expense of modifying wetlands in the basin of the Uruguay River. The environmental consequences of these changes are not well documented, but the fragility of the affected ecosystems strongly suggest that the land use modifications associated with the expansion in cultivated areas in those regions may result in irreversible loss of habitats and species.
General Conclusions

Institutional Dimension of the Environment in Mercosur

In spite of the commercial nature of Mercosur, there has been over time a gradual incorporation of the environmental dimension into the integration process. Such incorporation has been conducted in steps, with each step representing a more significant role of the environment in the integration process. Nonetheless, the primary commercial focus of Mercosur made the environment a minor issue for policy development, and has been considered only from the perspective of its potential role as an obstruction to market access. Only recently policy initiatives more focused on the environment have begun to be designed, initiating a path intended to move Mercosur toward sustainable development. In this regard, the last couple of years have seen a significant takeoff in the development of institutional mechanisms, work plans, and policy statements to fully institutionalize the environmental dimension into the integration process.

However, environmental policy initiatives are still of secondary importance in the agenda of the integration process because of the limited power of the Mercosur environmental agency, and the few regulations to protect the environment in the Common Market. However, the recent creation of a political forum (the Meeting of Environmental Ministers of Mercosur) for articulating and coordinating environmental initiatives at the highest level of Mercosur may help to revert that situation.
The process of harmonizing non-tariff barriers that have environmental elements by Mercosur is not showing indications of changing the existing Argentinean environmental regulatory framework. A total of 16 NTBs that have environmental elements have been analyzed for Argentina, and all of them have been environmentally justified and kept in place. Likewise, NTBs having environmental elements belonging to other Mercosur member countries have also been environmentally justified, which seems to indicate that the commercial liberalization process is not negatively affecting the existing level of environmental protection in the member countries of Mercosur.

Furthermore, a tenet for harmonizing NTBs with environmental elements has been established by which countries cannot adopt obligations under Mercosur that would lead to a reduction in the environmental protection already in place in their respective regulations. This situation suggests that those NTBs that have been analyzed and justified represent the minimum level of environmental protection to be provided by Mercosur in these areas. However, a potential source of conflict remains between Mercosur and the application of multilateral environmental agreements, since it has not been clearly specified which one, trade or the environment, would have preeminence in case of a dispute involving norms from both sources. On the other hand, there is no evidence that the implementation of Mercosur is undermining the ability of the Argentine government to take action to protect its national environment. However, the substantial institutional and legal changes regarding the environment that have occurred in the country during the last 15 years have not been prompted by the implementation of Mercosur, but have responded to the internal policy dynamics of the country.
Environmental Trade-Related Effects of Implementing Mercosur

The exploration of the environmental trade-related effects (i.e., scale, composition, technological, and geographical effects) associated with the implementation of Mercosur indicates that the volume of Argentina’s agricultural exports to Mercosur has increased substantially since 1991. Although significant technological advances have been introduced to minimize the scale effect associated with the augment in production observed in the agricultural sector in the last fifteen years, the increasing pressure on natural resources is likely to generate negative environmental effects—particularly in the fragile and marginal agro-ecological areas of the North Western part of the country.

In terms of the composition effect, Argentine agricultural exports to Mercosur are composed of a wide array of commodities; however, they are overwhelmingly dominated by wheat, which represents more than 70% of the total Argentine agricultural exports to Mercosur. Nonetheless, seven commodities (i.e., wheat, milk, barley, rice, potato, onions, and garlic) have more than 50% of their exports directed to the Common Market, suggesting that Mercosur has acted as a strong incentive for increasing production directed to exports to the Common Market.

The results from the study suggest that the composition of Argentine agricultural exports to Mercosur does not appear to include environmentally sensitive commodities or to be based on a pattern of environmental “dirty” specialization. In general, production systems employed for traded commodities directed to Mercosur can be considered as relatively environmentally friendly and having generated positive environmental effects (such as use of no-tillage farming practices to reduce soil erosion). However, the implementation of more environmentally friendly production techniques has not been prompted by the demand of green consumers in Mercosur countries. Instead, it has been
prompted by the need to revert the processes of soil erosion and fertility loss associated with the cycle of continuous agriculture initiated in the late 1980s.

The significant technological changes operated in the Argentine agricultural sector since the early 1990s—such as the incorporation of less intrusive farming techniques, use of moderate levels of fertilizers, use of environmentally neutral herbicides, and development of improved seeds—have eventually contributed to diminish the overall negative environmental effects associated with the increasing pressure on the natural resource base resulting from the considerable increases in agricultural production. However, the introduction of supplementary irrigation in wheat and the expansion of agriculture in marginal agro-ecological areas raise concerns on the long-term environmental repercussions of such technological changes.

It is noteworthy, however, that the incorporation of the described technologies has been associated mainly with initiatives developed during the mid 1980s—such as the incorporation of improved seeds—and with the structural changes promoted by the Convertibility Plan during the 1990s. Thus, the role of Mercosur in promoting the implementation of such technological transformations has been of secondary importance.

Although there has been a substantial expansion in the area under cultivation in Argentina, the role of Mercosur as a driver for land use change in the country seems to be limited, and in the best of cases, restricted to expansions in the cultivation of wheat, barley, and rice. Nonetheless, the expansion in the area under cultivation of wheat and rice appear to be problematic in certain regions. The expansion in the area under cultivation of wheat in the Chaco Region seems to be at the expense of pasturelands and non-disturbed forest. In the case of rice, there is some anecdotic evidence that wetlands
in the basin of the Uruguay River are being converted into rice paddies. These situations suggest that the land use modifications associated with the expansion in cultivated area for these commodities may result in irreversible loss of habitats and species.

The analysis of the environmental trade-related effects of implementing Mercosur on Argentina’s agricultural sector indicate that the Common Market has played a secondary role in the major changes operated in the sector during the last fifteen years. In this regard, Mercosur has acted mostly as a facilitator by creating market opportunities that helped in the adoption of the technologies made available by the Convertibility Plan. Because the changes operated in the Argentine agricultural sector have resulted in both positive and negative environmental repercussions, it is difficult to state categorically whether the overall effects of the described changes have been positive or negative in environmental terms. What is clear, however, is that for better or for worse, Mercosur is a reality that has affected and will keep affecting the livelihood of humans and the environment in the region for many years to come. Although Mercosur has promoted environmental initiatives in the region, to fully articulate trade and environmental policies to create win-win situations is the challenge still ahead.

Identifying Topics in Need of Future Research

The findings of this study indicate that the institutional framework for the environment in Mercosur has shown significant advances over time, however, there is still a prevalent weakness in its implementation “on the ground”. Considering this situation and looking at the recent developments in the integration process, such as the creation of the Meeting of Ministers of Environment or the incorporation of Venezuela as the fifth member of Mercosur, a question leaps to mind: what are the likely scenarios regarding the future of the environmental dimension in the Common Market?
Although to provide an answer to the posed question is difficult because of the dynamic and changing nature of the integration process, three potential scenarios may be explored: (i) “in the freezer”, (ii) “tiger without teeth”, and (iii) “happy marriage”. In the first scenario, the environment is considered an unwelcome companion to the overall integration process of Mercosur and no major advances are made to achieve sustainable development. In the second scenario, policy declarations and instruments to protect the environment and promote sustainable development are proposed but they do not translate into actions or obligations for the Party States. Finally, in the third scenario, positive synergies between trade and environmental policies are created to achieve sustainable development in Mercosur. The realization of any of these scenarios will depend on many factors, such as the overall pace of the integration process and the will of Mercosur policy-makers to consider the environment as part of the integration policies, among others. Even so, these three scenarios can be presented as working hypothesis to guide future research on the institutional environmental dimension of implementing Mercosur.

The results associated with the environmental trade-related effects must be interpreted cautiously, and as a first approximation to the potential environmental impacts linked to the implementation of Mercosur on Argentina’s agricultural sector. A recurrent obstacle faced during the development of this study has been the lack of data related to different environmental indicators (i.e., land use change dynamics and level of use of agrochemicals in different crops, among others.) Nonetheless, the study is able to identify those agricultural sectors that are linked to Mercosur, and some of the aspects related to their production that may be of environmental concern. In this sense, it would be highly useful to develop a set of critical environmental indicators related with the
identified agricultural commodities to assess the environmental effects associated with the expansion in the scale of production and the use of new technologies. Such environmental indicators should be developed according to the technologies employed in producing the commodity, and should be of readily monitored and cost-effective to assure that they can be followed over time. As an example, indicators related to the use of fertilizers and herbicides, and to the use of supplementary irrigation would be monitored to assess the environmental effects associated with the expansion in wheat production.

While the indicators described above are expressed mostly at a local scale, the environmental effects of implementing Mercosur are also felt at the regional scale. The most obvious example of Mercosur environmental effects at a regional scale is the “pulsating behavior” exhibited over time by the cultivated area of crops destined for exports. The maximum expansion of the agricultural frontier in the country was reached during the 1930s. Since then, the area under cultivation has expanded and contracted according to the variation in the international prices for commodities and the relative profitability between crops and livestock production (among other factors). Therefore, the current expansion in cultivated area of some crops linked to exports directed to Mercosur prompts several questions that are worthy of pursuing because of their implications in terms of biodiversity conservation: (i) What kind of ecosystem have been affected by the expansion in the cultivated area because of exports to Mercosur? (ii) What has been the dynamics of land use change for the affected ecosystems over time? (iii) What have been the effects on biodiversity (habitat modification/destruction for species of conservation concern) of those land use changes?
The information derived from these questions would provide hard data to better understand the environmental effects of trade liberalization. Furthermore, detailed case studies of the identified commodities and sectors linked to Mercosur would provide information helpful for recommendations to Mercosur policy-makers. These would represent useful steps for fully assessing the environmental trade-related effects of implementing Mercosur on Argentina’s agricultural sector.
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BIOGRAPHICAL SKETCH

José A. Gobbi was born on 14 July 1963 in Santa Rosa, La Pampa, Argentina. He graduated as a Licentiate in Conservation and Use of Natural Renewable Resources with orientation in wildlife management from the Universidad Nacional de La Pampa in 1986. During his last years in College, he worked as a field research assistant in a project on management and conservation of vizcachas, a native wildlife species considered a pest by local farmers. After graduation, he worked for the Wildlife Service of La Pampa Province on assessing the effects of both sport and commercial hunting on native and exotic wildlife species. Between 1989 and 1990, he became involved in the design and management of protected natural areas, and helped in the creation of a system for La Pampa Province. While developing this assignment, he obtained a Diplomado on the planning and management of protected areas from the Instituto Tecnológico de Estudios Superiores de Monterrey, Mexico, in 1990. A year later, he obtained a position at the recently created National Secretariat of Natural Resources and Environment, in Buenos Aires, Argentina, where he was part of a group proposing policy initiatives related to natural resource use and conservation.

As a result of José’s experiences during the first years of his career, he became interested in the links between the ecological and socio-economic dimensions of environmental conservation, and on the design of strategies aimed at sustainable development. This led him to the master's program at the Center for Latin American Studies at the University of Florida, from which he graduated in 1994. For his thesis,
José examined the ecological and socio-economic aspects of the fee hunting activity in cattle ranches of La Pampa Province. In this work, he proposed avenues to harmonize the interests of landowners for increasing their income with those of society for conserving biodiversity. Before finishing his master’s degree, José received an award from the Pew Charitable Trust to conduct an internship with the TRAFFIC Program at the World Wildlife Fund in Washington D.C. During his nine-month internship with the TRAFFIC Program, he assessed the effect on implementing NAFTA on the illegal parrot trade across the US-Mexico border.

After his internship in Washington, D.C., José moved to Lawrence, Kansas, with his wife, who was starting her graduate studies at the University of Kansas. While in Lawrence, he obtained a position as a Lecturer from 1997 to 1999 with the Center for Latin American Studies at the University of Kansas, teaching a class on natural resource use and conservation in Latin America to graduate students. During that time, José started to work as a part-time consultant for the World Bank on the development of a biodiversity-friendly coffee in El Salvador and Mexico. After starting his Ph.D. program at UF in the fall of 1999, he continued working during the summer semesters as a part-time consultant for the World Bank on several projects.

For his Ph.D. program, José received a fellowship from the UF Tropical Conservation and Development Center and a scholarship from the College of Natural Resource and Environment. In addition, he received grants from TCD and the International Agricultural Trade and Policy Center to conduct research on Mercosur in Argentina. Throughout his research on the environmental dimension of Mercosur, José made contact with the negotiators for Argentina to Mercosur’s environmental working
group; and since 2001 has been collaborating with them on several initiatives related to commerce and the environment, particularly in the area of environmental goods and services.

Currently, José is based at the Tropical Agricultural Research and Higher Education Center (CATIE) in Costa Rica, where he is the Coordinator of the socio-economic and policy component of the Regional Integrated Management Silvopastoral Ecosystem Project (RISEMP), a project on payment for environmental services in cattle farms of Colombia, Nicaragua, and Costa Rica. In CATIE, he oversees the implementation of the policy initiatives associated with the RISEMP project in the three countries, and teaches a class on socio-economic and policy aspects of agroforestry systems to master’ students from CATIE Graduate School.