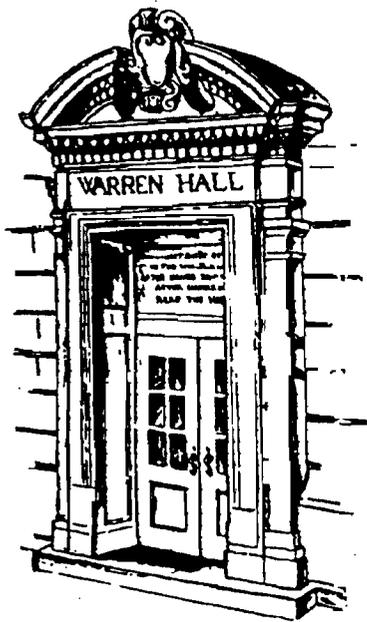


WP 96-17  
December 1996



# Working Paper

Department of Agricultural, Resource, and Managerial Economics  
Cornell University, Ithaca, New York 14853-7801 USA

THE G-3 FREE TRADE AGREEMENT: MEMBER COUNTRIES'  
AGRICULTURAL POLICIES AND ITS AGRICULTURAL  
PROVISIONS

Ricardo Argüello and Steven Kyle

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

THE G-3 FREE TRADE AGREEMENT: MEMBER COUNTRIES'  
AGRICULTURAL POLICIES AND ITS AGRICULTURAL PROVISIONS

Ricardo Argüello and Steven Kyle

December 1996

---

Ricardo Argüello is a Ph.D. student and Steven Kyle is an Associate Professor at the Department of Agricultural, Resource and Managerial Economics at Cornell University

## ABSTRACT

Since the mid 1980s Latin American and Caribbean countries have unilaterally liberalized their economies and have started a new wave of economic integration that led to the establishment of 25 trade agreements between 1990 and 1994. The Group of Three (G-3) Free Trade Agreement, comprising Colombia, Mexico, and Venezuela, provided for the liberalization of around 62 percent of exportables from Colombia and Venezuela and 16 percent of those from Mexico. This paper provides a qualitative assessment of the potential impact of the G-3 on member countries' agricultural trade. Its major conclusion is that the agreement is unlikely to produce important changes either in the structure of member countries' agricultural trade or in bilateral trade flows. This is due to a set of factors among which are the relatively limited number of products included in the agreement and their lack of importance within member countries' trade, the modest size of pre-agreement trade, and the size of the markets involved.

The structure of the paper is as follows. First, the most important recent developments in G-3 member countries' agricultural policies are described. Then, the general characteristics of the agreement are presented, giving special emphasis to the agricultural provisions. Finally, a qualitative assessment of the latter is done through their hypothetical application to the current structure of agricultural trade among member countries. Data on G-3 agricultural trade are presented in appendix 2.

## TABLE OF CONTENTS

List of Tables .....	iii
Introduction .....	1
Chapter 1. Overview of G-3 Agricultural Policies	4
1.1 Colombian Agricultural Policy	4
1.2 Mexican Agricultural Policy	17
1.3 Venezuelan Agricultural Policy	36
Chapter 2. The Group of Three Free Trade Agreement .....	54
2.1 Background on the Group of Three (G-3)	54
2.2 Significance of the Agreement	56
2.3 Structure of the Agreement	60
2.4 The Agricultural Sector in the G-3 Agreement	68
Chapter 3. The G-3's Agricultural Trade .....	73
3.1 Significance of Agricultural Trade within G-3 Trade	73
3.2 G-3's Agricultural Trade in the Context of Member Countries' Agricultural Trade	79
3.3 G-3's Agricultural Trade	82
3.4 Main Agricultural Products in Member Countries' Trade	89
3.5 Trade Liberalization and Bilateral Trade Flows	98

Appendix 1. Standard International Trade Classification (SITC) Codes at the Two Digit Level Included in the Defi- nition of the Agricultural Sector .....	103
Appendix 2. G-3's Agricultural Trade Data .....	104
A-2.1 Agricultural Trade Between Mexico and Colombia	108
A-2.2 Agricultural Trade Between Mexico and Venezuela	110
References .....	112
Glossary of Abbreviations .....	118

## LIST OF TABLES

Table 1.1	Percentage of Agricultural Products under Different Import Regimes in Colombia in the 'pre-Apertura' Period	6
Table 1.2	Colombian Basic Agricultural Data (1989-1993)	15
Table 1.3	Mexican Basic Agricultural Data (1989-1993)	31
Table 1.4	Percentage Changes in Bilateral Agricultural Trade Between Mexico and the U.S. After One Year of Operation of the NAFTA with Respect to the Year Before	34
Table 1.5	Value of the Agricultural Support Index for Some Venezuelan Products	47
Table 1.6	Nominal Protection Coefficients for Some Venezuelan Products	49
Table 1.7	Venezuelan Basic Agricultural Data (1989-1993)	51
Table 2.1	Value of Trade Among G-3's Member Countries (1993)	57

Table 2.2	Structure of Trade Flows Between Mexico and Colombia at the Three Digits Level of the SITC in 1993	58
Table 2.3	Structure of Trade Flows Between Mexico and Venezuela at the Three Digits Level of the SITC in 1993	59
Table 3.1	Share of Agricultural Trade in G-3 Countries' Foreign Trade	74
Table 3.2	Share of G-3's Agricultural Trade in G-3's Trade	77
Table 3.3	Share of Intra-G-3 Agricultural and Total Trade in Member Countries' Agricultural and Total Trade	78
Table 3.4	Share of Intra-G-3 Agricultural and Total Imports in Agricultural and Total Imports by Member Country	80
Table 3.5	Share of Intra-G-3 Agricultural and Total Exports in Agricultural and Total Exports by Member Country	81

Table 3.6	Share of Intra-G-3 Agricultural and Total Trade in Agricultural and Total Trade by Member Country	82
Table 3.7	Intra-G-3 Agricultural Trade ( \$ million)	83
Table 3.8	Main Products in Bilateral Trade between Colom- bia and Mexico (Importing Country: Colombia, Exporting Country: Mexico)	85
Table 3.9	Main Products in Bilateral Trade between Colom- bia and Mexico (Importing Country: Mexico, Exporting Country: Colombia)	87
Table 3.10	Main Products in Bilateral Trade between Mexico and Venezuela (Importing Country: Venezuela, Exporting Country: Mexico)	88
Table 3.11	Main Agricultural Imports of Colombia and their Share in Agricultural Imports from G-3 Partners (Average Percentages for the period 1989-1993)	89
Table 3.12	Main Agricultural Exports of Colombia and their Share in Agricultural Exports to G-3 Partners (Average Percentages for the period 1989-1993)	90

Table 3.13	Main Agricultural Imports of Mexico and their Share in Agricultural Imports from G-3 Partners (Average Percentages for the period 1989-1993)	91
Table 3.14	Main Agricultural Exports of Mexico and their Share in Agricultural Exports to G-3 Partners (Average Percentages for the period 1989-1993)	93
Table 3.15	Main Agricultural Imports of Venezuela and their Share in Agricultural Imports from G-3 Partners (Average Percentages for the period 1989-1993)	94
Table 3.16	Main Agricultural Exports of Venezuela and their Share in Agricultural Exports to G-3 Partners (Average Percentages for the period 1989-1993)	96
Table A-1.1	SITC Division Codes Considered as Agricultural Sector (including number of groups -G-, sub-groups -SG- and basic headings -BH-)	103
Table A-2.1	G-3 Countries' Total and Agricultural Trade (\$ million)	104

Table A-2.2	Intra-G-3 Total and Agricultural Trade (\$ million)	105
Table A-2.3	Main Products in Bilateral Trade between Colombia and Mexico. Importing Country: Colombia, Exporting Country: Mexico. (\$000)	106
Table A-2.4	Main Products in Bilateral Trade between Colombia and Mexico. Importing Country: Mexico, Exporting Country: Colombia. (\$000)	106
Table A-2.5	Main Products in Bilateral Trade between Mexico and Venezuela. Importing Country: Mexico, Exporting Country: Venezuela. (\$000)	107
Table A-2.6	Main Products in Bilateral Trade between Mexico and Venezuela. Importing Country: Venezuela, Exporting Country: Mexico. (\$000)	107
Table A-2.7	Colombian Imports from Mexico - Reported by Colombia (values in U.S. \$000)	108
Table A-2.8	Colombian Exports to Mexico - Reported by Colombia (values in U.S. \$000)	108

Table A-2.9	Mexican Imports from Colombia - Reported by Mexico (values in U.S. \$000)	109
Table A-2.10	Mexican Exports to Colombia - Reported by Mexico (values in U.S. \$000)	109
Table A-2.11	Venezuelan Imports from Mexico - Reported by Venezuela (values in U.S. \$000)	110
Table A-2.12	Venezuelan Exports to Mexico - Reported by Venezuela (values in U.S. \$000)	110
Table A-2.13	Mexican Imports from Venezuela - Reported by Mexico (values in U.S. \$000)	111
Table A-2.14	Mexican Exports to Venezuela - Reported by Mexico (values in U.S. \$000)	111

## Introduction

Since the mid 1980s Latin American economies have started a new wave of economic integration. After the limited success of different subregional integration schemes in the framework of the Import Substitution Industrialization strategy, Latin American economies have shifted towards unilateral and multilateral trade liberalization and the promotion of schemes of economic integration aimed at fostering the export sector. The formation of a Western Hemisphere Free Trade Area, projected for the year 2005, constitutes the ultimate expression of the 'new' process of economic integration in the Americas.

In 1989 the Group of Three (Colombia, Mexico, and Venezuela), which had started as a mechanism for peace talks in various Central American countries (known as the Contadora Group), extended its activities to the economic field. By this means, the three countries initiated negotiations directed towards the formation of a free trade area. Effective in January 1995, the Group of Three (G-3) Free Trade Agreement liberalized trade among the three countries over a wide range of products, guaranteed national treatment for partner countries' investment, and ruled over trade-related matters such as intellectual property rights, mechanisms for dispute resolution, and harmonization of customs regulations (rules of origin, inspection procedures, etc.).

The G-3 Free Trade Agreement is part of a set of 25 trade agreements that were established among Latin American and Caribbean countries between 1990 and 1994. Common objectives of most of these accords refer to the

expansion of domestic markets, the enhancement of competitiveness for regional industries, the diversification of the export base, the promotion of foreign investment, and the strengthening of technological development and cooperation. The means to achieve these objectives are also common: elimination of tariff and non-tariff barriers to trade complemented with progressive de-regulation of the economy.

As mentioned, the purpose of economic integration for Latin American countries is to boost the export sector, specializing their economies in the production of goods for which they have comparative advantage and deriving benefits from a more efficient allocation of resources. In terms of economic theory, the expectation is to benefit from the classical gains from trade. However, as trade liberalization is not complete and rather is done on a discriminatory basis (both in the sense of the limited group of countries involved and the groups of products that are effectively liberalized), its net economic outcome is uncertain.

Even though Latin American countries have been unilaterally liberalizing their economies since the 1980s, the agricultural sector has remained relatively protected. The same situation is observed with respect to the formation of trade agreements and the G-3 Free Trade Agreement is no exception. This paper attempts to provide a description of some recent developments in G-3 member countries' agricultural policies, to present the most important characteristics of the G-3 Free Trade Agreement (with emphasis on the agricultural sector), and to assess qualitatively the potential impact of the agreement on member countries' agricultural trade.

The organization of the paper is as follows. The first chapter describes the current status of agricultural policies in the G-3's member countries. They provide the economic environment of the agreement. Chapter Two presents a brief discussion of the origin of the Group of Three and offers an overview of the general content of the G-3 Free Trade Agreement and its agricultural provisions. The examination of the G-3's agricultural provisions in the context of intra-G-3 agricultural trade is accomplished in Chapter Three and a qualitative assessment of their implications is performed. Finally, two appendices contain (1) the operational definition of the agricultural sector employed and (2) support data for Chapter Three.

## 1. Overview of G-3 Agricultural Policies

### 1.1 Colombian Agricultural Policy

#### 1.1.1 The Opening Up of the Colombian Economy

Until 1990, Colombia had been recognized in international circles as an economically inward oriented country. Even though it ". . . has not always had a protectionist trade regime, external sector policies have been used frequently as an instrument of macroeconomic management of cycles in agricultural exports . . ." (Hallberg and Takacs, 1992; p. 260) - and were long the major source of foreign exchange receipts. Only with the macroeconomic adjustment program accomplished during 1984-86, did macroeconomic policies start to be used for economic stabilization purposes and trade policy for promoting long-term export growth and diversification of exports (Hallberg and Takacs, 1992).

The reforms of 1984-86 were able to stabilize the Colombian economy, reducing considerably the external imbalance and producing moderate rates of economic growth. Further stabilization measures were necessary in 1988-89 due to the deterioration of the international price of coffee and increased fiscal pressures arising from the anti-drug policy (Hallberg and Takacs, 1992). Yet the government realized that stability alone does not lead to higher productivity or economic growth and there was a need for improving the competitiveness of the economy, especially if it is taken into account that the economic expansion in the years before 1990 ". . . may be characterized as

a succession of short-lived sectorial booms without a clearly discernible structural pattern." (Ocampo, 1992, p. 303)

This situation, along with the growing number of other Latin American countries that have undertaken economic reforms that include trade liberalization<sup>1</sup> and the increasing interest in negotiating free trade agreements (FTAs)<sup>2</sup>, set the conditions for the launching of the Economic Modernization Program (EMP) in February 1990. This program, aimed at improving resource allocation efficiency and increasing competitiveness, had an ambitious trade reform as a keystone. This economic reform is usually referred to as the "Apertura" (opening up).

#### 1.1.2 Agricultural Trade Policy in the 'pre-Apertura' Period

Until 1990 agricultural production was kept under a protectionist regime that sought to develop self-sufficiency in food and raw materials production and to stimulate exports by means of a wide variety of trade instruments. Tariffs, advance deposits, import licenses, import quotas, minimum prices, export quotas, tax incentives for exports, and a government monopoly on agricultural imports were used to achieve these goals.

Like other products, agricultural imports were controlled through the mechanism of import licensing. As part of national macroeconomic policy,

---

<sup>1</sup> Chile -1974-79, Mexico -1983-88, Bolivia -1985-90, Venezuela -1989-93, Brazil -1990, Peru -1990, and Argentina -1988-90.

<sup>2</sup> Not to mention the pressure exerted by international organizations such as the World Bank and the International Monetary Fund.

the Monetary Board determined the foreign exchange budget available for imports and the Foreign Trade Institute rationed it among the different importers by means of the import licensing system, thereby establishing quantitative limits on imports. Any item to be imported belonged to one of three categories (Hallberg and Takacs, 1992). First, items included in the free list were freely importable, paying their corresponding tariffs and surcharges, and included intermediate inputs, raw materials, and capital goods (neither of them competing with national products). Second were items under prior import licensing which included most consumer goods and other products which compete to some degree with national production. Third were items in the prohibited list (accounting for around 1 percent of goods) which were forbidden because of health or safety considerations or because of their luxurious character.

Table 1.1 Percentage of Agricultural Products under Different Import Regimes in Colombia in the 'pre-Apertura' Period

	Free list	Prior license	Prohibited list
Raw materials, animals	42	58	0
Processed food	18	78	4
Total under each system	34	63	3

Source: Hallberg and Takacs (1992)

As Table 1.1 shows, the biggest portion of agricultural imports were subject to prior import licensing, processed food being the highest proportion under this system. In the period immediately before the implementation of the

Economic Modernization Program (EMP), the average tariff for agricultural imports was 22 percent plus a surcharge of 18 percent.

Besides the licensing and tariff systems, the Colombian government had a monopoly on the import of a substantial part of agricultural products, particularly grains and oils, through the Institute of Agricultural Marketing (IDEMA). In fact, IDEMA was intended to perform a regulatory function, importing products during periods of domestic production shortage and holding inventories to maintain adequate supply and prices. The differential between international and domestic prices (when favorable for the Institute) was used to help finance its activities. On the other hand, the government established minimum or guarantee prices that were administered by IDEMA. This institute acted as a buyer in the most important production areas as well as in those regions where the campesino sector worked in relative isolation from the national marketing network. This function permitted IDEMA to manage the set of instruments required to have complete regulatory power over a significant portion of the agricultural market.

Nonetheless, in periods when the relationship between domestic and international prices favored the development of exports of products that were oriented primarily to the internal market, a system of export quotas was employed. This was intended to secure sufficient domestic supply, preventing rises in consumer prices but strangling any chance of selling to the international market. This was the case for products such as cattle, sugar, cocoa, and cotton. On the other hand, marketing of nontradables was left to a great extent to market forces and the government made very little effort to

regulate this process. The most significant result was the creation of central wholesale markets in various principal cities starting in the early seventies.

Export promotion of agricultural products was encouraged with the establishment of an indirect tax rebate scheme (CERTs), the allocation of subsidized credit, and export promotion activities led by the Export Promotion Fund (PROEXPO). There are just a few cases in which the system produced positive results, most notably banana and flower exports. Picking up successful products and alternative ways to carry on the projects proved to be quite difficult. Moreover, it has been argued that the anti-export bias introduced by the Colombian 'pre-Apertura' import regime was so strong that export promotion measures ". . . would have had to average more than five times their 1989 levels in order to offset this bias, which would have represented a sum equal to about 20 percent of the fiscal budget." (Hallberg and Takacs, 1992, p. 268)

The diversity of treatment received by agricultural products makes it difficult to generalize about their implications. By 1986, agricultural products, on average, appeared to be unprotected as pointed out by Hallberg and Takacs: "[e]ffective protection estimates based on the differences between 1986 domestic and international prices showed a sharp discrimination in favor of industry (71 percent average effective protection) and against agriculture and mining (-8 percent). The estimates showed no correlation between effective protection as measured by price comparisons and the effective protection implicit in tariff rates . . . [t]hese findings imply that tariffs merely placed a lower bound on protection for items for which QRs actually determined domestic prices." (1992, p. 267-8).

It is clear that even though agricultural products are on average unprotected, importables have tended to be highly protected. Their degree of protection also depended on variables such as the exchange rate. Between 1960 and 1969, the percentage difference between domestic and international prices tended to be positive (i.e. policies were protectionist in their effects); from 1970 to 1976, this difference tended to be negative; and between 1977 and 1987, with some variations, it tended to be protectionist.

The major difference between the protectionism of the sixties and that of the seventies and eighties is that the latter was rather selective and tended to obey the needs of supplying the internal market, although not without costs. The results of this type of policy, according to de Pombo (1992), showed that ". . . some agricultural products lack comparative advantage. This had caused those products to lose ground as alternatives in the use of land (corn and soy) and as exportable products (rice and cotton) . . . When state intervention has had superfluous results and produced elevated costs for the national budget and for consumers, it becomes convenient to open markets to competition since it will bring about greater stability for growth, consolidation of technical advances, and better supply for the markets." (p.183)

### 1.1.3 Agricultural Policy in the 'Apertura' Period

The EMP stated ambitious objectives for the agricultural sector. The Modernization and Diversification Program for the Agricultural Sector (MDP), which constitutes its sectorial plan, was aimed at increasing income

based upon ". . . actions that are intended to guarantee its strengthening and expansion, improve its efficiency and productivity, and take into account the reality of production in the rural sector and domestic and foreign market characteristics." (de Pombo, 1992; p. 168) The key aspects of this program relate to (1) domestic and international marketing, (2) safeguards for national production, (3) infrastructure, (4) production costs, (5) generation and transfer of technology, and (6) credit.

The elimination of quantitative restrictions (QRs) and the reduction in tariff levels for capital goods and inputs for the agricultural sector were the first steps in the completion of the MDP<sup>3</sup>. Later, considering that agricultural products used as intermediate goods had reduced import tariffs and that international competition was threatening for others, a price band mechanism was introduced in June 1991 as a stabilization device. Initially, six importable goods were subjected to this mechanism (rice, sorghum, corn, wheat, barley, and soybean) and afterwards two more were added (sugar and milk).

Management of agricultural and livestock credit was centralized in a fund (FINAGRO), in an attempt to unify criteria applied in this field in aspects such as interest rates (eliminating subsidized interest rates with the exception of credit oriented to farmers in extreme poverty conditions), loan amounts, grace periods, payment timing, and eligibility of projects.

---

<sup>3</sup> At the end of 1990, ". . . only twelve of a total of 395 tariff classifications for inputs and raw materials used by the agricultural and livestock sector [were] still subject to prior import licensing regulations . . ." (de Pombo, 1992, p. 169).

Two other institutional changes of importance were introduced. First, the creation of the National Technology System (SIMTAP) based on the 'semi-privatization' of the former Colombian Agricultural Research Institute (ICA) and the promotion of private technical assistance units which operate preferentially on a regional basis. One of the foundations of this change is the aim to have a demand-driven research and technical assistance system. Second, the process of political and administrative decentralization has given municipalities responsibility for the management and financing of public technical assistance units (UMATA) as well as other services for the agricultural and livestock sectors (such as price information and training).

As mentioned above, the 'tariffication' of QRs (that is, the substitution of tariffs and surcharges for the import licensing system) was one of the main instruments in modifying Colombian agricultural policy. By November 1990, only 8 percent of agricultural products were placed under the prior licensing system while 92 percent were under the free list; according to their stage of processing, 92 percent of raw materials, animals, and agricultural products were under the free list regime, and 82 percent of the processed food products were also under this regime. At the same time, the average tariff for agricultural imports was reduced slightly to 20 percent and the tariff surcharge to 13 percent.

These changes in tariffs did not appear to imply big consequences for the agricultural sector but the elimination of QRs and the subsequent abolition of the import monopoly exerted by IDEMA introduced new elements to sectorial trade. The 'Apertura' program contemplated the inclusion of distinctive instruments to deal with this particular situation; ". . . in

November [1990], the elimination of QRs for industrial products was completed with the transfer of all but 3 percent of tariff positions to the free list. The remaining 3 percent corresponded to (1) basic agricultural products and their derivatives, for which a variable tariff scheme was being designed, and (2) items restricted for health and safety reasons." (Hallberg and Takacs, 1992, p. 270)

The variable tariff scheme that Hallberg and Takacs referred to is based on a price band mechanism intended to safeguard domestic producers from the instability of international prices for agricultural products. As has been pointed out by The International Agricultural Trade Research Consortium - IATRC - (1994), under a trade regime based on tariffs and increasing international integration, the stabilization of domestic prices becomes a critical policy area. According to this organization (IATRC, 1994), most Latin American countries engaged in trade liberalization policies seem to be able to confront explicit export subsidies (as in the case of American wheat exports and European sugar and powder milk exports). However, they experienced difficulties with less explicit subsidization and with occasional exports at prices below the prevailing levels in the central markets of the concerned countries. "Extending trade preferences exposes producers of import-competing activities in countries that are residual markets for exports from trading partners in the region to face low and very unstable border prices from the regional suppliers." (IATRC, 1994; p.84)

The use of the price band mechanism in Colombia was authorized within the regulations introduced by the International Trade Law of 1991. They were conceived as the means to determine whether or not to adjust

(upward or downward) custom tariffs established for agricultural importables, its substitutes and derivatives. According to this law, the variable tariff policy was intended to ". . . stabilize the import costs of agricultural products or agroindustrial products related to them whenever their prices could be highly unstable in international markets." (quoted in Reyes and Ramirez, 1993)

Even though the price band mechanism is undoubtedly the most important element in the agricultural trade policy of the 'Apertura' period in Colombia, there has been a need to make use of complementary instruments. Under laws established in the 'pre-Apertura' period, guarantee prices for some products have been set for short periods in order to ". . . avoid decreases in farmers' income" (Ministry of Agriculture and Livestock; Resolución 09040, November 1991); similarly, price adjustment factors intended to increase farmer's prices have been employed temporarily. In addition, as a permanent measure, IDEMA's role as a buyer has been reactivated but restricted to poor marginal areas.

After two and a half years of functioning, Reyes and Ramírez (1993) performed an evaluation of the price band mechanism in which attention was given to its effects on price stabilization, protection of domestic production, and farmers' income, as well as to possible methodological problems. The authors arrived at the conclusion that there is a bias in the mechanism, noting the persistent tendency of the official reference price to be below the floor price. Therefore, for the period under analysis the price bands have favored protectionism. However, the variable tariff was quite

important in achieving price stability while movements in the exchange rate registered a modest, or even negative, role for this purpose.

In the same way that price bands have had an stabilization effect on domestic prices, they have contributed to stabilizing farmers' prices. Reyes and Ramírez found a stabilization effect for all products, except soybean. Finally, the authors analyze the effects of price bands on income and welfare. In all cases, benefits to farmers derived from resource transfers were much bigger than those arising from risk diminution<sup>4</sup> (in the case of soybean the latter is even negative). The benefits from transfers are large for corn producers, medium for rice, barley, and milk, and small for sugar, sorghum, soybean, and wheat.

The overall conclusion from Reyes and Ramírez' analysis is that the price band mechanism has been beneficial for producers, but it has acted very much as a protectionist rather than a stabilization mechanism. Indeed, they found that the level of protection under this measure is bigger than with fixed ad-valorem tariffs and that in some cases the products included do not have highly variable international prices.

#### 1.1.5 Final Comments

In 1992 the agricultural sector in Colombia showed clear recessive symptoms that motivated strong pressure from farmers on the

---

<sup>4</sup> Positive values associated with transfers of resources indicate net gains in farmers' income at the expense either of consumers or taxpayers and positive values associated with gains in efficiency (risk diminution) indicate benefits for farmers stemming from price stabilization.

government. As a result, a series of political measures were adopted to alleviate the ongoing crisis. Among them is the transient modification of part of the conditions that ruled agricultural credit for loans already given to farmers in some subsectors, the modification of the price band mechanism for substitutive and derivative products and byproducts, the establishment of guarantee prices for some products, and the reactivation and strengthening of the role of IDEMA as a buyer of commercial crops.

Even though the 'Apertura' process was blamed as the cause of this crisis, some authors have shown that it was not the real source (Montenegro, 1993). Indeed, as follows from the analysis done by Reyes and Ramírez (1993) on the price band mechanism, it is difficult to argue that the 'Apertura' process caused the crisis; on the contrary, the price band mechanism acted very much as a protectionist device, a little as a stabilization measure, and not at all as a non-protectionist policy. According to Montenegro (1993), the main roots of the agricultural crisis of 1992 stemmed from an unfortunate coincidence of factors that had a generalized decline of international prices and a severe drought as key factors. Nonetheless, Montenegro concedes that other factors (such as the appreciation of the exchange rate, the decrease in import tariffs for some products, rural violence, and the crisis of the Colombian Agricultural Bank) played a considerable role in the advent of this crisis.

It appears that in spite of the controversy that arose around the impact of the 'Apertura' process on the agricultural sector, the period since its implementation is still too short to allow a complete evaluation of its effects. Major institutional changes like the decentralization of the

extension service and the 'semi-privatization' of the agricultural research system have yet to show what kind of effect they will have on the development of the sector. Also, the impact of the 'Apertura' on other variables will exert important indirect influences on the agricultural sector; particularly the behavior of employment and income - as well as income distribution - is expected to affect the sector principally through the demand for food. Basic data on Colombian agricultural production, imports, and exports are provided in Table 1.2 below.

Table 1.2 Colombian Basic Agricultural Data (1989-1993)

	1989	1990	1991	1992	1993
Sectorial GDP <sup>1</sup>	6,699.7	7,087.6	6,990.4	7,773.3	8,652.2
Production index <sup>2</sup>	126.8	136.1	139.8	140.7	142.8
Per-Cap. Prod/n. index <sup>2</sup>	106.0	111.8	112.9	111.7	111.5
Agricultural imports <sup>3</sup>	338.7	392.5	314.8	637.8	747.5
Agricultural exports <sup>3</sup>	2,411.7	2,494.6	2,695.7	2,658.7	2,516.3

1 Source: The World Bank (figures in \$ Million)

2 Source: FAO's AGROSTAT (1979-81=100)

3 Source: United Nations (figures in \$ Million)

One of the most interesting questions is whether or not the 'campesino' (peasant) sector will be able to maintain its growth and to what extent the restructuring of the research system will affect it. A complementary question about the options for the campesino sector to overcome marketing difficulties is likely to be a major preoccupation. The puzzle for large-scale agriculture is how to improve its efficiency to compete with foreign products. It is possible that the example of sugar cane, coffee, flowers, and

banana can be illustrative. In these cases farmers have devoted a considerable amount of capital to develop and operate research and extension units which produce or adapt new varieties of plants and transfer not only these new varieties but also new and more adequate farming practices improving the efficiency of their economic activity.

Undoubtedly, the proposed government plan for improving basic infrastructure has an important role in the outcome for the agricultural sector. Road construction, port modernization, refrigerated storage facilities, and communications are some of the services required by the agricultural sector to achieve the competitiveness that is needed for its full development. It is also clear that an adequate exposure of the sector to external competition is necessary to promote the desired transformations and that some fine tuning (if not substantial changes) must be accomplished in sectorial policy.

## 1.2 Mexican Agricultural Policy

### 1.2.1 The Opening Up of the Mexican Economy

Oil dependence and cyclical fiscal deficits created the conditions for a series of 'stabilization crises' that have characterized the Mexican economy, especially during the 1970s and 1980s. In response to one of these crises President de la Madrid (1983-1988) implemented a new stabilization program with the IMF in 1983.

Even though the economy showed signs of recovery under the new program, the fiscal deficit fell only marginally due to the fact that interest payments rose more than government spending decreased. As a consequence, inflation soared - reaching 159 percent in December 1987 (Kalter, 1992, p. 5). In the middle of an electoral year, the government resorted to ". . . a series of closed-door negotiations with representatives of major economic interests . . ." (Joint Economic Commission, 1988; p.24). The goal of these negotiations was to break the political opposition and to work out a way of satisfying both demands of fairness regarding austerity and the goal of increasing economic efficiency. The result of these meetings, held during the final year of the de la Madrid administration, was a broad social agreement named the Pacto de Solidaridad Económica, popularly known as the Pacto.

Among other reforms, the Pacto pushed for an acceleration of trade liberalization of the economy<sup>5</sup>. The signing of a "framework agreement" on trade with the United States contemporary with the negotiation of the Pacto acted as a catalyst for increased liberalization. According to a study of the Joint Economic Commission, the process of trade liberalization led Mexico ". . . from a complex system of 16 different tariff schedules with rates as high as 100 percent to a single schedule with a maximum rate of 20 percent." (1988, p. 28). From the issuing of the Pacto, the Mexican government relied more heavily on the management of the exchange rate as a means for controlling the flow of imports and avoiding further deterioration of the

---

<sup>5</sup> Mexico started liberalizing the economy in 1983, reducing tariffs and quantitative restrictions, and decided to join the GATT in 1986 during the implementation of the third stabilization package with the IMF.

trade balance. This mechanism replaced to a great extent the use of quantitative restrictions which were eliminated completely on 95 percent of all tariff items, representing about 75 percent of import value.

The economic policy under the Salinas administration (1989-1994) followed the path signaled by the Pacto, but tried to extend its economic scope in order to foster improved conditions for sustained growth. The Salinas program essentially intensified the policies initiated in 1986. In this regard, measures were undertaken to liberalize its international trade and investment systems, to liberalize and privatize the financial system, and to deregulate specific economic activities.

During the Salinas administration the liberalization of international trade beyond the point reached at the end of 1988 was minor in reference to quantitative restrictions, tariffs, import reference prices, and export promotion<sup>6</sup>. To narrow the range of applied tariffs, in 1989 the minimum tariff was raised from 5 to 10 percent and the established tariff structure was maintained. Also, the elimination of remaining official import prices was continued and efforts to develop non-oil exports were increased (In 1989 a joint commission for the promotion of non-oil exports was established with participation of the public and private sectors - Szymczak, 1992, p. 30). However, very important steps were taken in securing the effective application of these changes. A comprehensive free trade agreement was negotiated and implemented with the United States and Canada (NAFTA)

---

<sup>6</sup> Quantitative restrictions affecting automobiles were modified at the end of 1989 and by 1990 less than 15 percent of imported items were subject to licensing requirements (mainly agricultural and agroindustrial products as well as petroleum and derivatives).

while similar agreements were negotiated with a number of Latin American countries.

Government efforts to liberalize foreign investment were also very important during the Salinas administration. The goal was to reach 5 billion dollars a year in foreign investment during the early 1990s, more than doubling the figures for the 1980s. However, at the end of the Salinas administration it was clear that none of the policies aimed at insulating the Mexican economy from external shocks was strong enough to prevent a new economic crisis. Trying to overcome the cycle of low economic growth, the government shifted aggregate demand policy, increasing governmental spending and allowing the financial sector to maintain lower levels of reserves.

A series of speculative attacks against the peso forced the government to gradually resort to stricter measures to avoid an exchange crisis. From mid-1992 to September 1993, tight monetary policy combined with high interest rates were employed to keep the exchange rate stabilized; however, these measures were insufficient to control the situation and between September 1993 and March 1994 it was necessary to devalue the peso while maintaining high interest rates and increasing public debt through dollar-indexed bonds (Tesobonos). The increase in international interest rates in February 1994 worsened the situation and the Mexican government pushed the interest rate up further and resorted to limited sales of international reserves between April and August. Finally, from September to December 1994 (during the transition period between the Salinas and Zedillo administrations) massive sales of international reserves were necessary and

the peso plummeted further causing a deterioration in the current account<sup>7</sup> (Thorne, 1995).

### 1.2.2 State Intervention in the Agricultural Sector

As in other countries, state intervention in the Mexican agricultural sector has been extensive. During the 1930s, under the government of Lázaro Cárdenas, large amounts of land were allocated land to the ejido system. Starting in the 1940s and continuing to the mid-1960s, significant public investment was made in rural infrastructure (from dams and irrigation systems to roads and electrification projects) and a positive climate was created for private sector large-scale commercial agriculture. New lands were opened to agricultural production, particularly in the north and northwestern regions, while high-yielding crop varieties were introduced and technologies associated with irrigation production were promoted. While there was practically no deconcentration of land ownership in the southern part of the country, this period, corresponding to the 'green revolution', perpetuated the bimodal pattern that characterizes Mexican agriculture.

Simultaneously, a broad set of parastatal enterprises was created to attend to the needs of a growing agricultural sector that between 1940 and 1960 increased its output at an annual rate of 6.3 percent (Martin, 1993; p.14). In the early 1950s the Mexican Import and Export Company - CEIMSA - was

---

<sup>7</sup> According to Mariscal (1995), short term public debt in dollar-indexed Tesobonos accounted for 6% of this type of debt in December 1983, 87% in December 1994, and 69% in February 1995.

created to act as the official domestic buyer and importer/exporter of agricultural products. Official guarantee prices were established in 1953 to help avoid price fluctuations and to stimulate production through periodic adjustments. In 1961, CEIMSA was restructured and changed its name to Compañía Nacional de Subsistencias Populares - CONASUPO. As a result of its restructuring, the firm broadened its activities, expanding the coverage of the product collection system, buying or creating a series of food processing industries, and enlarging its chain of retail stores to final consumers - DICONSA.

Also during this period the agricultural credit system was reinforced through the creation of several regional programs and the encouragement of private loans to the sector. Around the mid-1960s, 68 percent of the agricultural credit was provided by the private financial sector (Appendini, 1992b). In addition, other related institutions were created to support Mexican agricultural development supplying subsidized inputs. For example, seeds production and distribution was provided through PRONASE, the production of chemical fertilizers was nationalized and FERTIMEX became a state monopoly, the production of insecticides was reorganized, and other inputs such as electricity, diesel and gasoline, and water were subsidized.

The modern sector was responsible for the biggest part of sectorial output increase. The convergence of high support prices and subsidies boosted production from 'entrepreneurial' farmers while the incorporation of new land into the 'traditional' sector made possible an increase in its production. However, at the end of the 1960s Mexican agricultural output decreased as a

consequence of the drop in the profitability of basic products and the lack of responsiveness of the 'traditional' sector (Appendini, 1992b; p. 53). As a result, in the early 1970s Mexico became a major importer of basic foodstuffs (Burbach and Rosset, 1994; p. 5).

At the beginning of the 1970s, under the integrated rural development program - PIDER, the Mexican government initiated a new wave of public spending in the agricultural sector. Small and medium-scale irrigation projects were accomplished, the distribution of inputs and the collection of products were improved through the strengthening of CONASUPO's rural warehouses (BORUCONSA and ANDSA), and the credit system was restructured in 1976 with the creation of the Mexican Rural Bank - BANRURAL. In spite of these efforts, agricultural output growth lagged behind population growth and at the end of the 1970s the food deficit was huge<sup>8</sup>.

The last attempt of the Mexican government to introduce dynamism into the agricultural sector through public spending was made between 1980 and 1982 during the oil boom. Agricultural public spending increased more than 15 percent between 1980 and 1982, sectorial investment grew nearly 9 percent annually, guarantee prices rose, and governmental subsidies were kept at high levels - preferential interest rates were 82.5 percent less than commercial rates, the price of fertilizers was 30 percent below market prices, and seed prices were 70 percent less than free market prices (Appendini,

---

<sup>8</sup> It has been calculated that had food imports continued increasing at the rate of the late 1970s, by 1990 about 72 percent of total Mexican oil revenues would have had to be devoted to food imports (Martin, 1993; p. 38).

1992b; p. 73). While agricultural output soared, so did public spending. However, the Mexican Food System - SAM - was short-lived; the decline in oil prices and the financial crisis declared in August 1982 obligated the government to practically discard the program and the goal of self-sufficiency.

During the period of orthodox adjustment (1982-1987) the contraction of the economy did not affect drastically the agricultural sector and therefore the consequences of the crisis were not felt until the end of 1986. Even though a strict policy of austerity was implemented and public agricultural spending was restricted, slight increases in guarantee prices and the maintenance of agricultural subsidies together with the positive effects of periodic currency devaluation and favorable weather, helped the sector to alleviate the early effects of the crisis. This was a period during which the fruits and vegetables sector experienced remarkable growth that, even though not matched by high international prices, was significant in increasing its importance within the agricultural sector and the Mexican export sector in general.

It has been pointed out by Appendini (1992b), that agricultural policy during the first half of the de la Madrid administration was hesitant and to a great extent it was reduced to budget restrictions. However, starting in 1986 and coinciding with negotiations held with the World Bank around the assignment of a series of loans for the agricultural sector, some measures were initiated pointing towards the restructuring of Mexican agriculture.

### 1.2.3 The Agricultural Reform

One of the few points around which there is broad consensus among analysts of the Mexican agricultural sector was the need to reduce and rationalize public agricultural expending. Decades of intense governmental intervention in the agricultural sector did not suffice to make Mexican agricultural policy successful - the fiscal cost of these policies was also high: in 1985 FERTIMEX received fiscal transfers equivalent to 0.3 percent of GDP (Appendini, 1992b).

Consequently, in 1987 Mexican agricultural policy changed and a period of significant reform for this sector was initiated. Until this year, sectorial policy, especially food policy, was dominated by a short-term vision determined to a great extent by anti-inflationary measures within the framework of adjustment policies. The new agricultural policy, conversely, was more integrated with the macroeconomic program and more aggressive in introducing changes into the rural area. The confluence of the macroeconomic adjustment and stabilization program, the economic restructuring process, and the aim of economic liberalization generated the need for such an integration.

At the end of 1988, the share of agricultural imports that required prior licenses was reduced from 85 percent in 1985 to 53 percent. Simultaneously, the elimination of licensing requirements and the reduction of import tariffs for agricultural inputs was performed at a faster pace in order to benefit domestic production. Price increases were implemented initially covering diesel, gasoline, electricity, and water, and seeds and fertilizers later

on. Increases in guarantee prices for agricultural outputs were allowed at smaller levels than prices for the corresponding inputs and therefore profitability dropped. The gap between the preferential interest rate for the agricultural sector and the commercial interest rate was diminished, driving this subsidy from 0.51 percent of GDP in 1986 to 0.13 percent in 1988. Public spending in agriculture fell from 8.21 percent of total programmable spending in 1986 to 5.39 percent in 1988, contracting the execution of sectorial programs like irrigation, extension, and research. Even though diminished, the Mexican agricultural and food support budget amounted to 3.1 billion dollars in 1988 (Cook, 1993; p. 900-4).

Besides the introduction of these changes in Mexican agricultural policy, the shift from an orthodox to a heterodox macroeconomic adjustment policy (signaled by the issuing of the Pacto), implied a significant modification in the management of the exchange rate. The peso, which had been devalued periodically within the orthodox approach (favoring Mexican agricultural exports and discouraging imports), was subjected to a new regime of slow controlled devaluation that was programmed to be about 8 percent annually during the first three years of the Pacto. This fact, along with the presence of higher interest rates in Mexico than in the U.S. and the existence of preferential credit for Mexico in the U.S. market to buy its agricultural products, generated strong anti-export forces that helped to depress domestic production. As a consequence, sectorial GDP experienced negative growth rates during 1987-1988 (Appendini, 1992b).

These changes, however, constituted only the beginning of the 'revolution' experienced by the Mexican agricultural sector from 1989, during the

presidency of Carlos Salinas. The agricultural reform undertaken during the Salinas administration could be characterized as an effort to modernize and dynamize the agricultural sector by means of opening it up to market forces. In 1989, a series of major institutional changes were carried out by the government, beginning the process of deregulation and privatization of the agricultural sector. Credit policy was modified and BANRURAL decided not to give new loans to farmers that had not restructured their outstanding loans. As a consequence, around 70 percent of its clients lost access to financial support. Even though this policy was eventually made flexible, as of August 1990 22 percent of the arable land that usually received credit from BANRURAL continued to be excluded from it. Additionally, commercial farmers began to be serviced only through private banks. An important change in production policy was also accomplished. Government support was segmented and the bulk was targeted towards farmers considered to have the potential to improve their efficiency. A series of Regional Promotional Plans were developed and only the specific areas and crops that matched the criteria established under each of these plans were allowed governmental productive support. (Appendini, 1992a, 1992b; Hewitt, 1992; Myhre, 1995; García, 1995)

The role of CONASUPO was redefined so that its marketing activities were restricted to corn and beans and its former monopoly on agricultural imports was abolished. In order to strengthen the presence of this agency in ejido areas, the Marketing Support Program for Ejido Areas (PACE) was broadened and the location and number of BORUCONSA's (CONASUPO's points of purchase) warehouses were modified. Consistently with the segmentation of governmental agricultural support services, the National

Program of Solidarity (PRONASOL) was launched with the purpose of bringing social assistance to farmers without the potential to improve their productive efficiency. (Appendini, 1992a, 1992b; Hewitt, 1992; Myhre, 1995; García, 1995)

Other additional measures were also implemented during 1989. The National Agricultural and Livestock Insurance Company (ANAGSA) was eliminated and was later replaced with a new firm (AGROSEMEX). The retirement of CONASUPO from the marketing of the majority of agricultural products was compensated with the creation of ASERCA which performs the function of an agricultural product exchange market, seeking both a more 'transparent' and efficient process of price determination. FERTIMEX's manufacturing plants were privatized and the firm was redefined solely as a marketing business. At the end of 1989, the budget allocated to the Mexican Ministry of Agriculture, Livestock, and Water Resources (SARH) had decreased 70 percent in real terms as compared with that of 1983. Finally, the flexibility allowed for imports of agricultural products was further increased and hence the degree of foreign competition within domestic markets was enhanced. (Appendini, 1992a, 1992b; Hewitt, 1992; Myhre, 1995; García, 1995)

Following the institutional shock of 1989, the transformation of the agricultural sector was formalized through the launching of the National Program for the Modernization of the Rural Area 1990-1994. After the first year of this program, the average import tariff for agricultural products was 5 percent and among the main domestically produced goods only maize, beans, and wheat continued to be under licensing requirements (Appendini,

1992b; p. 104). In addition, imports of agricultural inputs were completely liberalized and guarantee prices (with the exception of maize and beans) and subsidized interest rates were abolished. The production of maize and beans in 'promising' rain-fed areas also became eligible for attention under the Regional Promotional Plans system.

Three major policy tools were introduced in Mexico after the launching of the Program for the Modernization of the Rural Area. First, the modification of the land ownership regime in January 1992; second, the signing of NAFTA in December 1992; and, third, the establishment of the Program for Direct Support to Rural Areas (PROCAMPO).

The change of the land ownership system implied the modification of the Mexican constitution. The objectives of this change are ambitious: it attempts to create a market for land in Mexico and to remove institutional rigidities that were presumed to be blocking private investment. The new regime 'individualized' land ownership and gave legal title to land to ejido farmers who now can sell or use it as collateral for their loans. This also allowed foreigners to buy land in Mexico (up to the limits established for private nationals in the modified article 27 of the Mexican constitution), and authorized land ownership by corporations (previously prohibited) limiting their landholdings to 2,500 hectares.

In 1989, Mexico and the United States conducted talks about the definition of a framework for broadening bilateral trade and investment relations that, in 1990, was extended to cover standards, regulations, testing, and certification issues (USDA, 1992; p. 1). In June 1990 President Salinas asked

President Bush to consider the establishment of a free trade area (FTA) between the two countries. Since Canada already had an FTA with the U.S., it decided to join the set of conversations that, after about two years, culminated with the signing of the North American Free Trade Agreement (NAFTA). The coverage of NAFTA regulations is broad, comprising areas in which other international treaties have made only limited advances such as property rights, the environment, and labor issues. Its importance for the Mexican economy as a whole cannot be overstated and its impact on the Mexican agricultural sector, in particular, is expected to be a major determinant in shaping its future as it allows open competition with the U.S.' agricultural sector.

Among the striking challenges faced by the Mexican agricultural sector is the effective and efficient conversion of its productive activities. The Mexican government has attempted to decouple farmer support from production decision-making, hence freeing the introduction of new crops by means of a system of financial transfers to farmers. Instead of making these transfers conditional upon the newly planned crops, the new system is based on historical average acreages planted in some crops and on fixed average yields. Established in October 1993, this Program for Direct Support to Rural Areas (PROCAMPO) is intended to benefit about 70 percent of total cultivated area and will make constant payments, in real terms, to farmers during a ten year span after which it will be phased out within five more years (Valdés, 1994; p. 29). Basic data on Mexican agricultural production, imports, and exports are presented in Table 1.3.

Table 1.3 Mexican Basic Agricultural Data (1989-1993)

	1989	1990	1991	1992	1993
Sectorial GDP <sup>1</sup>	18,065.7	25,427.3	21,397.5	26,320.9	27,477.8
Production index <sup>2</sup>	104.9	115.6	118.9	117.2	121.1
Per-Cap. Prod/n. index <sup>2</sup>	85.1	91.8	92.5	89.2	90.2
Agricultural imports <sup>3</sup>	3,534.9	4,268.0	4,046.1	5,353.6	5,205.2
Agricultural exports <sup>3</sup>	2,726.0	2,996.6	3,224.5	2,895.6	3,549.2

1 Source: The World Bank (figures in \$ Million)

2 Source: FAO's AGROSTAT (1979-81=100)

3 Source: United Nations (figures in \$ Million)

#### 1.2.4. The NAFTA and the Agricultural Sector

As was mentioned, NAFTA regulates the phased elimination of most trade barriers (tariff and non-tariff barriers) on trilateral trade among Mexico the U.S. and Canada. The accord includes trade and investment provisions and is the first case of an FTA linking developed and developing economies. According to Hufbauer and Schott (1993), "[t]he accord immediately converts key US and Mexican agricultural restrictions into tariff-rate quotas and sets a maximum 15-year period for the phase out of the over-quota tariffs -an impressive achievement considering the dismal track record of other talks in reducing long-standing farm trade barriers." (p. 2) A particular feature of NAFTA's agricultural provisions is that they are the only case in which the agreement does not involve the three signing countries; instead, two separate bilateral accords were negotiated between Mexico and the U.S. and Mexico and Canada, while agricultural trade among the U.S. and Canada continues to be ruled by their previous FTA. Nonetheless, provisions on

rules of origin, safeguards, and sanitary and phytosanitary standards are common to the three countries.

NAFTA's agricultural bargaining process concentrated on the mutual elimination of trade and non-trade barriers to trade between Mexico and the U.S., particularly in regard to Mexico's liberalization of its import regime for basic crops (especially grains) and the U.S. opening up for imports of sub-tropical fruits and horticultural products from Mexico. The agreement established five different schedules for trade liberalization ranging from immediate tariff elimination to tariff-rate quotas complemented by a fifteen year phase out period for tariffs (Hufbauer and Schott, 1993).

The three countries have issued lists of products to which a special safeguard mechanism, in the form of TRQs (different from those mentioned above), can be imposed within the 10 year transition period if considered necessary to protect domestic production. In the case of the U.S. the list includes seasonal vegetables and fresh watermelons and in the case of Mexico it includes swine, certain potatoes, and fresh apples. Similarly, a 'snapback' in imposed tariffs to the pre-NAFTA level (or the Most Favored Nation level if lower) is allowed for a period up to 3 years (or 4 in the case of the most import-sensitive products), if the surge of imports from a NAFTA partner threatens to cause substantial damage to domestic producers. These safeguard mechanisms cannot be applied simultaneously to the same product.

As was mentioned, NAFTA also determines common sanitary and phytosanitary measures and establishes strict rules of origin. For example, a

processed farm product, in general, can only be classified as of North American origin if at most up to 7 percent of its transaction value is of non-NAFTA origin (for tobacco this value is 9 percent and for fruit juices 0).

### 1.2.5 The Provisional Outcome of NAFTA

There seems to be a loose consensus among analysts that the future of Mexican agriculture under NAFTA is not very bright. While agricultural liberalization makes the realization of important efficiency gains for the Mexican economy possible (Levy and van Wijnbergen, 1992), these gains may entail a huge social cost. Appropriate mechanisms are needed to assure the mobility of resources from the agricultural sector to other sectors of the economy (Martin, 1993) and the dynamics of economic growth need to provide for the productive absorption of these resources.

Ex-ante evaluations of the impact of NAFTA on Mexico-U.S. agricultural trade flows indicated that U. S. exports to Mexico would increase faster than Mexican exports to the U.S., hence reinforcing the trend initiated from recent years towards net Mexican deficits in agricultural trade vis a vis the U.S. In fact, after having a 2 percent trade surplus in 1990, Mexico has registered considerable deficits in the following years - 19 percent in 1991, 60 percent in 1992, and 33 percent in 1993 (USDA, 1994; p. 7). An evaluation of bilateral agricultural trade flows after one year of operation of NAFTA, performed by the USDA's NAFTA Economic Monitoring Task Force (1995), shows that U.S. agricultural exports to Mexico increased 25.3 percent with respect to 1993 and that Mexican exports increased 5.4 percent, further deteriorating the Mexican agricultural trade balance. Table 1.4 details the

behavior of bilateral agricultural trade in 1994 with respect to the year before.

Table 1.4 Percentage Changes in Bilateral Agricultural Trade Between Mexico and the U.S. After One Year of Operation of the NAFTA with Respect to the Year Before

	<u>\$ Million</u>	<u>Change</u>
<b>U.S. Total Exports to Mexico</b>	4,513	25.3
Animals and animal products	1,359	15.8
Grains and feeds	1,223	38.2
Fruits and prepar., except juice	185	66.6
Fruit juices, including frozen	11	97.9
Nuts and preparations	44	18.0
Vegetables and preparations	263	42.4
Oilseeds and products	851	29.8
Other	580	5.0
 <b>U.S. Total Imports from Mexico</b>	 2,855	 5.4
Bananas and plantains	59	-37.9
Coffee, including products	333	32.5
Animals and animal products	385	-16.0
Live cattle	352	-18.1
Grains, products, and feeds	85	41.0
Fruits and preparations	358	14.0
Fruit juices, including frozen	58	89.5
Vegetables and preparations	1,125	6.3
Tomatoes	315	3.7
Sugar and related products	51	81.7
Beverages, except fruit juices	198	6.6
Cotton linters	14	17.9
Seeds - field and garden	7	-21.2
Cut flowers	13	11.2
Nursery stock, bulbs, etc.	8	11.0
Other	163	337.8

Source: USDA's NAFTA Economic Monitoring Task Force (1995)

In determining the future of Mexican agricultural sector, the evolution of the domestic market is a major question. If its growth is high enough to boost the demand for agricultural products, it could provide the main source for sectorial growth, depending on the composition of the demand.

The modern agricultural sector will become more integrated into a North American food system, characterized by highly competitive requirements and a permanent need for technological change and integrative schemes. Unless well directed policies and public investment are put into practice, this situation is likely to increase the technological and economic gap between the production of tradables and non-tradables and to exacerbate the characteristic "dualism" of the Mexican agricultural sector and the likelihood of increased rural to urban or international migration. This is so because of the relatively poor natural resource endowment that characterizes the Mexican agricultural sector and limits the possibility that traditional agriculture, lacking financial resources, can modernize without government intervention (Paarlberg, 1993; Cook, 1993; Levy and van Wijnbergen, 1992; OTA, 1992).

Dynamic gains from liberalization accruing to the agricultural sector are expected to be relatively limited. They depend almost exclusively on the potential of the sector to attract further investment, which is considered to be constrained by a variety of factors such as the relatively poor natural resource endowments of the country (especially land quality and water availability), the lack of clear-cut long term competitive advantage, and lack of infrastructure. On the other hand, the rapid de-regulation of the sector has created what has been called an 'institutional vacuum'. This threatens

not only the possibility of having a less disruptive transition period, both in the economic and social sense, but also the chance of modernizing and diversifying the traditional sector due to the absence of institutions (both at the government and community levels) that can carry out the needed transformation.

In such a context, the perspective for further economic integration of the Mexican agricultural sector with those of other Latin American countries is unclear. From the political point of view, it is unlikely that the Mexican government would be willing to add more trouble to the already complicated social situation in Mexican rural areas. From the economic point of view, it may be in the Mexican interest to have other suppliers of agricultural products competing on an equal basis with U.S. exports. However, new competitors also bring new dangers. Free trade with other Latin American countries creates competition for Mexican tropical products for the internal market and the consequences of this competition should be carefully considered before extending the scope of free trade.

### 1.3 Venezuelan Agricultural Policy

During the 1920s oil replaced agricultural goods as the main Venezuelan export. Since then, oil earnings have been the major source of fiscal revenues and have financed the modernization of the economy. The increased importance of oil and the overvalued exchange rate arising from the oil boom provided the economic basis for ending the power of the old landowners class. A land reform was launched between 1946 and 1948 and

was followed by several other attempts that, however, were unable to effectively deconcentrate land ownership (Nissen and Welsch, 1994).

The dynamics of the Venezuelan macroeconomic situation are, in essence, similar to those of other Latin American countries. In Dornbusch's analysis (1990), the presence of relatively inconsistent goals is responsible for periodic crisis. If the economy has external equilibrium and high wages, unemployment is high. If the economy is competitive enough to reach external equilibrium at full employment, real wages are low and generate social tension. If real wages and employment are high, external imbalances may be a serious problem if there is no way to finance them. Dornbusch considers that Latin America remained in the last situation during most of the 1970s and that the crisis of the 1980s was due to both lack of external finance sources and negative external shocks. What is particularly important (but not exclusive) in the Venezuelan case, though, is the development of a widespread rent-seeking behavior in the context of a highly protected economy. As Nissen and Welsch (1994) point out, "[t]he existence of the oil rent itself and the need to distribute it created a widespread rent-seeking mentality rather than an entrepreneurial orientation towards production" (p.94). Besides, as oil revenues made the bolivar a strong currency, the only way to sustain the ISI strategy was by means of high tariff protection and import quotas that reinforced the lack of competitiveness of domestic industry. This made it very difficult to diversify the Venezuelan export basis.

A series of external shocks have marked the development of the Venezuelan economy. The oil boom of 1972-1974 led to a peak in the

investment rate of 42 percent of GDP. Public and private foreign borrowing became more important when oil revenues stagnated during 1977-1978 and were insufficient to finance the investment program. As a consequence, at the end of the 1970s, the Venezuelan economy had excess productive capacity, high external and fiscal deficits, and inflationary pressures that called for major economic adjustments.

In the midst of the recession of 1979-1980 a new oil boom (bringing oil revenues from \$8.8 billion to \$18 billion per year - Nissen and Welsch, 1994) allowed Venezuela to register external and fiscal surpluses again, but it was unable to restore the dynamics of economic growth. A new decrease of oil revenues, starting in 1982, and the continuing capital flight pushed public foreign borrowing up and led to an international reserves crisis in 1983.

Changes in fiscal spending, the exchange rate regime, and import restrictions (Hausmann, 1990) stabilized the economy at the end of 1985 and the government switched to a demand-led expansion policy with a three-year investment program aimed at obtaining a minimum 3 percent growth. At this time, the economy was shaken by a third external shock. Oil prices plummeted in 1986 driving a \$3.3 billion surplus in the current account to a \$2.2 billion deficit. Notwithstanding the fact that the non-oil sector grew 6 percent after almost a decade of stagnation, the economy was in a profound crisis.

By 1989, the need to make radical changes in economic policy was evident. The basic lines of the new economic program were defined by a team of economists that belonged to a group composed by the Presidential

Commission for State Reform and a prestigious university (Instituto de Estudios Superiores de Administración). The program was also discussed with representatives of the Roraima Group, an organization grouping the top of the private sector (Nissen and Welsch, 1994). The program, very much along the lines of the adjustment programs proposed by the World Bank and the IMF, included a series of policies aimed at the liberalization and deregulation of the economy. Among them were the elimination of price controls on goods and services (with the exception of some basic consumption goods), the abandonment of the multiple exchange rate system and its replacement by a single floating exchange rate, gradual but significant reductions in import tariffs, increases in prices and tariffs of publicly supplied goods and a tax reform aimed at reducing fiscal deficits, and liberalization of the interest rate to remove distortions in capital markets.

The essential elements of the trade reform comprise the reduction of non-tariff barriers (NTBs) to a maximum of 5 percent of domestic production (initially NTBs covered about 50 of the output of the manufacturing sector), the simplification of the tariff structure reducing the number of tariff categories from 40 to 5, the reduction of the maximum tariff level from 135 percent to 20 percent, the elimination of state import monopolies, and the removal of restrictions on exports (with few exceptions applying to subsidized products). Restrictions on foreign direct investment were scheduled to be lifted and national treatment was granted to foreign investors, including the issuing of a limit on profit taxes of 30 percent. The reform has led also to membership to GATT and to the establishment of a common external tariff with Colombia in 1992.

### 1.3.2 Agricultural Policy during the 1983 Economic Reform

The economic reform of 1983 was intended to correct macroeconomic imbalances that were impinging upon the sustainability of Venezuelan economic growth. Even though the objective of this policy was not the reform of the economic structure, it had important effects on the agricultural sector via governmental spending and other supporting measures. At the end of 1983 the agricultural sector was in crisis; sectorial output and harvested area were declining and farmer confidence in sectorial institutions was at its lowest point due to the bankruptcy of the government owned agricultural marketing company (CMA), which was unable to pay farmers for their crops.

Although the administration that took office in 1984 continued the austerity policy initiated in 1983, a production enhancement program was implemented for the agricultural sector. According to Gutiérrez (1995), this program was based on the restoration of farmers' confidence in sectorial institutions, the restructuring and expansion of agricultural credit, protectionism for domestic production, and the improvement of sectorial profitability. To restore farmers' confidence, the government allocated funds to cover CMA's outstanding debts and restructured farmers' loans previously acquired, reducing interest rates and extending payment periods. Simultaneously, the credit policy covering new sectorial loans was modified, establishing a maximum interest rate of 8.5 percent (substantially below interest rates for other activities) and requiring the financial sector to allocate no less than 20 percent of its loans to the agricultural sector. It has

been estimated (Gutiérrez, 1995) that public sectorial lending increased at 2.5 percent annually while private lending grew at 8.6 percent, both in real terms, during the period 1984-1988.

Agricultural trade policy during 1984-1988 was intended to give high protection levels to the agricultural sector while trying to reduce imports. Processed products that were highly competitive with domestic production or considered to be luxury goods, were ruled out for import (products under nota 1); this group comprised products such as apples, pears, pork, and poultry, among others (Bolling, 1988). Most basic commodities, such as wheat, feed grains, dried milk, sugar, oilseeds, and protein meals were under an import-quota system (nota 2) that allocated import licenses only after domestic production had been sold out. Additionally, imports of some products were required to obtain sanitary certificates from the Ministry of Health (nota 3), the Ministry of Agriculture (nota 6), or the country of origin (nota 5).

Concessions made to the feed manufacturing industry also created distortions in the agricultural sector. A system of reference prices operated for this subsector in fixing the value of imported products. Since the early 1980s, reference prices were below international prices so that feed manufacturers were directly subsidized. Intending to secure food supply, the Venezuelan government allocated preferential exchange rates for imports of basic commodities<sup>9</sup>. This helped to boost the production of mixed feed for hogs, poultry, and dairy cattle (Bolling, 1988) as well as the production of

---

<sup>9</sup> Within the multiple exchange rate regime.

bread and pasta from imported wheat, replacing traditional consumption of domestic white corn and rice in diets (Kennedy, 1994).

According to Gutiérrez (1995) there were no clear objectives or policy measures in relation to agricultural exports during this period. In general, they were discouraged both because of governmental concern about domestic food supply, which led sometimes to export prohibitions, and because of the exchange rate policy. Exporters of agricultural products did not have access to free market exchange rates and therefore could exchange their foreign receipts only at the official exchange rate which was increasingly above the former<sup>10</sup>. In fact, Krissoff and Trapido (1991) - referenced in Gutiérrez (1995) - consider that overvalued exchange rates were the most important macroeconomic policy in determining the behavior of the agricultural sector. Export subsidies were unable to avoid the decrease in agricultural exports during this period.

The profitability of the agricultural sector was also favored through price policies, subsidies, and government spending. Fixed according to domestic production costs and well above international prices - according to Bolling (1988), a set of guarantee prices at the farm level were established for corn, sorghum, rice, beans, copra, peanuts, sesame, sunflower seed, bananas, plantains, garlic, potatoes, broilers, eggs, beef carcasses, pork, milk, cocoa,

---

<sup>10</sup> Until 1986, exporters were allowed to exchange foreign receipts at the free market exchange rate; as a consequence, agricultural exports grew from 125 million dollars in 1983 to 251 million dollars in 1986. However, in 1987 they were restricted to the official exchange rate, that at the time was about 50 percent above the free market rate, and therefore agricultural exports dropped to 91 million dollars in 1988 (Gutiérrez, 1995)

coffee, and cotton. After being reduced in 1983 due to budget cuts, subsidies were reestablished, rising from about 9 percent of the agricultural budget in 1986 to 25 percent in 1988<sup>11</sup> (Gutiérrez, 1992); in the case of fertilizers, subsidies ranged from about 50 to 90 percent of the market price (Bolling, 1988; Gutiérrez, 1992). Public spending was also increased during this period, growing at an annual rate of 9 percent in real terms. In allocating the sectorial budget, priority was given to irrigation projects, rural roads, agricultural research, and marketing facilities. Finally, imports of agricultural inputs and equipment were stimulated by assigning them allotments within the preferential exchange rate regime. These conditions favored private investment in the sector that, nevertheless, did not increase at the expected levels (real annual growth for this variable was 3.5 percent during this period).

An extraordinarily dynamic agricultural growth resulted from these policies; sectorial output grew more than 6 percent per year between 1984 and 1988, the increase being more remarkable in cases in which the country had been a net importer in recent years (corn, sugar cane, oil seeds, and others). Subsidies were particularly successful in stimulating poultry, pork, and milk production. Agricultural output growth, however, was obtained at a high public cost that made it unsustainable. As Bolling (1988) points out "[t]he government effort to control the economy through import and input subsidies and high farm price supports has been costly. Resources have been misallocated as Venezuela sought to create a temperate zone agriculture in a

---

<sup>11</sup> These measures were implemented after the government switched from a restrictive to an expansive macroeconomic policy as was mentioned in the previous section.

tropical zone climate" (p. 131-132). Indiscriminate import substitution, subsidies and other support policies, and high protection levels generated an agricultural sector lacking competitiveness; this situation indirectly discriminated against products in which Venezuela has comparative advantage such as rice, tropical fruits, roots and tubers, coffee, cocoa, plantains, and beef (Gutiérrez, 1992, 1995).

Increasing macroeconomic imbalances jointly with stagnating oil revenues resulted in the abandonment of the expansive economic policy and the introduction of a new economic adjustment program in 1989 that radically modified agricultural policy.

### 1.3.3 Agricultural Policy under the 1989 Adjustment Program

The 1989 adjustment program has had important effects on the agricultural sector through changes in fiscal, credit, exchange rate, and trade policies. Measures in these fields jointly with the objective of sectorial deregulation are changing the orientation of Venezuelan agriculture. Fiscal policy changes resulted in a considerable diminution in agricultural spending in 1989 and even though it increased again in the following years its level in real terms has been below those in 1984-1988. Preferential interest rates were increased, the multiple exchange rate regime, which favored agricultural inputs and equipment imports, was eliminated, and trade protection was dramatically reduced.

Attempting to foster sectorial competitiveness, reductions in agricultural spending were particularly severe for subsidies. General subsidies for food

and fixed prices, benefiting poor consumers, were almost completely eliminated and sometimes replaced by targeted direct subsidies. However, in June 1994, as a consequence of the financial crisis, emergency price controls were instituted for basic goods comprising rice, grains, flour, bread, pasta, fruits, vegetables, sugar and sweets, pork, beef, poultry, fish, eggs, milk, fats and oils, salt, chocolate, condiments, and non-alcoholic beverages (Kennedy, 1994). Subsidies for most inputs and machinery were eliminated but remain in place for irrigation water (irrigation fees are just 1 to 2 percent of its costs), fertilizers (although reduced to 30 percent of its market price in 1991), and electricity (there is 24 percent discount for farmers' tariffs). Additionally, the agricultural sector is still exempted from income tax and the value added tax at the wholesale level<sup>12</sup> does not apply on domestically produced agricultural commodities (such as rice and sorghum) and on selected processed staples (including table rice, corn and wheat flour, bread and pasta, meat, eggs, canned sardines, and powdered milk) - Kennedy, 1994. Government-administered guarantee prices for rice, palm oil, sugar cane, and wheat were discontinued, while farm prices for fluid milk and processor-level prices for powdered milk remain unchanged.

According to Gutiérrez (1995), the huge devaluation introduced with the modification of the foreign exchange rate regime was not enough to completely compensate for underpricing of imports in domestic currency. As a consequence, the combined effects of this policy and those of trade liberalization, resulted in the decline of real prices for most agricultural

---

<sup>12</sup> Issued in October 1993 and transformed into a new wholesale tax in July 1994.

products. On the other hand, the bolivar devaluation increased import prices of inputs and equipment, impinging upon sectorial production costs.

Agricultural credit policy reform was also significant in increasing production costs. Preferential interest rates for this sector were raised to a level equivalent to 85 percent of the commercial rate and the requirement for the financial sector of devoting a certain percentage of its portfolio to agriculture was diminished from 22.5 percent under the previous legislation to 12 percent in 1992 and then raised to 17.5 percent in 1993. With the disbanding of the governmentally-owned agricultural development bank (BANDAGRO), sectorial credit was mainly left in the hands of the private financial sector. This institutional reform was complemented by the restructuring of the agricultural credit fund (FCA), a state agency that supplies funds for agricultural credit to public and private banks, and of the agricultural credit institute (ICAP), that administered loans at subsidized interest rates (7 percent plus a 3 percent fee for technical services) for working capital and purchases of equipment by small farmers. As a result of these changes, availability of credit for the agricultural sector diminished and shortage of cash affected area planted as well as marketing of crops; private investment was also affected, falling 3.6 percent in real terms during 1989-1992 with respect to the period 1984-1988 (Gutiérrez, 1995).

As part of the de-regulation process, the export monopolies that controlled trade of coffee (FONCAFE) and cocoa beans (FONCACAO) were eliminated as well as export controls on rice, legumes, and cornmeal. Similarly, the government sold most of its sugar mills and removed its marketing monopoly on this product; however, storage facilities continue under public

ownership. The reduction or elimination of subsidies and the de-regulation of agricultural markets are reflected in the diminution of the degree of support for agricultural commodities. Calculated as the ratio of public transfers to farmers to the production value<sup>13</sup>, the agricultural support index has tended to decline between 1986 and 1993. Table 1.5 presents the value of the support index for some products.

Table 1.5 Value of the Agricultural Support Index for Some Venezuelan Products

	Rice	Corn	Sorghum	Sugar	Milk
1986	79.3	61.3	80.3	38.2	65.1
1989	40.1	-15.8	43.9	-39.6	-13.1
1991	11.6	1.5	21.1	16.3	42.3
1993	10.4	10.1	20.0	-1.8	30.8

Figures as a percentage of production value (data for corn are with respect to hard red winter wheat prices).

Source: Gutiérrez (1995)

Trade policy reform has been key in de-regulating agricultural markets and removing distortions in resource allocation resulting from government intervention. Initially programmed to begin in 1991, trade reform was initiated by mid 1990 when the list of prohibited import products (nota 1)

<sup>13</sup> Within the Andean Pact countries the agricultural support index is defined as the ratio of transfers to farmers (comprising the effect of sectorial or general policies on agricultural products' prices and on inputs' prices - including only fertilizers and short-term credit) to the output value. This index has been used in trying to harmonize agricultural policies.

was scheduled for complete elimination and a broad set of products was removed from the prior import license requirement (nota 2) - this measure comprised products such as fish, fruits, vegetables, roots and tubers, coffee, cocoa, and meat. In 1989, approximately 20 percent of primary products and 30 percent of processed products were under nota 1 regulations; this proportions had been reduced to 5 and 25 percent in 1990 and to zero in 1991 (Gutiérrez, 1995). Analogously, 38 percent and 49 percent of primary and processed products were subject to nota 2 requirements in 1989, and these proportions were reduced to 32 and 25 percent in 1990 and to 9 and 19 percent in 1991 (Gutiérrez, 1995). Later on, in 1992, the rest of quantitative restrictions were abolished and after the harvest season corresponding to the second half of this year, imports of feed grains, soybeans, and soybean meal were unrestricted (Kennedy, 1994).

On the other hand, tariff reductions were carried out to increase the degree of competition for the sector. Average import tariffs for primary products were diminished from 36 percent in 1989 to 22 percent in 1990 and to 12 percent in 1991, while those applied to processed products declined from 58 percent to 35 and to 23 percent, respectively (Gutiérrez, 1995). In January 1992, tariffs were further reduced to a maximum of 20 percent and as a safeguard mechanism the option was established of increasing them up to 32 percent in cases in which imports pose a particular threat for domestic producers (Venezuela issued antidumping measures in 1992). This option has been used for feed grains, cheese, and orange juice on the grounds that imports of these products receive subsidies in their countries of origin. As a result of trade liberalization, at the end of 1993 nominal protection

coefficients had decreased as compared to those in 1986. The corresponding figures are shown in Table 1.6.

Table 1.6 Nominal Protection Coefficients for Some Venezuelan Products

	Rice	Corn	Sorghum	Sugar	Milk
1986	54.3	57.8	57.7	29.0	64.4
1989	-2.1	2.5	17.3	-46.3	-16.2
1991	5.8	0.4	11.9	13.5	41.9
1993	-8.1	17.2	7.4	-7.5	26.8

Source: Gutiérrez (1995)

By removing barriers to trade the government has not only increased competition in agricultural markets but has also strengthened linkages between domestic prices and international prices. However, considering that during a long period the Venezuelan agricultural sector did not face price risk (since price controls and subsidies were in place), a price band mechanism was implemented in order to ease the transition towards a price fluctuating market (Coleman and Larson, 1991). This price stabilization scheme was deemed particularly suited to isolating the domestic market from extreme fluctuations in international prices, given that it allows changes in international prices to be reflected in the market, is transparent and predictable, and does not pose a big financial burden on the government (Coleman and Larson, 1991). The system was established in 1991, covering products such as animals feed, meat, cereals for human consumption, sugar, milk, and oilseeds and its derivatives. In 1993 it was modified to better protect domestic producers and to make it more

compatible with the common external tariff of the Andean Pact and with the Andean Pact's price band mechanism.

A broad array of public investment programs was issued to complement and support the process of de-regulation of the agricultural sector. The Venezuelan government has sought to improve and promote better use of the existing productive infrastructure (irrigation systems, rural roads, and land improvement), to enlarge and rationalize the commercial infrastructure, and to encourage and support agricultural research (Gutiérrez, 1992). This has been attempted through both comprehensive legislation regulating the development of the agricultural sector (Ley Orgánica para la Agricultura) and a more specific plan for sectorial investment, financed by the World Bank and the Inter-American Development Bank (Programa de Inversiones para la Transformación del Sector Agropecuario - PITSA). Unfortunately, the PITSA, planned as a billion dollar program, has not completely gone into effect; as of 1993, disbursements made by the World Bank and the Inter-American Development Bank were less than 50 million dollars (Gutiérrez, 1995).

The adjustment of the agricultural sector within the 1989 Venezuelan economic program has been difficult. Planted area has decreased since 1989; after a peak of near 3 million hectares in 1988, it diminished to 2 million hectares in 1989 and to 1.5 million hectares in 1993. Sectorial output has been practically stagnant and therefore sectorial output per capita has decreased. However, these results present important differences; negative rates of growth characterize products that previously had high protection levels and for which it was impossible to develop comparative advantage.

Among these, it is worthwhile mentioning corn, sorghum, potatoes, sunflower, black beans, peanuts, sugar cane, pork, and milk. On the other hand, products that had low levels of protection or that developed some advantage due to vertical integration have reacted positively before trade liberalization and de-regulation; this group includes rice, bananas, plantains, cocoa, tomato, beans, fish and fish products, poultry, and beef. One of the salient characteristics of agricultural output during this period is the increase in yields per hectare; sectorial output per hectare increased from about 105 tons/hectare in 1989 to about 130 tons/hectare (Gutiérrez, 1995). This increase is considered to be caused both by a more efficient use of inputs, including land, and by the retirement of marginal (low quality) land. Basic data on agricultural production, imports and exports is provided in Table 1.7.

Table 1.7 Venezuelan Basic Agricultural Data (1989-1993)

	1989	1990	1991	1992	1993
Sectorial GDP <sup>1</sup>	2,629.8	2,672.0	2,896.2	3,056.9	2,999.8
Production index <sup>2</sup>	131.4	131.8	132.9	136.8	137.4
Per-Cap. Prod/n. index <sup>2</sup>	104.4	102.4	101.0	101.8	100.1
Agricultural imports <sup>3</sup>	761.4	613.3	877.9	1,052.8	1,043.1
Agricultural exports <sup>3</sup>	233.8	346.3	250.7	263.3	350.3

1 Source: The World Bank (figures in \$ Million)

2 Source: FAO's AGROSTAT (1979-81=100)

3 Source: United Nations (figures in \$ Million)

The bolivar devaluation of 1989 and the contraction of aggregate demand allowed for the recuperation of Venezuelan agricultural exports and a

significant improvement in the sectorial trade balance in 1989 and 1990, which diminished to a net deficit of 396 million dollars in 1990 - the lowest during the period 1983 - 1993. After this point, agricultural imports increased in response to trade liberalization, currency appreciation, and the recuperation of aggregate demand and, even though sectorial exports continued increasing, the sectorial trade balance worsened to a deficit of 900 million dollars in 1992 and 1993. It is worth mentioning, however, that since the liberalization process was initiated agricultural exports have diversified significantly, the exports/imports ratio has improved, and agricultural exports now seem to be less correlated to oil exports (Gutiérrez, 1995). It also appears that trade liberalization with Colombia has played an important role in fostering Venezuelan agricultural exports; Colombia is currently Venezuela's second largest trading partner.

With the advent of the provisional government in 1993 and that of the new government in 1994, some of the economic policies leading to the deregulation of the Venezuelan economy have been frozen. In some instances, pressures for more protection and the fear of increasing social unrest lead to temporary measures that restrict trade openness. Phytosanitary certificates issued by the Ministry of Agriculture seem to have been used for protectionist purposes (Kennedy, 1994). During 1993 the issuing of these certificates was delayed several weeks seemingly in response to pressures from domestic producers for more protection and imports of pork and poultry were practically banned for a relatively long period. Even so, no major reversals have been made in relation to the liberalization of the agricultural sector. Currently, the most important policy fact impinging upon the development of this sector is, however, the lack of definition of a

sectorial policy in a moment in which it is experiencing significant adjustments.

## 2. The Group of Three Free Trade Agreement

### 2.1 Background on the Group of Three (G-3)

The origin of the G-3 dates back to 1989 when the Presidents of Colombia, Mexico, and Venezuela announced their intention to pursue further economic cooperation among the three countries as a continuation of their efforts within the Contadora Group<sup>1</sup>. In a joint statement issued in September 1990 in the United Nations headquarters in New York, the three presidents announced their ". . . commitment to participate actively in the execution of measures that favor the increase in trade among the three countries by means of a deeper liberalization . . ." and expressed their willingness to initiate ". . . a negotiation and joint analysis process targeted towards the assessment of the required measures leading to the definition of free trade agreements among the three countries" (Presidencia de la República de Colombia, 1991).

In September 1993 an agreement was reached in Caracas by the foreign affairs ministers who decided to establish a universal tariff reduction schedule applicable to all products, with some exceptions (Cortes, 1993)<sup>2</sup>. According to ECLAC (1995), the treaty implies the immediate liberalization

---

<sup>1</sup> Originally integrated by Mexico, Colombia, Venezuela, and Panama, the Contadora Group was intended to help provide a political solution to the armed conflicts in Central America.

<sup>2</sup> This was a common procedure during the negotiation process. Periodical intervention of high range officials removed obstacles that could not have been resolved by the negotiation teams. This type of intervention is considered to be an expression of the political will of the presidents to reach an agreement, but was highly criticized by affected sectors.

of around 62% of exportables from Colombia and Venezuela and 16% of those from Mexico. Started in January 1995, the agreement provides for automatic and linear tariff elimination for most goods within a ten-year span and allows Venezuela a two-year grace period to initiate the elimination of tariffs on textiles and apparel products as well as a thirteen-year period for tariff elimination for the automobile sector; the latter concession was granted to Colombia also. In addition, Colombian textile exports to Mexico will be subjected to import quotas during the first years of the agreement. Special treatment covering the three countries was accorded to the agricultural sector.

The G-3 agreement in practice consists of two similar bilateral accords between Mexico and Colombia and Mexico and Venezuela (BID, 1995). Trade relationships between Colombia and Venezuela are ruled according to the provisions of the Andean Pact. In fact, in the text of the G-3 it is stated that the following chapters do not rule the relationships between Colombia and Venezuela: (a) national treatment and market access (chapter III), (b) automobile sector measures (chapter IV), (c) agricultural and livestock sectors measures (chapter V, Section A), (d) safeguards, (e) unfair trade practices (chapter IX), (f) governmental firms measures (chapter XVI), and (g) intellectual property measures (chapter XVIII).

The G-3 constitutes a 170 million consumer market with an aggregate GNP of more than 500 billion dollars that represents more than 30 percent of Latin American population and GNP. However, according to CEPAL (1995), several issues must be settled among the three countries to guarantee the smooth functioning of the agreement. Among them, it is worthwhile to

mention exchange rate misalignment, the existence of different fiscal structures, differences between Mexican import tariffs vis-a-vis third countries and the Colombian-Venezuelan common external tariff<sup>3</sup>, and disparities in labor legislation.

## 2.2 Significance of the Agreement

Although it is estimated that intra-G-3 trade represents only about 2% of the three countries' total trade, the G-3 is expected to boost commerce between Mexico and Colombia and Mexico and Venezuela (CEPAL, 1995). One of the main reasons for this expectation is the recent behavior of bilateral trade between Colombia and Venezuela. After the reduction or elimination of tariffs and the establishment of the common external tariff in 1992, this trade grew from 1.02 to 1.66 billion dollars in 1993, making these countries mutually the second largest trade partners if oil exports are not taken into account (CEPAL, 1995). However, trade has tended to stagnate due to import restrictions imposed by Venezuela's macroeconomic difficulties.

The relative importance of trade among the three countries can be seen in Table 2.1. According to United Nations data for 1993, trade flows relevant to the G-3 agreement (those between Mexico and Colombia and Mexico and Venezuela) have small shares in each country's trade. Colombia is by far the smallest trader within the group and therefore the relative importance of potential increases in trade stemming from the agreement is bigger than in

---

<sup>3</sup> As a 'departure' from the Andean Pact, Colombia and Venezuela signed in 1992 a bilateral agreement liberalizing most trade and establishing a common external tariff.

the case of its partners. Nonetheless, the weak economic integration of these countries gives rise to doubt about the potential of the agreement to effectively boost trade.

Table 2.1 Value of Trade Among G-3's Member Countries (1993)

		Value <sup>1</sup>	Share <sup>2</sup>
<b>Colombia:</b>	Total Imports	9,840,820	100
	Imports from Mexico	264,343	2.7
	Imports from Venezuel.	944,260	9.6
	Total Exports	7,454,866	100
	Exports to Mexico	83,574	1.1
	Exports to Venezuela	716,850	9.6
<b>Mexico:</b>	Total Imports	85,270,907	100
	Imports from Colombia	83,994	0.1
	Imports from Venezuel.	226,929	0.3
	Total Exports	51,698,167	100
	Exports to Colombia	236,783	0.5
	Exports to Venezuela	225,267	0.4
<b>Venezuela:</b>	Total Imports	11,266,625	100
	Imports from Colombia	469,579	4.2
	Imports from Mexico	219,258	2.0
	Total Exports	15,208,136	100
	Exports to Colombia	910,078	6.0
	Exports to Mexico	224,351	1.5

1. Values in U.S. \$000

2. As a percentage of total imports or exports

Data discrepancies are due to differences in countries' reports

Source: United Nations data

Tables 2.2 and 2.3 present the G-3's structure of trade at the three digit level of the Standard International Trade Classification (SITC) for 1993. These

tables show that Mexican exports to its G-3 partners are dominated by intermediate goods and that Venezuelan exports to Mexico have the same characteristic. On the contrary, Colombian exports to Mexico tend to be more of the final-good type. Another characteristic of intra-G-3 trade is that it is spread over a relatively wide group of products. This feature may favor the chance for increasing trade once tariffs are reduced, because of the wide range of activities involved. Yet, it may be simultaneously regarded as negative in the sense that even the products with the highest shares within bilateral trade currently do not have strong positions in the market.

Table 2.2 Structure of Trade Flows Between Mexico and Colombia at the Three Digit Level of the SITC in 1993

---

Main Colombian Imports from Mexico <sup>†</sup>	
Carboxylic acids (513)	20.0
Passenger motor vehicles, except buses (781)	12.4
Lorries and other special vehicles (782)	5.0
Motor vehicle parts and accessories (784)	4.5
Medicinal and pharmaceutical products (541)	3.3
Synthetic and reclaimed rubber (233)	3.1
Other products*	51.7
Main Colombian Exports to Mexico <sup>†</sup>	
Printed matter (892)	25.8
Coal, lignite, and peat (322)	9.3
Pesticides and disinfectants (591)	6.6
Articles of plastic not elsewhere specified (893)	4.9
Paper (642)	4.0
Other products*	49.4

---

<sup>†</sup> As a percentage of the corresponding value of trade with Mexico

\* Each group contributing less than 3 percent

Numbers in parenthesis correspond to the SITC's codes

Source: United Nations data

Table 2.3 Structure of Trade Flows Between Mexico and Venezuela at the Three Digit Level of the SITC in 1993

---

Main Venezuelan Imports from Mexico<sup>†</sup>

Passenger motor vehicles, except buses (781)	16.5
Carboxylic acids (513)	6.9
Automatic data processing equipment (752)	6.0
Copper, except cement copper (682)	5.4
Other inorganic chemicals (523)	4.7
Hydrocarbons and other derivatives n.e.s. (511)	4.0
Other products*	56.5

Main Venezuelan Exports to Mexico<sup>†</sup>

Aluminum (684)	38.5
Refined petroleum products (334)	14.6
Iron and steel universal plates and sheets (674)	10.3
Other organic chemicals (516)	9.8
Miscellaneous chemical products, n.e.s. (598)	5.2
Iron and steel shapes (673)	4.8
Other products*	16.8

---

<sup>†</sup> As a percentage of the corresponding value of imports (exports) from (to) Mexico

\* Each group contributing less than 3 percent

Numbers in parenthesis correspond to the SITC's code

Source: United Nations data

Despite these conditions, analysts consider there to be potential trade flow increases for most sectors that are currently traded (initially favoring Colombian and Venezuelan exports due to the asymmetric nature of the treaty). For instance, the Colombian Ministry of Foreign Trade (1993) suggests that Colombian exports to Mexico may increase considerably and its market share will grow to reach levels of 35 percent in the case of the

printing industry, 45 percent for textiles and apparel products, 50 percent for leather products, and 80 percent for agricultural products<sup>4</sup>.

However, the macroeconomic crisis that affects both Mexico and Venezuela negatively influences the prospects for significant trade increases. Furthermore, currency devaluations in 1994 in Venezuela and Mexico may have a depressing effect on trade growth. The reduced pre-agreement level of trade between Mexico and Colombia and Mexico and Venezuela may also be an indicator of potentially meager results. Nonetheless, the agreement has been criticized by analysts such as Moises Naim on the grounds that ". . . subregional pacts such as that between Colombia, Mexico and Venezuela are unjustified, and reflect a protectionist mindset that is no longer appropriate" (Selwitz, 1994; p. 6 - quoting M. Naim). According to this perspective, a distinguishing characteristic of this type of agreement is that it is market-reform oriented instead of ISI oriented as before. Summarizing, the expected outcome of the G-3 (as in most cases of formal economic integration) is unknown and its assessment awaits empirical study.

### 2.3 Structure of the Agreement

Below is a general description of the content of the agreement, its objectives, scope, and special measures.

---

<sup>4</sup> The Colombian Foreign Trade Ministry considered in 1993 that Colombian exports to Mexico may be increased up to ten times its value (83.6 million dollars in 1993) once the integration process is complete.

### 2.3.1 Objectives and Generalities

The three countries have committed themselves to strengthening their economic relationships through the creation of an expanded market for their goods and services, as well as to enhance their productive activities, investment, and technological development. Consequently, the objectives of the treaty include the promotion of market expansion and diversification, the elimination of trade barriers, the enhancement of competitiveness, the increase of investment, the protection of intellectual property, the establishment of procedures for cooperation, the creation of efficient mechanisms for dispute resolution, and the maintenance of equitable relationships among the three countries given their recognition that differential treatment among them is allowed according to LAIA's rules.

It was agreed that the accord will last for at least three years, after which it will be renewed for an indefinite period. Withdrawal of any of the countries from the treaty is allowed 180 days after notification to LAIA. Accession of new member countries is open to Latin American and Caribbean countries subject to the approval of the three partners. There is no obligation for member countries to harmonize their macroeconomic policies and each of them is free to apply its own trade policy; however, Colombia and Venezuela are ruled in this respect by the Andean Pact. Finally, the accord does not establish a supra-national organism (it is administered through a special commission) and each member country is solely responsible before third parties.

### 2.3.2 Market Access and Trade of Goods

The G-3 establishes that parties will give national treatment, according to Article III of the GATT, to their respective goods and therefore will avoid any type of trade discrimination. It was also agreed that import tariffs and taxes will not be increased for goods complying with rules of origin regulations and that non-tariff barriers affecting intra-G-3 trade will be eliminated. However, export support programs that make use of tax rebates were allowed to continue operating within the agreement (this measure applies to the Colombian Plan Vallejo, the Mexican PITES, and the Venezuelan Esquema de Perfeccionamiento Activo). On the other hand, member countries have the right to determine reference prices based on international prices in order to control the fulfillment of anti-dumping practices and apply sanctions if necessary.

To guarantee market access, a tariff elimination schedule was defined in which complete tariff elimination will occur within a ten year span by means of uniform reductions starting in January 1995 followed by a second one in July 1996 and eight successive annual reductions that will be finished in 2004. To determine the starting tariff level, within the accord the regional tariff preference previously negotiated in the framework of LAIA was included. It was decided to extend this preference to the universe of products; consequently, Mexico applied a 28% tariff reduction to Colombian and Venezuelan products and the latter applied a 12% tariff reduction to Mexican products; this procedure established the starting point for the tariff elimination schedule.

Tariff elimination is determined to occur reciprocally and gradually according to three categories: (1) immediate elimination in Colombia, Venezuela and Mexico, (2) immediate elimination in Mexico and a five year elimination period in Colombia and Venezuela, and (3) ten year elimination period in the three countries. Exempt from tariff elimination, but allowed full market access, were some agricultural products that are considered to be highly sensitive, the automobile sector for the first two years of the agreement (there is, though, the commitment to completely liberalize this sector at the end of the twelfth year - with the only exception being the used transportation vehicles market), and the textile and apparel sectors in the case of Venezuela<sup>5</sup>. The completion of the tariff elimination schedule may be accelerated if the parties agree to do so for any type of product.

In special cases market access is restricted. Colombia does not grant national treatment for the production of alcoholic beverages, a state monopoly, and may restrict trade in this kind of good; it also may restrict trade in products used in producing energy as well as in used goods. Mexico may restrict trade in used goods (except for transborder services) as well as in petroleum and its derivatives and used transportation vehicles. Similarly, Venezuela may restrict trade in petroleum and its derivatives. Additionally, labeling regulations were established and the creation of export taxes was explicitly

---

<sup>5</sup> In this case import quotas were eliminated and especial 'temporary flexibilization levels' - ranges of sectorial trade values - were determined in order to allow for a more flexible application of rules of origin regulations; 'temporary flexibilization levels' were established also in the case of Colombia-Mexico bilateral trade in this products.

prohibited unless they apply to an agreed list of staples and for purposes of poverty alleviation or supply stabilization when domestic prices are maintained below the international level.

The liberalization program only applies to goods that originate in any of the three countries. To establish this condition a set of rules of origin were included, according to which products that are entirely obtained or produced in the territory of one or more of the parties are admissible for tariff reductions. Similarly, products in which production use is comprised of imports from outside the region are considered admissible if these products have undergone a 'substantial transformation' within any of the member countries such that they shift from one customs classification to another. There are some cases in which a product is admissible even if it does not fulfill the requirement of shifting customs classifications. The condition applied in this case is that this product must have a minimum content of regional inputs that is calculated according to the transaction value method. Chemical products must have a regional content of at least 40% that will be increased to 45% in the fourth year and to 50% after the sixth year. The machinery sector is required to have 50% regional content; the rest of sectors must have at least 50% of regional content during the first five years of the agreement and 55% thereafter. Compared to LAIA's rules of origin, those of the G-3 are more restrictive both in regional content and in their application along the different steps of the production process (as in the textiles sector).

The agreement includes two types of safeguard clauses. Both clauses were conceived as protective measures and were intended to be used in case of economic disruption. First, a bilateral safeguard may be invoked during the

first fifteen years of the agreement and provides for one year suspension of the schedule of tariff elimination that may be renewed for another year. Use of this clause causes the payment of compensation charges from the invoking country to the affected countries as established in the GATT. Second, a multilateral safeguard clause ruled by Article XIX of the GATT permits the temporary imposition of a tariff or import quota to products imported from any supplier with the exception of G-3 partners, unless their products represent a substantial share of the damaging imports and make an important contribution to the undesired damage. This clause is permanent. As usual, safeguard clauses can only be invoked in case of generalized apparent damage to domestic production or threat of generalized damage.

Similarly, mechanisms were established aimed to guarantee the effectiveness and transparency of anti-dumping and subsidy inquiries. These mechanisms are consistent with each of the partners' laws, as well as with GATT rules. Member countries are allowed to establish and apply countervailing measures in cases in which it is proved that there are dumping practices or payment of export subsidies. These measures require the level of dumping to exceed 2% of the nominal value of the good in question, the subsidy to be above the 1% ad-valorem level, or the volume of imports under inquiry account for more than 1% of the internal market (2.5% in the case of various suppliers). There are also norms regulating notification procedures, time periods for investigations, and the right to defense.

### 2.3.3 Other Topics

As was mentioned, the scope of the G-3 goes beyond the trade of goods. Drawing closely on the lines established by the NAFTA, the accord includes provisions related to services, including communications and finance, investment, intellectual property, and governmental purchases. The most salient characteristics of these topics are presented below.

In general, services are to be gradually liberalized according to two principles that were discussed at the GATT's Uruguay Round. First, national treatment is to be given to nationals from any of the three signing countries. Second, under the most favored nation principle, G-3 member countries must receive benefits granted to third parties by any of the members of the group, including preferences granted by Mexico to the U.S. and Canada under the NAFTA. Similarly, no member country is allowed to require service sector firms to establish branches or representatives in the country where they plan to sell their services and the intra-G-3 temporary admission of persons is facilitated in order to promote the flow of business representatives of service firms.

Regarding the telecommunications sector, it was agreed to liberalize those services in which some value has been added. The criteria to determine whether or not value has been added relates to the use of computerized processing systems that modify the form, content, codes, or other aspects of the information being transmitted to patrons in such a way that a new service, different from the basic one used as an input, is provided. There is guaranteed, non-discriminatory access to telecommunication networks of

any of the three countries for intra-G-3 operations in value added communication services. Maritime transportation was also liberalized, eliminating the requirement that a certain proportion of transported products should be carried in national flag ships. Analogously, measures were adopted to enhance the liberalization of air transportation.

The accord grants national treatment to investors from the three countries and Mexico extends to Colombia and Venezuela the same investment benefits that it conceded to the U.S. and Canada under the NAFTA. Intellectual property regulations were set according to the principles of national treatment and most favored nation in cases of identical trademarks, notoriously similar trademarks, and denominations of origin; the Common Andean Regime provided the basis for these regulations. In addition, copyright was agreed to be ruled according to each country's legislation. Purchases made by the public sector were also partially liberalized and the three countries agreed to give each other national treatment in this respect; however, thresholds were defined to act as minimum points beyond which the regulations of the treaty are triggered.

Finally, the administration of the treaty was assigned to the Administrative Committee formed by the respective ministers of foreign trade and other related ministries. Some responsibilities were assigned to the commercial section of the three countries' diplomatic representatives and a number of committees, sub-committees, and task forces were created to serve special purposes - such as supervising the fulfillment of the agreement, providing information to governments and to the public, and providing means for dispute resolution - or further developing specific areas of the accord.

## 2.4 The Agricultural Sector in the G-3 Agreement

Trade in agricultural products is one of the least liberalized sectors of the G-3 agreement. Five provisions were established to cover trade in agriculture: (1) member countries commit themselves to facilitate market access through the reduction or elimination of barriers to reciprocal trade, such as import restrictions, import taxes, and trade regulations; (2) for those products included in the tariff elimination schedule, parties do not use quantitative restrictions, price bands or price stabilization mechanisms, or variable levies; (3) each party defined a list of products excluded from tariff elimination; these, considered sensitive products, may be excluded and can be traded under prior import license mechanisms, or may be subject to price bands, or simply excluded from the tariff elimination program without other requirements; (4) an agricultural trade committee will annually suggest to member countries the inclusion of products under the list mentioned above in the tariff elimination program - a procedure was established to verify this process; and (5) two special arrangements were defined; one for sugar and the other for products included under the tariff elimination program on a temporary basis.

None of the most significant agricultural products in intra-G-3 trade was included in the tariff elimination program - the only exceptions may be fish, either fresh, frozen, preserved or prepared, for Mexico; cocoa for Colombia; tuna fish, its derivatives, and cocoa for Venezuela; and vegetables for Mexico. Most meat and dairy products, as well as grains and its derivatives (starch, oil, and cakes) are excluded from the liberalization program; the

same policy applies to cotton, some fresh fruits and vegetables, all preserved and prepared fruits and vegetables, and animal feed. Products under the Andean Pact's price band mechanism (applying to Colombia and Venezuela), although excluded from tariff elimination, are subject to ALADI's regional tariff preferences. No further additions of products to the lists of goods under prior license systems or price band (or price stabilization) mechanisms were allowed once the G-3 came into effect.

Sugar trade is regulated by means of a special arrangement administered by a sugar analysis committee that was scheduled to seek an agreement in these areas within the first six months of operation of the accord. The arrangement provides for the establishment of an import quota for Colombian and Venezuelan sugar to be imported to Mexico, to be activated in those years in which Mexico acts as an importer and without prejudice to the agreements that the latter has established with Central American countries and other third parties (including NAFTA partners). Similarly, the committee must define the mechanism to regulate Mexican sugar access to Colombian and Venezuelan markets. In defining both import quotas and the market access mechanism, Mexico was allowed to fulfill its GATT-related obligations and Colombia and Venezuela to maintain their price band system or other price stabilization mechanism. Rules were also established to regulate reciprocal sugar trade in case the respective committee is unable to reach an agreement; these basically define the corresponding tariffs to be applied.

A group of products was temporarily included in the tariff elimination program; in this case, a special tariff reduction schedule was defined,

establishing a 15% tariff reduction to be linearly accomplished within the first six years of the accord; the tariff level reached at the end of the sixth year will be maintained between the seventh and tenth year and then will be reduced to zero in proportional amounts between the eleventh and fifteenth year. Special safeguard mechanisms, based on tariff-quotas, were set for these products to be applied between the eleventh and fourteenth years. Most products included in this group are fruits and vegetables; tomatoes (fresh, chilled, prepared and preserved), onions, carrots, melons, watermelons, chick peas, and prepared or preserved asparagus (except in vinegar) are the most relevant. The list also includes mayonnaise for the three countries, non-decaffeinated and decaffeinated green coffee in the case of Colombia (applying to trade with Mexico and Venezuela) and Mexico (applying only to trade with Colombia), and orange juice (frozen and in other forms) in the case of Colombia and Venezuela.

Mexico and Venezuela were granted the reciprocal right to use special safeguard mechanisms (tariff-quotas) for the following products: cucumbers, hot peppers, fresh garlic, avocados, and fresh and dried oranges in the case of Venezuelan imports from Mexico, and mangoes, guavas, preparations for soups, beer, rum, and meat flour in the case of Mexican imports from Venezuela.

G-3 parties recognize the potentially distortive nature of domestic production-support policies and agreed on the use of policies with minimal effects on trade or that are exempted from any reduction commitment arising from GATT negotiations. Each member country is entitled to modify its domestic production support measures, including those that are

subjected to GATT commitments. Similarly, G-3 parties agreed to eliminate export subsidies for the agricultural sector. Therefore, it was agreed that products included in the tariff elimination program may maintain any export subsidy they were receiving previous to their inclusion for three more years. From the fourth year on, the subsidy must be reduced in equal annual proportions so that its elimination will be completed simultaneously with that of tariffs. Member countries also renounce any right arising from multilateral negotiations to make use of export subsidies for the agricultural sector and to only resort to them by previous agreement among the affected parties.

There is, however, a major exception to the de-regulation process affecting the agricultural sector. Export taxes can be retained when applying to each country's list of staples and its inputs (which are mostly food products) if the corresponding revenues or benefits are intended to: (1) assist targeted consumers, or (2) assure the availability of these goods when they are included in stabilization programs that imply the maintenance of domestic prices below international levels. Besides, Colombia is allowed to use stabilization funds for agricultural goods for export and to keep export taxes for coffee and panela (dehydrated molasses).

Two committees were established to assure the proper functioning of agricultural trade in the framework of the agreement. First, a committee on technical and marketing regulations was created, aimed at guaranteeing a smooth functioning of packaging, grading, and quality rules, as well as to recommend measures to harmonize these rules when necessary. Second, the agricultural marketing committee is expected to follow up the

development of the agreement in this sector and to serve as a forum for the discussion of any relevant issue in the field. Finally, a set of phytosanitary and zoosanitary regulations were adopted; according to them each party has the right to establish its own regulations (which may be stricter than international recommendations) and must fulfill requirements intended to secure their compliance with scientific principles, to act on a basis of non-discriminatory treatment, and to avoid being a source of disguised protectionism. A phytosanitary and zoosanitary committee was established to oversee, control, and develop any activity related to this field.

### 3. The G-3's Agricultural Trade

#### 3.1 Significance of Agricultural Trade within G-3 Trade

Largely as a consequence of the development of the oil industry, the agricultural sector is of less economic importance to Mexico and Venezuela than it is to Colombia. In 1992, the agricultural sector accounted for 17 percent of Colombia's GDP while in the cases of Mexico and Venezuela its share was only 9 and 5 percent, respectively (Valdes, 1994; Kennedy, 1994). Regarding foreign trade, the situation of the agricultural sector is similar to that in production. Agricultural trade represented 18.9 percent of total trade (imports plus exports) for Colombia in 1993, 7.5 percent for Mexico, and 5.3 percent for Venezuela<sup>1</sup>.

The recent behavior of the share of agricultural trade in G-3 countries' foreign trade is presented in Table 3.1. From these data, it is apparent that agricultural imports, as a percentage of total imports, have been relatively stable in the cases of Colombia and Venezuela while in the case of Mexico its relative importance has been declining (although its absolute value has increased<sup>2</sup>). Agricultural exports, on the other hand, have declined in

---

<sup>1</sup> Figures in this chapter, unless otherwise specified, come from United Nations data (see references). For the purposes of this chapter, the agricultural sector is defined as covering the following groups of the Standard International Trade Classification (rev. 3): "Food and Live Animals" (group 0); "Tobacco, unmanufactured" (group 121); "Hides, skins, furskins, raw" (group 21); "Oil-seeds, oleaginous fruits" (group 22); "Natural rubber, etc." (group 231); "Cotton" (group 263); and "Crude animal, vegetable materials" (group 29) - for a detailed list, see Appendix 1.

<sup>2</sup> Absolute figures for this table (as well as those relevant to other tables along this chapter) are reported in Appendix 2.

relative importance for Colombia and Mexico while those of Venezuela have experienced a slight growth.

Table 3.1 Share of Agricultural Trade in G-3 Countries' Foreign Trade

Agricultural Imports as a percentage of Total Imports<sup>1</sup>

	1989	1990	1991	1992	1993
Colombia	6.8	7.0	6.3	9.5	7.6
Mexico	15.5	15.2	10.6	11.2	8.0
Venezuela	10.8	9.3	8.8	8.3	9.3

Agricultural Exports as a percentage of Total Exports<sup>2</sup>

	1989	1990	1991	1992	1993
Colombia	42.0	36.9	37.1	38.4	33.8
Mexico	11.8	11.2	12.0	10.7	6.9
Venezuela	1.8	1.9	1.7	1.9	2.3

Agricultural Trade as a percentage of Total Trade<sup>3</sup>

	1989	1990	1991	1992	1993
Colombia	25.6	23.4	24.6	24.2	18.9
Mexico	13.7	13.2	11.2	11.0	7.5
Venezuela	4.9	3.9	4.5	4.9	5.3

1.  $(M^{ag}_i / M^{tot}_i) * 100$ ;  $i = \text{Colombia, Mexico, Venezuela}$

2.  $(X^{ag}_i / X^{tot}_i) * 100$ ;  $i = \text{Colombia, Mexico, Venezuela}$

3.  $[(M^{ag}_i + X^{ag}_i) / (M^{tot}_i + X^{tot}_i)] * 100$ ;  $i = \text{Colombia, Mexico, Venezuela}$

Source: U.N. (see References section)

The share of agricultural trade in total trade has decreased for Colombia and Mexico and has been relatively stable for Venezuela, although modestly

increasing. However, it is worth noting that the significance of agricultural trade for Colombia is higher than for its partner countries. This fact is clearly due to the importance of agricultural exports, particularly coffee which in 1993 still accounted for about 16 percent of total Colombian exports. However, between 1989 and 1993 Colombian agricultural exports grew at an annual average rate of 1 percent and, if this situation remains in the near future, agricultural trade will continue to lose weight within total trade<sup>3</sup>. In the case of Mexico, the future importance of agricultural trade for the economy is uncertain. After the NAFTA came into effect in January 1994, both agricultural imports and exports were expected to grow, but the extent to which this growth may lead them to gain share within the total Mexican trade will depend on the behavior of the other economic sectors and on the dynamics of the domestic market. On the other hand, according to Venezuelan data reported by the United Nations, the increase in Venezuelan agricultural exports between 1991 and 1993 is almost entirely due to bilateral trade with Colombia (trade liberalization between the two countries was reached in 1992). During this period, Venezuelan agricultural exports to Colombia grew at an annual average rate of 62 percent increasing its share in Venezuelan agricultural exports from 7.5 to 37 percent. The bolivar devaluation of 1994 is expected to partially reinforce the tendency

---

<sup>3</sup> Markets' evolution for the most important Colombian agricultural exports is not favorable. International prices for coffee has been declining and unstable since the collapse of the International Coffee Agreement; the introduction of the E.U.'s common agricultural policy on bananas (the second largest Colombian agricultural export) reduced market share for Colombian exports and tends to depress international prices; and the issuing of the NAFTA as well as claims for protection by American producers, pose a potential threat on Colombian exports of cut flowers to the U.S. (the third most important Colombian agricultural export and its main target market, respectively).

towards the relative diminution of the agricultural imports share while increasing that of agricultural exports.

The share of agricultural trade in G-3 trade is shown in Table 3.2. Comparing these data with those related to the share of agricultural trade in each of the partner countries' trade (Table 3.1) it is possible to draw the following conclusions. First, agricultural imports tend to be less important within intra-G-3 trade than within total trade for the three member countries. Second, in Colombia and Mexico agricultural exports are notably less significant within the G-3 than in their whole export structure, since both countries target their agricultural exports towards DC markets. On the other hand, even though Venezuelan agricultural exports within the G-3 are also less important than in its whole export structure, their share tends to be closer to that of agricultural exports in total exports. Third, the combined effect of the previous observations shows that G-3's agricultural trade is less significant for the three countries than their total agricultural trade is within the respective trade structures. However, in the case of Venezuela this conclusion does not hold for 1989 and 1990.

The comparison between these trade structures can be put into perspective by observing the relative importance of intra-G-3 trade within member countries' aggregate trade. As Table 3.3 shows, intra-G-3 agricultural trade has very low shares in member countries' aggregate agricultural trade. In fact, during the period 1989-1993, intra-G-3 agricultural trade represented less than one percent of member countries' agricultural trade. Very low shares also characterize total intra-G-3 trade. In this case, however, all figures are slightly higher than those corresponding to agriculture.

Table 3.2 Share of G-3's Agricultural Trade in G-3's Trade \*

G-3 Agricultural Imports as a percentage of:<sup>1</sup>

	1989	1990	1991	1992	1993
G-3 Total Imports	4.1	9.4	1.0	0.9	1.5
Colombian G-3 Imports	0.7	0.7	0.6	0.9	1.2
Mexican G-3 Imports	6.6	17.5	1.3	0.8	1.5
Venezuelan G-3 Impts.	6.4	2.7	0.9	1.0	1.8

G-3 Agricultural Exports as a percentage of:<sup>2</sup>

	1989	1990	1991	1992	1993
G-3 Total Exports	4.1	9.4	1.0	0.9	1.5
Colombian G-3 Exports	17.8	19.7	1.5	2.3	1.8
Mexican G-3 Exports	2.7	1.7	0.7	0.9	1.5
Venezuelan G-3 Exports	2.8	17.0	1.3	0.2	1.4

G-3 Agricultural Trade as a percentage of:<sup>3</sup>

	1989	1990	1991	1992	1993
G-3 Total Trade	4.1	9.4	1.0	0.9	1.5
Colombian G-3 Trade	3.7	5.5	0.8	1.2	1.3
Mexican G-3 Trade	4.1	9.4	1.0	0.9	1.5
Venezuelan G-3 Trade	4.5	11.4	1.1	0.6	1.6

\* Due to inconsistencies between data reported by the different countries, bilateral flows were averaged. Original data are reported in Appendix 2.

1.  $(\sum_j M_{agij} / \sum_j M_{totij}) * 100$ ; where i = importing country  
j = exporting countries

2.  $(\sum_j X_{agij} / \sum_j X_{totij}) * 100$ ; where i = exporting country  
j = importing countries

3.  $[\sum_j (M_{ag} + X_{ag}) / \sum_j (M_{tot} + X_{tot})_{ij}] * 100$ ; where: i = reference country  
j = partner countries

In all cases i and j = Colombia, Mexico, and Venezuela and  $i \neq j$

Source: U.N. (see References section)

Table 3.3 Share of Intra-G-3 Agricultural and Total Trade in Member Countries' Aggregate Agricultural and Total Trade

Intra G-3 Imports as a percentage of: <sup>1</sup>					
	1989	1990	1991	1992	1993
Agricultural Imports	0.2	0.8	0.1	0.1	0.2
Total Imports	0.8	1.1	0.9	1.0	0.9
Intra G-3 Exports as a percentage of: <sup>2</sup>					
	1989	1990	1991	1992	1993
Agricultural Exports	0.2	0.7	0.1	0.1	0.2
Total Exports	0.6	0.9	1.0	1.4	1.1
Intra G-3 Trade as a percentage of: <sup>3</sup>					
	1989	1990	1991	1992	1993
Agricultural Trade	0.2	0.8	0.1	0.1	0.2
Total Trade	0.7	1.0	1.0	1.2	1.0

1.  $(\sum_{i,j} M_{ag_{ij}} / \sum_i M_{ag_i}) * 100$  and  $(\sum_{i,j} M_{tot_{ij}} / \sum_i M_{tot_i}) * 100$ , respectively

where  $i$  = importing country,  $j$  = exporting countries, and  $i \neq j$

2.  $(\sum_{i,j} X_{ag_{ij}} / \sum_i X_{ag_i}) * 100$  and  $(\sum_{i,j} X_{tot_{ij}} / \sum_i X_{tot_i}) * 100$ , respectively

where  $i$  = exporting country,  $j$  = importing countries, and  $i \neq j$

3.  $[\sum_{i,j} (X_{ag_{ij}} + M_{ag_{ij}}) / \sum_i (X_{ag_i} + M_{ag_i})] * 100$  and

$[(\sum_{i,j} (X_{tot_{ij}} + M_{tot_{ij}}) / \sum_i (X_{tot_i} + M_{tot_i})) * 100$ , respectively

In all cases  $i$  and  $j$  = Colombia, Mexico, and Venezuela and  $i \neq j$

Source: U. N. (see References section)

### 3.2 G-3's Agricultural Trade in the Context of Member Countries' Agricultural Trade

Indicators for the G-3 as a whole, such as those presented in Table 3.3 above, may be misleading in that they are heavily influenced by the relatively large size of the Mexican economy as compared to those of its G-3 partners. However, when each G-3 partner is considered separately, it can be seen that the relative importance of G-3 total and agricultural trade is practically negligible at this level too. Comparatively, total intra-G-3 trade is slightly more important for Colombia, intermediate for Venezuela, and less important for Mexico. Tables 3.4, 3.5, and 3.6 show for each member country the share of its intra-G-3 agricultural trade with respect to its agricultural trade and provides as a way of comparison the same indicator for its total G-3 trade.

Table 3.4 shows that the shares of intra-G-3 agricultural imports in member countries' agricultural imports are lower than the shares of intra-G-3 imports in total imports. This indicate that agricultural imports are less significant in the G-3 than in the whole import structure of these countries. Even though the shares of intra-G-3 agricultural imports are very similar for the three countries, those of total intra G-3 imports show some differences among them. Imports from G-3 partners are relatively more important for Colombia, intermediate for Venezuela, and less important for Mexico.

Table 3.4 Share of Intra-G-3 Agricultural and Total Imports in  
Agricultural and Total Imports by Member Country

---

Agricultural Imports from G-3 Partners as a percentage of:<sup>1</sup>

	1989	1990	1991	1992	1993
Colombian Agricult. Imports	0.3	0.2	0.3	0.3	0.4
Mexican Agricultural Imports	0.2	0.9	0.1	0	0.1
Venezuelan Agricult. Imports	0.5	0.5	0.1	0.2	0.4

Imports from G-3 Partners as a percentage of:<sup>2</sup>

	1989	1990	1991	1992	1993
Colombian Total Imports	2.3	2.0	3.2	3.1	2.6
Mexican Total Imports	0.4	0.8	0.5	0.6	0.5
Venezuelan Total Imports	0.9	1.8	1.4	1.8	2.0

---

1.  $[(\sum_j M^{ag}_{ij}) / M^{ag}_i] * 100$ , where  $i$  = importing country  
 $j$  = exporting countries

2.  $[(\sum_j M^{tot}_{ij}) / M^{tot}_i] * 100$ , where  $i$  = importing country  
 $j$  = exporting countries

In all cases  $i$  and  $j$  = Colombia, Mexico, and Venezuela and  $i \neq j$

Source: U.N. (see References Section)

Contrary to the imports case, Table 3.5 shows that the difference between the shares of agricultural exports and those corresponding to total exports is smaller. This indicates that the behavior of pre-agreement intra-G-3 agricultural exports tends to be closer to the pattern of member countries' exports than it is for imports. The relative importance of intra-G-3 exports is the largest for Venezuela, followed closely by that of Mexico, and is the lowest for Colombia.

Table 3.5 Share of Intra-G-3 Agricultural and Total Exports in Agricultural and Total Exports by Member Country

Agricultural Exports to G-3 Partners as a percentage of:<sup>1</sup>

	1989	1990	1991	1992	1993
Colombian Agricult. Exports	0.2	0.3	0	0.1	0.1
Mexican Agricultural Exports	0.2	0.1	0.1	0.1	0.2
Venezuelan Agricult. Exports	0.9	8.8	0.7	0.2	0.9

Exports to G-3 Partners as a percentage of:<sup>2</sup>

	1989	1990	1991	1992	1993
Colombian Total Exports	0.4	0.6	0.7	1.0	1.1
Mexican Total Exports	0.8	0.9	1.1	1.6	0.9
Venezuelan Total Exports	0.6	1.0	0.9	1.4	1.5

1.  $[(\sum_j X^{ag}_{ij}) / X^{ag}_i] * 100$ , where  $i$  = exporting country  
 $j$  = importing countries

2.  $[(\sum_j X^{tot}_{ij}) / X^{tot}_i] * 100$ , where  $i$  = exporting country  
 $j$  = importing countries

In all cases  $i$  and  $j$  = Colombia, Mexico, and Venezuela and  $i \neq j$

Source: U.N. (see References Section)

Table 3.6 presents the summary of intra-G-3 agricultural trade in terms of its importance in the context of each member country's agricultural trade and allows for a comparison with total intra-G-3 trade. As shown, intra-G-3 agricultural trade is relatively more important for Venezuela but is negligible in all cases. On the other hand, total intra-G-3 trade is more important for Colombia than for the other two countries, being the least important for Mexico and intermediate for Venezuela.

Table 3.6 Share of Intra-G-3 Agricultural and Total Trade in Agricultural and Total Trade by Member Country

Agricultural Trade with G-3 Partners as a percentage of: <sup>1</sup>					
	1989	1990	1991	1992	1993
Colombian Agricultural Trade	0.2	0.3	0.1	0.1	0.1
Mexican Agricultural Trade	0.2	0.6	0.1	0.1	0.1
Venezuelan Agricult. Trade	0.6	3.5	0.3	0.2	0.5
Trade with G-3 Partners as a percentage of: <sup>2</sup>					
	1989	1990	1991	1992	1993
Colombian Trade	1.3	1.2	1.7	2.0	1.9
Mexican Trade	0.6	0.8	0.7	0.9	0.7
Venezuelan Trade	0.7	1.2	1.1	1.6	1.7

1.  $\left\{ \left[ \sum_j (X^{ag}_{ij} + M^{ag}_{ij}) \right] / (X^{ag}_i + M^{ag}_i) \right\} * 100$ , where:  $i$  = reference country  
 $j$  = partner countries

2.  $\left\{ \left[ \sum_j (X^{tot}_{ij} + M^{tot}_{ij}) \right] / (X^{tot}_i + M^{tot}_i) \right\} * 100$ , where:  $i$  = reference country  
 $j$  = partner countries

In all cases  $i$  and  $j$  = Colombia, Mexico, and Venezuela and  $i \neq j$

Source: U.N. (see References Section)

### 3.3 G-3's Agricultural Trade

The following general characterization of G-3's agricultural trade stems from the conclusions of the two previous sections. First, agricultural trade is clearly more important for Colombia than it is for its partner countries. However, its importance has been declining significantly. Second, when compared to the whole trade structure, the weight of agricultural trade within the G-3 is very low for the three countries. Third, when the structure

of intra-G-3 trade is compared to the structure of each of the partner countries' trade, it is observed that intra-G-3 trade is 'biased' against agricultural products. Fourth, as shown in Table 3.7, the volume of intra-G-3 agricultural trade is extremely low.

Table 3.7 Intra-G-3 Agricultural Trade ( \$ million)

Importing Country: Colombia					
Exporting Country:	1989	1990	1991	1992	1993
Mexico	0.8	0.8	0.9	1.8	3.0
Importing Country: Mexico					
Exporting Country:	1989	1990	1991	1992	1993
Colombia	4.4	7.6	0.8	1.6	1.5
Venezuela	2.0	30.4	1.7	0.4	3.2
Importing Country: Venezuela					
Exporting Country:	1989	1990	1991	1992	1993
Mexico	4.1	3.2	1.2	2.1	4.0

Source: U.N. (see References section)

Another characteristic of intra-G-3 agricultural trade is its relative instability, which may be partially due to a variety of causes related to protected markets. Among these is the discretionary relaxation of trade regulations or deviations from customary trade patterns because of shortages or abnormal market situations. Lack of competitiveness of partner countries' products may be another cause of instability. Exceptionally high prices may allow these products to temporarily enter a market without the

possibility of establishing stable trade relationships. The low volume of trade of most products is also a possible cause of instability since it does not favor the development of conditions for meaningful trade flows.

Examination of data in Table 3.7 indicates that Colombian agricultural imports from Mexico have a clear upward trend. The rest of intra-G-3 agricultural flows presents an erratic behavior. The coefficient of variation for Colombian exports to Mexico during the period 1989-1993 was 80 percent, that corresponding to Mexican imports from Venezuela was 152 percent, and that for Mexican exports to Venezuela was 38 percent.

The instability of intra-G-3 agricultural trade is even more marked at the product level. Only a very few products show identifiable patterns of trade flows and a large number do not register commerce at all for some years<sup>4</sup>. Tables 3.8 to 3.11 show the annual share of the main groups of agricultural products that were bilaterally traded by the G-3 partners from 1989 to 1993<sup>5</sup>, their average level of share during the period 1989-1993, and the coefficient of variation for their annual traded values.

As shown in Table 3.8, traditionally the most important group of agricultural products that Mexico has exported to Colombia is sugar and honey. Although both its share within annual trade flows and its traded

---

<sup>4</sup> There is the possibility that trade flows for certain products become so reduced that they do not appear reported on trade statistics. The U.N., for example, does not publish trade flows below \$100,000.

<sup>5</sup> Groups are defined at the three-digits level of the SITC.

values have fluctuated, this group still contributes a significant part of bilateral trade flows.

Table 3.8 Main Products in Bilateral Trade between Colombia and Mexico  
(Importing Country: Colombia, Exporting Country: Mexico)\*

	1989	1990	1991	1992	1993	AS†	CV#
Cereal preparations	-	-	2.8	3.0	6.7	2.5	133.7
Vegetables, fresh/s. preserv	-	0.9	-	0.8	25.7	5.5	193.2
Fruits and nuts, fresh/dry	3.1	1.6	3.5	2.0	4.0	2.8	83.2
Fruit/Vegetable juices	-	-	-	6.9	7.7	2.9	131.5
Sugar and honey	62.4	28.6	39.8	43.6	19.7	38.8	37.4
Coffee and substitutes	-	-	15.0	2.8	-	3.6	144.2
Spices	4.3	21.4	2.5	4.8	3.4	7.3	62.6
Feeding stuff for animals	-	-	2.0	0.9	3.1	1.2	134.7
Edible products, nes (098)†	15.3	21.1	22.1	25.9	25.4	21.9	69.2
Crude vegetable materials	14.9	15.1	12.3	9.3	4.4	11.2	13.4
Other products	-	11.4	-	-	-	2.3	-
Total	100	100	100	100	100		

\* Percentages

† Average share for the period

# Coefficient of variation for the series of traded values

† not elsewhere specified

Source: U.N. (see References section)

The group corresponding to edible products has had a relatively large and increasing share within annual trade flows. At the end of the period 1989-1993, this group registered the second largest share for this type of trade. Crude and vegetable materials is the group that has maintained the highest stability in terms of traded values. However, given that Colombian imports from Mexico have been increasing steadily from 1990 on, this group has lost

importance relative to others. As of 1993, the group including fresh and simply preserved vegetables obtained the largest share within Colombian imports from Mexico accounting for more than one quarter of this trade flow. Nonetheless, during the four previous years this group had a very low or null share, a situation that jointly with the low value of its trade in its 1993 peak (about \$776,000) makes it difficult to guess if commerce in this type of product will continue to be important.

Table 3.9 indicates that between 1989 and 1992 Colombian exports to Mexico have been characterized by the dominance of one group of products. Sugar and honey contributed 96 percent of this trade flow on average from 1989 to 1991, while cotton accounted for 84 percent of it in 1992 (a year in which there were no exports of sugar and honey). In 1993, exports of fish (fresh, chilled, and frozen), which traditionally had a very low share, contributed 42 percent of this trade flow resulting in an increase of its traded value of more than 40 times between 1992 and 1993.<sup>6</sup> In the same year, exports of shell fish (fresh and frozen) appeared for the first time, accounting for 24 percent of Colombian exports. Similarly, exports of crude vegetable materials radically expanded its share. Among Colombian exports to Mexico, there is no one single product that shows stability or a clear trend during the five years for which data are reported here.

---

<sup>6</sup> However, the value of these exports at their peak was less than \$1 million.

Table 3.9 Main Products in Bilateral Trade between Colombia and Mexico  
(Importing Country: Mexico, Exporting Country: Colombia)\*

	1989	1990	1991	1992	1993	AS‡	CV#
Fish, fresh/chilled/frozen	0.4	0.1	0.5	1.3	41.9	8.8	187.5
Fish, salted/dried/smoked	-	-	-	8.1	-	1.6	-
Shell fish, fresh/frozen	-	-	-	-	24.2	4.8	-
Fruits, preserved/prepared	-	-	0.1	1.5	3.7	1.1	148.5
Sugar and honey	96.4	97.1	94.5	-	4.8	58.6	116.3
Sugar confectionery	-	-	-	-	2.7	0.5	-
Cotton	2.4	1.0	-	84.4	-	17.6	172.6
Crude vegetable materials	0.9	1.5	3.7	4.8	22.8	6.7	119.1
Other products	-	0.3	1.3	-	-	0.3	-
Total	100	100	100	100	100		

\* Percentages

‡ Average share for the period

# Coefficient of variation for the series of traded values

Source: U.N. (see References section)

Venezuelan agricultural exports to Mexico have been concentrated in the seeds for soft fixed oil group (group 222) as can be seen in Table 3.10. Characterized by relatively stable traded values, the largest variation occurred in 1992 when the Venezuelan agricultural exports to Mexico dropped 67 percent with respect to the previous year (to \$354,000). Fluctuations in the share of this group are mainly due to the presence of sporadic exports of other products.

Table 3.10 Main Products in Bilateral Trade between Mexico and Venezuela  
(Importing Country: Mexico, Exporting Country: Venezuela)\*

	1989	1990	1991	1992	1993	AS‡	CV#
Fish, preser./prepared (037)	12.7	-	0.1	2.8	-	3.1	187.1
Cereal preparations	-	-	-	3.5	29.2	6.5	196.0
Sugar and honey (061)	-	90.2	-	-	-	18.0	-
Edible products, nes (098)†	-	-	0.9	13.9	0.2	3.0	142.5
Unmanufactured tobacco	-	-	36.9	-	-	7.4	-
Seeds for soft fixed oil (222)	85.2	9.6	62.1	79.8	68.9	61.1	53.7
Other products	2.1	0.3	-	-	1.7	0.8	99.5
Total	100	100	100	100	100		

\* Percentages

‡ Average share for the period

# Coefficient of variation for the series of traded values

† not elsewhere specified (nes)

Source: U.N. (see References section)

Data on Mexican exports to Venezuela are presented in Table 3.11. As compared to Venezuelan exports to Mexico, this trade flow is more diversified in the sense that more than one group of products showed continuity during the period 1989-1993. However, only the edible products group had relative stability. Despite of the variability of its share within this trade flow, the traded value of Mexican exports of edible products to Venezuela increased from 1989 to 1992 and then, in 1993, underwent a 24 percent reduction to 1.3 million dollars. Exports of vegetables (fresh and simply preserved) and sugar and honey have also been present during the whole period (those corresponding to vegetables in 1992 were only 0.05 percent and do not appear in Table 3.11). Their share in this trade flow as well as their traded values, however, have fluctuated widely and do not

seem to have a recognizable pattern. Meat (fresh, chilled, and frozen), unmilled maize, and confectionery sugar entered this trade flow in 1993. Among them, maize was the most notable case as this product's share reached 50 percent with 2.6 million dollars.

Table 3.11 Main Products in Bilateral Trade between Mexico and Venezuela  
(Importing Country: Venezuela, Exporting Country: Mexico)\*

	1989	1990	1991	1992	1993	AS†	CV#
Bovine meat, fr./chill./froz	-	-	-	-	4.2	0.8	-
Maize, unmilled	-	-	-	-	50.3	10.1	-
Vegetables, fresh/s. preserv	22.2	80.2	26.3	-	6.7	27.1	111.3
Sugar and honey	70.0	0.9	8.5	14.5	6.6	20.1	147.4
Sugar confectionery	-	-	-	-	6.9	1.4	-
Edible products, nes (098)	4.4	16.5	47.8	77.4	24.4	34.1	64.2
Crude vegetable materials	2.9	2.3	11.6	2.1	0.9	4.0	44.4
Other products	0.4	0.2	5.7	6.0	-	2.5	260.8
Total	100	100	100	100	100		

\* Percentages

† Average share for the period

# Coefficient of variation for the series of traded values

† not elsewhere specified (nes)

Source: U.N. (see References section)

### 3.4 Main Agricultural Products in Member Countries' Trade

This section presents data on the general structure of agricultural trade for the G-3 partners and compares the share of its principal products (at the SITC's three-digit level) with that corresponding to intra-G-3 trade. The objective of this exercise is to help determine the significance of intra-G-3

agricultural trade for the G-3 member countries in the context of their agricultural trade.

Table 3.12 Main Agricultural Imports of Colombia and their Share in Agricultural Imports from G-3 Partners (Average Percentages for the period 1989-1993)

	Total Agr. Imports.	Agric. Imp. Mexico <sup>†</sup>
Fish, prepared/preserved, nes (037)	5.1	-
Wheat, etc., unmilled (041)	25.3	-
Rice (042)	1.1	-
Barley, unmilled (043)	4.0	-
Maize, unmilled (044)	4.8	-
Cereals, nes, unmilled (045)	1.6	-
Cereal preparations (048)	3.4	2.5
Vegetables, fresh/s. preserved (054)	7.4	5.5
Fruits and nuts, fresh/dried (057)	5.2	2.8
Feeding stuff for animals (081)	8.9	1.2
Edible products, preparats., nes (098)	2.4	21.9
Seeds for soft fixed oil (222)	5.1	-
Seeds for other fixed oils (223)	1.1	-
Natural rubber, gums (231)	5.6	-
Cotton (263)	2.3	-
Crude vegetable materials (292)	5.5	11.2
Other products &	11.3	54.9

<sup>†</sup> Agricultural Imports from Mexico

<sup>‡</sup> Agricultural Imports from Venezuela

& Includes 29 groups of products each contributing less than 3 percent  
nes: not elsewhere specified

Source: U.N. (see References section)

Data presented in Table 3.12 shows that among the most important Mexican exports to Colombia (Table 3.8) only the groups of products corresponding to vegetables (fresh and simply preserved) and crude vegetable materials have some relevance within Colombian agricultural imports. Edible products, spices, and sugar and honey, which constitute 68 percent of Mexican exports to Colombia, have small or null shares within Colombian imports.

Table 3.13 Main Agricultural Exports of Colombia and their Share in Agricultural Exports to G-3 Partners (Average Percentages for the period 1989-1993)

	Total Agr. Exports.	Agric. Exp. Mexico †
Fish, fresh/chilled/frozen (034)	1.7	8.8
Shell fish, fresh/frozen (036)	3.1	4.8
Fruits and nuts, fresh/dried (057)	14.8	-
Fruits, preserved/prepared (058)	1.0	1.1
Sugar and honey (061)	4.8	58.6
Coffee and substitutes (071)	54.9	-
Crude vegetable materials (292)	11.4	6.7
Other products &	8.3	20.0

† Agricultural Exports to Mexico

‡ Agricultural Exports to Venezuela

& Includes 38 groups of products each contributing less than 3 percent

Source: U.N. (see References section)

Three out of five of the most significant Colombian exports to Mexico also have importance for Colombia. Table 3.13 shows that the groups sugar and honey, crude vegetable materials, and shell fish (fresh/frozen) accounted for 4.8, 11.4, and 3.1 percent of Colombian agricultural exports. Conversely, the

two remaining exports of importance have low or null shares in Colombian exports. Fish (fresh/chilled/frozen), which was the largest Colombian export to Mexico in 1993, contributed only 1.7 percent but has grown at a faster rate than Colombian agricultural exports. Cotton, on the other hand, does not appear to be a growing or important Colombian export.

Table 3.14 shows that the group sugar and honey had the highest average share among Mexican imports from Colombia and also was an important agricultural import for Mexico. It appears to be the sixth largest agricultural import for this country. Cotton and crude vegetable materials, which are also among the main Mexican imports from Colombia, showed lower shares within Mexican imports. However, they still retained some relative importance. On the contrary, fish (fresh/chilled/frozen) and shell fish (fresh/frozen) which account for 13.6 percent of Colombian exports to Mexico, do not show any significance among Mexican imports.

As shown also in Table 3.14, the principal Venezuelan export to Mexico is also the product with the highest share among Mexican agricultural imports. Seeds for soft fixed oil represented more than 61 percent of Venezuelan exports on average and more than 11 percent of Mexican imports. Sugar and honey and cereal preparations that are also important Venezuelan exports to Mexico, show some significance as Mexican imports (although cereal preparations less than sugar and honey). Unmanufactured tobacco which was an important Venezuelan export to Mexico in 1991 is not a significant Mexican import.

Table 3.14 Main Agricultural Imports of Mexico and their Share in Agricultural Imports from G-3 Partners (Average Percentages for the period 1989-1993)

	Total Agr. Imports.	Agric. Imp. Colombia †	Agric. Imp. Venez. ‡
Live animals for food (001)	4.0	-	-
Bovine meat, fr./chilled/frozen (011)	5.2	-	-
Other meat, fr./chilled/frozen (012)	7.2	-	-
Meat, prepared/preserved, nes (014)	1.3	-	-
Milk and cream (012)	10.5	-	-
Wheat, etc., unmilled (041)	2.5	-	-
Maize, unmilled (044)	6.5	-	-
Cereals, nes, unmilled (045)	9.0	-	-
Cereal preparations (048)	2.3	-	6.5
Vegetables, fresh/s. preserved (054)	3.1	-	-
Fruits and nuts, fresh/dried (057)	2.3	-	-
Sugar and honey (061)	5.5	58.6	18.0
Chocolate and products (073)	1.2	-	-
Feeding stuff for animals (081)	4.8	-	-
Edible products, preps, nes (098)	2.7	-	3.0
Seeds for soft fixed oil (222)	11.3	-	61.1
Cotton (263)	2.3	17.6	-
Crude vegetable materials (292)	2.9	6.7	-
Other products &	15.6	17.1	11.4

† Agricultural Imports from Colombia

‡ Agricultural Imports from Venezuela

& Includes 27 groups of products each contributing less than 3 percent

nes: not elsewhere specified

Source: U.N. (see References section)

Table 3.15 Main Agricultural Exports of Mexico and their Share in Agricultural Exports to G-3 Partners (Average Percentages for the period 1989-1993)

	Total Agr. Exports.	Agric. Exp. Colombia <sup>†</sup>	Agric. Exp. Venez. <sup>‡</sup>
Live animals for food (001)	11.0	-	-
Shell fish, fresh/frozen (036)	9.3	-	-
Fish, etc., prepared/preserved (037)	1.3	-	-
Cereal preparations (048)	1.1	2.5	-
Vegetables, fresh/s. preserved (054)	29.1	5.5	27.1
Vegetables, preserved/prepared (056)	2.4	-	-
Fruits and nuts, fresh/dried (057)	11.3	2.8	-
Fruits, preserved/prepared (058)	1.5	-	-
Coffee and substitutes (071)	13.1	3.6	-
Edible products, preps., nes (098)	1.7	21.9	34.1
Crude vegetable materials (292)	2.7	11.2	4.0
Other products &	15.5	52.5	34.8

<sup>†</sup> Agricultural Exports to Colombia

<sup>‡</sup> Agricultural Exports to Venezuela

& Includes 31 groups of products each contributing less than 3 percent  
nes: not elsewhere specified

Source: U.N. (see References section)

Data in Table 3.15 show that the largest Mexican exports to Colombia do not have importance as Mexican agricultural exports. Sugar and spices are not valuable Mexican exports, while edible products and crude vegetable materials have relatively high growth rates but low shares. The only group of products that has importance in this trade flow and is significant to Mexican agricultural exports is vegetables (fresh/simply preserved). This group, in fact, constitutes the main agricultural export of Mexico.

The case of Mexican exports to Venezuela is similar to that of Colombia. The vegetables group (fresh/simply preserved), on average, is the second most important Mexican export to Venezuela and is the only one that has importance as a Mexican agricultural export. Edible products and crude vegetable materials appear as important exports to Venezuela. Sugar and honey and unmilled maize, which contribute to more than 30 percent of this trade flow, are not important among Mexican exports.

Table 3.16 indicates that among the Mexican agricultural exports to Venezuela, the groups unmilled maize, vegetables (fresh/simply preserved), and sugar and honey have meaningful shares among Venezuelan imports. In contrast, edible products which were the largest Mexican export to Venezuela during the period 1989-1993, account only for one percent of Venezuelan agricultural imports.

On the other hand, none of the Venezuelan exports to Mexico has importance among Venezuelan agricultural exports. Table 3.17 shows that the group seeds for soft fixed oils, which constitutes the basis of this trade flow, accounts only for 2.5 percent of Venezuelan agricultural exports. Similarly, cereal preparations and sugar and honey have low shares of Venezuelan exports. Trade of the latter group was targeted exclusively to Mexico and the same happened with a transient export of unmanufactured tobacco that did not suffice to put this product among the relevant Venezuelan exports.

Table 3.16 Main Agricultural Imports of Venezuela and their Share in Agricultural Imports from G-3 Partners (Average Percentages for the period 1989-1993)

	Total Agr. Imports.	Agric. Imp. Mexico †
Milk and cream (022)	10.7	-
Cheese and curd (024)	1.0	-
Wheat, etc., unmilled (041)	20.0	-
Maize, unmilled (044)	8.3	10.1
Cereals, nes, unmilled (045)	3.1	-
Cereal, etc., preparations (048)	6.8	-
Vegetables, fresh/s. preserved (054)	7.1	27.1
Fruits and nuts, fresh/dried (057)	2.8	-
Sugar and honey (061)	5.9	20.1
Feeding stuff for animals (081)	14.1	-
Edible products, preps., nes (098)	1.0	34.1
Seeds for soft fixed oils (222)	3.0	-
Cotton (263)	4.2	-
Other products &	12.0	8.6

† Agricultural Imports from Colombia

‡ Agricultural Imports from Mexico

& Includes 33 groups of products each contributing less than 3 percent  
nes: not elsewhere specified

Source: U.N. (see References section)

Table 3.17 Main Agricultural Exports of Venezuela and their Share in Agricultural Exports to G-3 Partners (Average Percentages for the period 1989-1993)

	Total Agr. Exports.	Agric. Exp. Mexico <sup>‡</sup>
Bovine meat, fr./chilled/frozen (011)	6.1	-
Fish, fresh/chilled/frozen (034)	9.3	-
Shell fish, fresh/frozen (036)	13.8	-
Fish, etc., prepared/preserv., nes (037)	7.3	3.1
Rice (042)	2.2	-
Cereal, etc., preparations (048)	2.5	6.5
Vegetables, fresh/s. preserved (054)	2.1	-
Fruits and nuts, fresh/dried (057)	12.3	-
Fruits, preserved/prepared (058)	4.0	-
Sugar and honey (061)	3.1	18.0
Coffee and substitutes (071)	8.0	-
Cocoa (072)	4.5	-
Feeding stuff for animals (081)	2.4	-
Edible products, preps., nes (098)	3.2	3.0
Hides, skins, exc. furskins, raw (211)	2.4	-
Seeds for soft fixed oil (222)	2.5	61.1
Seeds for other fixed oils (223)	1.5	-
Other products &	13.1	8.3

<sup>†</sup> Agricultural Exports to Colombia

<sup>‡</sup> Agricultural Exports to Mexico

& Includes 29 groups of products each contributing less than 3 percent  
nes: not elsewhere specified

Source: U.N. (see References section)

### 3.5 Trade Liberalization and Bilateral Trade Flows

In determining the main groups of products whose trade flows are expected to be modified by the agreement, some criteria based on the information presented in the previous sections are employed. To be selected, a group of products must have had a share in its bilateral trade flow that were at least 5 percent on average during the period 1989-1993. Second, it ought to have been of relative importance within the agricultural trade of one of the participating countries (that is, within the agricultural imports of the importing country or the agricultural exports of the exporting country<sup>7</sup>). Finally, to avoid the inclusion of products that had relatively important traded values for just one year, the criterion of having some permanence during the period was added (as was mentioned before, the instability of the G-3 agricultural trade allows for the emergence of products on a transitory basis but with a high share in the corresponding trade flow).

By applying these criteria, the following sets of products were selected: (1) for trade flows from Mexico to Colombia, crude vegetable materials - group 292; (2) for trade flows from Colombia to Mexico, sugar and honey and crude vegetable materials - groups 061 and 292; (3) for trade flows from Venezuela to Mexico, seeds for soft fixed oil - group 222; and (4) for trade flows from Mexico to Venezuela, vegetables (fresh/simply preserved) and sugar and honey - groups 054 and 061. The traded value of these products accounted for an average of 40 percent of the aggregate bilateral trade between Mexico and Colombia and Mexico and Venezuela during the period 1989-1993. If the

---

<sup>7</sup> The threshold level in this case was fixed at the 3 percent level.

criterion related to the permanence of trade were relaxed, 4 more products would be selected and the share of the whole group within aggregate bilateral trade would rise to 81 percent<sup>8</sup>.

To appraise the status of the selected groups of products under the G-3's tariff liberalization schedule it is necessary to get into the specific categories of products that are traded within each group. Trade flows from Mexico to Colombia correspond to the subgroup 292.4 that refers to "[p]lants or parts of plants (including seeds and fruits) of a kind used primarily in perfumery, in pharmacy, or for insecticidal, fungicidal or similar purposes, fresh or dried, whether or not cut, crushed or powdered" (United Nations, 1989). The subgroups important in trade flows from Colombia to Mexico correspond to codes 061.2 and 292.9. Subgroup 061.2 includes cane and beet sugar, other than raw, and chemically pure sucrose in solid form, whether or not containing added flavoring or coloring matter. Subgroup 292.9 comprises a subset of products characterized by the fact that they are vegetable materials of various kinds used for purposes such as stuffing or padding and manufacture of brooms and brushes. The subgroup also covers vegetable saps and extracts, pectic substances, and seaweed and other algae.

Trade flows from Venezuela to Mexico only include subgroup 222.5 that corresponds to sesame seeds. On the other hand, trade flows from Mexico to

---

<sup>8</sup> These 4 products include vegetables in the case of flows from Mexico to Colombia, shell fish for flows from Colombia to Mexico, sugar and honey for flows from Venezuela to Mexico, and unmilled maize for trade flows from Mexico to Venezuela (the latter is reported by Venezuela and do not appear in the Mexican statistics). All these products have importance just in one year during the analyzed period.

Venezuela include subgroups 054.2 and 061.9. Subgroup 054.2 embraces all leguminous vegetables, dried or shelled, whether skinned or split. Subgroup 061.9 contains sugars different from cane and beet sugars and molasses, such as pure lactose, maltose, glucose and fructose, in solid form as well as sugar syrups not containing added flavoring or coloring matter (artificial honey and caramel are included also).

The status of these products under the G-3 is as follows (1) Vegetable materials for perfumery and pharmacy (subgroup 292.4) are included within the tariff elimination schedule. The respective starting tariffs were fixed at the 20 percent ad-valorem level for Mexico and 14.4 percent for Colombia and Venezuela. (2) Non-raw beet and cane sugar (subgroup 061.2) is initially excluded from trade liberalization. As mentioned above, a special agreement on quotas and tariffs for all sugar products is expected to be determined by an ad hoc committee. (3) Vegetable materials for different uses (subgroup 292.9) are scheduled for tariff elimination and the corresponding initial ad-valorem tariffs were set at 10 percent for Mexico and 7.2 percent for Colombia and Venezuela. (4) Sesame seed (subgroup 222.5) is excluded from tariff elimination. However, Mexico applies no tariff charges on this product and therefore imports can enter this market duty free. (5) Leguminous vegetables (subgroup 054.2) are excluded from tariff elimination. Nonetheless, for some products in this subgroup a tariff reduction on ad-valorem duties was applied from the date in which the accord entered into effect. These reductions were fixed at 28 percent in the case of Mexico and 12 percent in the case of Colombia and Venezuela. (6) Lactose and other sugars (subgroup 061.9) are excluded from tariff elimination. For some of these products it was agreed to apply the same

tariff reductions mentioned in the previous case. However, the definitive situation of this subgroup within the G-3 is still to be defined by the ad hoc committee on sugar trade.

The previous review shows that two out of the six most important products in bilateral trade between Mexico and Colombia and Mexico and Venezuela are scheduled for tariff elimination within the G-3. Two additional products benefited from tariff reductions (although one of them not completely) with respect to the level of regional tariff preferences previously accorded within the LAIA. Finally, the two remaining products are excluded from trade liberalization, one of them subject to programmed negotiations. In terms of their relevance in aggregated bilateral trade, the products that were included for liberalization account for 1.9 percent of this trade flow while the products that benefited from tariff reductions represent 10.3 percent of it. On the other hand, excluded products account for 27.4 percent.

It is not possible at this point to have a clear idea of the likely impact of the G-3 on member countries' agricultural trade. Even if its effects remain confined to existing trade flows, assessing its consequences with the information so far presented is difficult. It is clear, however, that there does not seem to be a great potential for trade expansion in the case of the products that were included for tariff elimination; this is so both because of the size of their markets and their share in aggregate bilateral trade. In the case of the products that obtained tariff reductions (both exports from Mexico to Venezuela), the response of trade flows is unknown and will depend greatly on variables such as exchange rate movements in both countries. The outcome for at least one of the excluded products will be

determined once the ad hoc committee arrives at a determination on how to treat sugar trade. In summary, leaving aside the effect of this decision, it would seem that the G-3 agreement is likely to have a very modest impact on member countries' agricultural trade. Only empirical verification can help to arrive at a more accurate assessment.

## Appendix 1

### Standard International Trade Classification (SITC) Codes at the Two Digit Level Included in the Definition of the Agricultural Sector

Table A-1.1 SITC Division Codes Considered as Agricultural Sector  
(including number of groups -G-, subgroups -SG- and basic  
headings -BH-)

Code	Description of division heading	G	SG	BH
00	Live animals other than animals of division 03	1	6	11
01	Meat and meat preparations	4	17	38
02	Dairy products and birds' eggs	4	12	22
03	Fish (not marine mammals), crustaceans, mol- luscs, and aquatic invertebrates and preparations.	4	14	47
04	Cereals and cereal preparations	8	21	34
05	Vegetables and fruit	5	27	96
06	Sugars, sugar preparations, and honey	2	7	17
07	Coffee, tea, cocoa, spices, and manufactures thereof	5	16	35
08	Feeding stuff for animals (not unmilled cereals)	1	6	26
09	Miscellaneous edible products and preparations	2	6	18
12 <sup>1</sup>	Tobacco and tobacco manufactures	2	6	8
21	Hides, skins, and furskins, raw	2	9	18
22	Oil seeds and oleaginous fruits	2	13	15
23 <sup>2</sup>	Crude rubber (including synthetic and reclaimed)	2	5	16
26 <sup>3</sup>	Textile fibers and their wastes <sup>4</sup>	8	26	57
29	Crude animal and vegetable materials, n.e.s.	2	9	37

<sup>1</sup> only group 121 (unmanufactured tobacco) was included

<sup>2</sup> only group 231 (natural rubber) was included

<sup>3</sup> only group 263 (cotton) was included

<sup>4</sup> includes fibers other than wool tops and other combed wool and excludes waste manufactured into yarn or fabric.

Source: U.N. Statistical Office (1986) Standard International Trade  
Classification. Revision 3

**Appendix 2**  
**G-3's Agricultural Trade Data**

Table A-2.1 G-3 Countries' Total and Agricultural Trade (\$ million)

Total Imports:					
	1989	1990	1991	1992	1993
Colombia	5,010.5	5,588.5	4,967.0	6,683.9	9,840.8
Mexico	22,788.6	28,066.3	38,073.3	47,877.9	65,270.9
Venezuela	7,029.6	6,600.8	10,037.6	12,668.1	11,266.6
Agricultural Imports:					
	1989	1990	1991	1992	1993
Colombia	338.7	392.5	314.1	637.8	747.5
Mexico	3,534.9	4,268.0	4,046.1	5,353.6	5,205.2
Venezuela	761.4	613.3	877.9	1,052.8	1,043.1
Total Exports:					
	1989	1990	1991	1992	1993
Colombia	5,739.4	6,765.0	7,268.6	6,916.1	7,454.9
Mexico	23,046.0	26,811.7	26,956.7	27,207.1	51,698.2
Venezuela	13,096.4	18,044.3	15,129.9	14,235.3	15,208.1
Agricultural Exports:					
	1989	1990	1991	1992	1993
Colombia	2,411.7	2,494.6	2,695.7	2,658.7	2,516.3
Mexico	2,724.0	2,996.6	3,224.5	2,895.6	3,549.2
Venezuela	233.8	346.3	250.7	263.3	350.3

Source: U.N. (see References section)

Table A-2.2 Intra-G-3<sup>†</sup> Total and Agricultural Trade\* (\$ million)

Intra-G-3 Imports:					
	1989	1990	1991	1992	1993
Colombian G-3 Imports	116.3	113.6	157.9	205.1	250.6
Mexican G-3 Imports	96.9	217.3	188.7	268.7	309.4
Venezuelan G-3 Impts.	63.6	117.0	134.7	223.1	222.3
Total G-3 Imports	276.8	447.9	481.3	696.9	782.3
Intra-G-3 Agricultural Imports:					
	1989	1990	1991	1992	1993
Colombian G-3 Ag. Imp.	0.8	0.8	0.9	1.8	3.0
Mexican G-3 Ag. Impts.	6.4	38.0	2.5	2.1	4.7
Venezuelan G-3 Ag. Im.	4.1	3.2	1.2	2.1	4.0
Total G-3 Agric. Impts.	11.3	42.0	4.6	6.0	11.7
Intra-G-3 Exports:					
	1989	1990	1991	1992	1993
Colombian G-3 Exports	24.8	38.5	52.4	71.0	83.8
Mexican G-3 Exports	179.9	230.5	292.7	428.2	472.8
Venezuelan G-3 Exports	72.1	178.8	136.2	197.6	225.6
Total G-3 Exports	276.8	447.8	481.3	696.8	782.2
Intra-G-3 Agricultural Exports:					
	1989	1990	1991	1992	1993
Colombian G-3 Ag. Exp.	4.4	7.6	0.8	1.6	1.5
Mexican G-3 Ag. Expts.	4.9	4.0	2.1	3.9	7.0
Venezuelan G-3 Ag. Ex.	2.0	30.4	1.7	0.4	3.2
Total G-3 Agric. Exports	11.3	42.0	4.6	5.9	11.7

<sup>†</sup> Intra-G-3 trade comprises bilateral trade flows among Mexico and Colombia and Mexico and Venezuela

\* Due to inconsistencies between data reported by the different countries, bilateral flows were averaged.

Source: U.N. (see References section)

Table A-2.3 Main Products in Bilateral Trade between Colombia and Mexico. Importing Country: Colombia, Exporting Country: Mexico. (\$000)

	1989	1990	1991	1992	1993
Cereal preparations	0	0	26.4	53.3	201.0
Vegetables, fresh/s. preserv	0	7.1	0	14.7	776.1
Fruits and nuts, fresh/dry	26.0	13.2	33.5	35.3	119.5
Fruit/Vegetable juices	0	0	0	123.6	231.3
Sugar and honey	522.3	229.2	378.5	779.5	595.0
Coffee and substitutes	0	0	142.8	50.0	0
Spices	36.4	171.3	23.9	85.6	102.9
Feeding stuff for animals	0	0	19.1	16.8	94.5
Edible products, nes (098) <sup>†</sup>	127.8	168.7	210.0	462.0	767.0
Crude vegetable materials	125.1	120.7	117.5	166.7	133.9

<sup>†</sup> not elsewhere specified

Source: U.N. (see References section)

Table A-2.4 Main Products in Bilateral Trade between Colombia and Mexico. Importing Country: Mexico, Exporting Country: Colombia. (\$000)

	1989	1990	1991	1992	1993
Fish, fresh/chilled/frozen	17.5	8.7	3.6	21.7	973.0
Fish, salted/dried/smoked	0	0	0	136.8	0
Shell fish, fresh/frozen	0	0	0	0	561.0
Fruits, preserved/prepared	0	0	0.8	25.0	85.6
Sugar and honey	4,247.4	7,389.6	725.2	0	111.0
Sugar confectionery	0	0	0	0	62.8
Cotton	104.0	76.3	0	1,434.8	0
Crude vegetable materials	39.4	110.7	28.4	81.8	529.5

Source: U.N. (see References section)

Table A-2.5 Main Products in Bilateral Trade between Mexico and Venezuela. Importing Country: Mexico, Exporting Country: Venezuela. (\$000)

	1989	1990	1991	1992	1993
Fish, preserv./prepar. (037)	253.1	0	1.5	12.6	0
Cereal preparations	0	0	0	15.3	938.2
Sugar and honey (061)	0	27,427.4	0	0	0
Edible products, nes (098) <sup>†</sup>	0	0	15.1	61.5	5.0
Unmanufactured tobacco	0	0	634.9	0	0
Seeds for soft fixed oil (222)	1,702.9	2,907.2	1,067.3	353.7	2,212.5

<sup>†</sup> not elsewhere specified (nes)

Source: U.N. (see References section)

Table A-2.6 Main Products in Bilateral Trade between Mexico and Venezuela. Importing Country: Venezuela, Exporting Country: Mexico. (\$000)

	1989	1990	1991	1992	1993
Bovine meat, fr./chill./froz	0	0	0	0	217.5
Maize, unmilled	0	0	0	0	2,592.1
Vegetables, fresh/s. preserv	906.8	2,569.9	308.8	0.1	346.5
Sugar and honey	2,854.3	27.2	100.3	308.4	341.3
Sugar confectionery	0	0	0	0	355.8
Edible products, nes (098)	180.7	529.0	561.5	1,649.5	1,256.5
Crude vegetable materials	118.3	73.0	136.4	45.5	46.3

<sup>†</sup> not elsewhere specified (nes)

Source: U.N. (see References section)

## A-2.1 Agricultural Trade Between Mexico and Colombia (original data)

Table A-2.7 Colombian Imports from Mexico - Reported by Colombia  
(values in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Imports	338,670.5	392,465.1	314,075.6	637,778.8	747,524.3
Agr. Impts. from Mexic.	852	1,018.4	1,088.8	2,132.9	3,320.5
Cereal preparations			52.8	106.6	584.3
Vegetables, fresh/presv.		14.2		29.4	882.2
Fruits, fresh/dried	52	26.3	66.9	70.5	123.9
Fruits, preserv./prepar.				122.2	288.5
Sugar and honey	494.5	298.4	544	922.9	683.9
Coffee and substitutes			98.6	99.9	
Spices	72.7	200.5	47.8	171.2	104.8
Feeding stuff for animal			19.1	16.8	94.5
Edible products	112.6	161.3	128.1	317.9	339.5
Crude vegetable materls	120.2	135.3	97.9	209.3	129.8

Table A-2.8 Colombian Exports to Mexico - Reported by Colombia  
(values in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Exports	5,739,442	6,765,037	7,268,643	6,916,051	7,454,865
Agr. Exports to Mexico	4,666	7,293.7	959.2	1,464.1	1,201.1
Fish, fresh/chilled/froz.	17.5	8.7	3.6	21.7	973
Fish, salt./dried/smok.				136.8	
Fruits, preserv/prepar.			0.8	25	85.6
Sugar and honey	4,361.8	6,979.2	874.4		
Sugar candy, non-choco.					62.8
Cotton	207.9	152.5		1,242.5	
Crude vegetable materls	78.8	100.4	56.7	26.5	

Table A-2.9 Mexican Imports from Colombia - Reported by Mexico  
(values in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Imports	3,534,904	4,267,965	4,046,133	5,353,637	5,205,157
Agr. Imps. from Colom.	4,133	7,921	576	1,764	1,842
Shell fish, fresh/frozen					561
Sugar and honey	4,133	7,800	576		222
Cotton				1,627	
Crude vegetable materls		121		137	1,059

Table A-2.10 Mexican Exports to Colombia - Reported by Mexico (values  
in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Exports	2,725,976	2,996,624	3,224,455	2,895,621	3,549,164
Agr. Exports to Colomb.	823	584	777	1,391	2,717
Cereal preparations					261
Vegetables, fresh/presd.					670
Fruits, fresh/dried					115
Fruit and veg. juices				125	174
Sugar and honey	550	160	213	636	506
Coffee and substitutes			187		
Spices		142			101
Edible products	143	176	240	506	752
Crude vegetable materls	130	106	137	124	138

## A-2.2 Agricultural Trade Between Mexico and Venezuela (original data)

Table A-2.11 Venezuelan Imports from Mexico - Reported by Venezuela  
(values in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Imports	761,413.1	613,278.4	877,903.5	1,052,751	1,043,067
Agr. Impts. from Mexic.	3,388.2	3,112.1	1,472.8	2,529.1	5,601.8
Maize, unmilled					2,592.1
Cereal preparations	1.9	103.2	78.3	425.6	218.5
Vegetables, fresh/presv.	901.5	2,317.8	373.5	0.1	397.9
Sugar and honey	2,140.5	54.3	200.6	373.7	325.5
Edible products	181.4	476	514.6	1,460.9	1,047.5
Crude vegetable materls	130.6	145.9	172.7	90.9	92.6
Other products *	32.3	14.9	133.1	177.9	927.7

\* Includes 11 groups of products, each contributing less than 5 percent to agricultural imports from Mexico

Table A-2.12 Venezuelan Exports to Mexico - Reported by Venezuela  
(values in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Exports	233,812.1	346,308.8	250,709.4	263,333.7	350,280.1
Agr. Exports. to Mexico	2,809.8	3,3671.2	1,653.5	360.4	3,293.6
Fish, prepared/preservd	330.2		3	25.1	
Cereal preparations				30.6	698.4
Sugar and honey		30,298.7			
Edible products			15.1	61.5	5
Tobacco, unmanufact.			558.8		
Seeds for 'soft' fixed oil	2,395.8	3,219.4	1,067.5	194.4	2,477.9
Other products *	83.8	153.1	9.1	48.8	112.3

\* Includes 8 groups of products, each contributing less than 5 percent to agricultural exports to Mexico

Table A-2.13 Mexican Imports from Venezuela - Reported by Mexico  
(values in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Imports	3,534,904	4,267,965	4,046,133	5,353,637	5,205,157
Agr. Imp. from Venez.	1,186	27,151	1,778	513	3,125
Fish, prepared/preservd	176				
Cereal preparations					1,178
Sugar and honey		24,556			
Tobacco, unmanufact.			711		
Seeds for 'soft' fixed oil	1,010	2,595	1,067	513	1,947

Table A-2.14 Mexican Exports to Venezuela - Reported by Mexico (values  
in U.S. \$000)

	1989	1990	1991	1992	1993
Total Agric. Exports	2,725,976	2,996,624	3,224,455	2,895,621	3,549,164
Agr. Exports. to Venez.	4,766	3,297	875	1,733	2,454
Meat, fresh/chilled/froz.					242
Vegetables, fresh/presv.	912	2,822	244		295
Sugar and honey	3,568			243	357
Sugar candy, non-choco.					312
Edible products	180	475	531	1,490	1,248
Crude vegetable materls	106		100		

## References

- Appendini, Kirsten (1992a); "Política Alimentaria y Estabilización Económica en México: El Dilema del Precio del Maíz"; in Cynthia Hewitt de Alcántara (comp.) Reestructuración Económica y Subsistencia Rural. El Maíz y la Crisis de los Ochenta; El Colegio de México - Centro Tepoztlán - UNRISD; México
- Appendini, Kirsten (1992b); De la Milpa a los Tortibonos. La Reestructuración de la Política Alimentaria en México; El Colegio de México-UNRISD; México
- Asociación Nacional de Industriales de Colombia - ANDI (1994) Contenido del Acuerdo G-3. Comercio 1991-1993. Programa de Liberación; (Data Base) Bogotá, Colombia
- Avilan, Justo and Eder, Herbert (1986) Sistemas y Regiones Agrícolas de Venezuela; Fundación Polar - Ministerio de Agricultura y Cria; Caracas
- Banco Interamericano de Desarrollo -IDB (1995) Integración Económica en las Americas. Nota Periodica; División de Integración, Comercio y Asuntos Hemisfericos; Julio
- Bolling, Christine (1988) "Venezuela"; in USDA - ERS Global Review of Agricultural Policies; Agriculture and Trade Analysis Division, Staff Report AGES880304
- Burbach, Roger and Rosset, Peter (1994); Chiapas and the Mexican Agriculture; Institute for Food and Development Policy; Oakland, CA; December
- Coleman, Jonathan and Larson, Donald (1991) Tariff-based Commodity Price Stabilization Schemes in Venezuela; World Bank, International Economics Department, Working Paper WPS 611, Washington
- Comision Económica para America Latina y el Caribe - CEPAL (1995) Desenvolvimiento de los Procesos de Integración en America Latina y el Caribe; LC/R.1527; May 16th, Santiago de Chile
- Cook, Roberta (1993); "Implications of the NAFTA for the U.S. Horticultural Sector"; in Review of Issues Related to the North American Free Trade Agreement. Hearings Before the Committee on Agriculture. House of Representatives. One Hundred Second Congress. Second Session; U.S. Government Printing Office; Washington

Cortés, Adriana (1993) "10% Anual Durante una Década: Desgravación Arancelaria Será Lineal, Gradual y Automática"; in El Nacional, October 19th 1993, Sección Negocios, p. 1; Caracas, Venezuela

de Pombo, J. (1992) "Dynamics of the Colombian Agricultural Sector"; in A. Cohen and F. Gunter (eds.) The Colombian Economy. Issues of Trade and Development; Westview Press

Dornbusch, Rudiger (1990) Prologue to Ricardo Hausmann Shocks Externos y Ajuste Macroeconómico; Banco Central de Venezuela, Caracas

FAO "Agricultural Statistics. AGROSTAT. Data Base"

FAO (1995) Production Yearbook. 1994; FAO Statistics Series; Vol 48, No. 125; Rome

García, Raul (1995); Modernizing Poverty: Economic Reforms and Peasant Vulnerability in Mexico; Lecture at Cornell's International Studies in Planning Seminar Series; Jan.

Gutierrez, Alejandro (1992) Gasto Público y Acumulación de Capital en la Agricultura Venezolana (1968-1990); Fundación Polar; Caracas

Gutierrez, Alejandro (1995) Las Políticas de Ajuste y la Agricultura Venezolana; Universidad de los Andes, Mérida, Venezuela

Hallberg, K. and Takacs, W. (1992) "Trade Reform in Colombia: 1990-94"; in A. Cohen and F. Gunter (eds.) The Colombian Economy. Issues of Trade and Development; Westview Press

Hewitt de Alcántara, Cynthia (1992); "Introducción: Reestructuración Económica y Subsistencia Rural"; in Cynthia Hewitt de Alcántara (comp.) Reestructuración Económica y Subsistencia Rural. El Maíz y la Crisis de los Ochenta; El Colegio de México - Centro Tepoztlán - UNRISD; México

Hommes, Rudolf (1992) "Challenges to the Private Sector in the Nineties: Colombian Economic Policies and Perspectives"; in A. Cohen and F. Gunter (eds.) The Colombian Economy. Issues of Trade and Development; Westview Press

Hufbauer, Gary and Schott, Jeffrey (1993); NAFTA: An Assessment (revised edition); Institute for International Economics, Washington, DC; October

IATRC (1994) The Uruguay Round Agreement on Agriculture: An Evaluation; Commissioned Paper Number 9; July

Joint Economic Committee. Congress of the United States (1988); Economic Reform in Mexico: Implications for the United States; A Staff Study; U.S. Government Printing Office; Washington

Kennedy, Richard (1994) "Venezuela"; in Donna Roberts and David Skully (eds.) Global Review of Agricultural Policies. Western Hemisphere; USDA, Economic Research Service, Statistical Bulletin Number 892

Levy, Santiago and van Wijnbergen, Sweder (1992); Transition Problems in Economic Reform. Agriculture in the Mexico-U.S. Free Trade Agreement; World Bank. Working Papers; WPS 967; Aug.

Martin, Philip (1993); NAFTA, Migration, and U.S. Labor Markets; University of California at Davis

Myhre, David (1955); The Transformation of Rural Mexico: Restructuring or Destabilization?; Lecture at the Latin American Studies Program, Weekly Luncheon Seminar Series; Cornell University; April

Montenegro, Armando (1993) "Prólogo" a C. González and C. Jaramillo (coordinadores) Competitividad sin Pobreza. Estudios para el Desarrollo del Campo en Colombia; Tercer Mundo Editores, Bogotá

Nissen, H-P. and Welsch, Friedrich (1994) "Venezuela"; in Christian Morrisson (general editor) The Political Feasibility of Adjustment in Ecuador and Venezuela; OECD, Paris.

Ocampo, José A (1992). "Prospects for Medium-Term Growth in Colombia"; in A. Cohen and F. Gunter (eds.) The Colombian Economy. Issues of Trade and Development; Westview Press

Paarlberg, Robert (1993); "Will NAFTA Be Good for U.S. Agriculture?"; in Review of Issues Related to the North American Free Trade Agreement. Hearings Before the Committee on Agriculture. House of Representatives. One Hundred Second Congress. Second Session; U.S. Government Printing Office; Washington

Presidencia de la Republica de Colombia (1991) "Declaración de los Presidentes del Grupo de los Tres"; in Presidencia de la República de Colombia La Integración Latinoamericana. El Grupo de Río, El Grupo Andino, El Grupo de los Tres; Bogotá, Colombia

República de Colombia. Ministerio de Comercio Exterior (1993) Tratado de Libre Comercio Entre Colombia, Mexico y Venezuela; Bogota, Colombia

República de Colombia. Ministerio de Agricultura (1995) Anuario Estadístico del Sector Agropecuario. 1994; Bogotá, Colombia

República de Venezuela. Ministerio de Agricultura y Cría (1994) Anuario Estadístico Agropecuario. 1989-90-91; Caracas, Venezuela

Reyes, A. and Ramírez, C. (1993) "Evaluación del Sistema de Franjas de Precios"; in C. González and C. Jaramillo (coordinadores) Competitividad sin Pobreza. Estudios para el Desarrollo del Campo en Colombia; Tercer Mundo Editores, Bogotá

Selwitz, Robert (1994) "No Threat From Latin Trade Pact - For Now"; in Global Trade and Transportation, v. 114, no. 11; p.6

Szymczak, Philippe (1992); "International Trade and Investment Liberalization: Mexico's Experience and Prospects"; in Loser, Claudio and Kalter, Eliot (eds.) Mexico: The Strategy to Achieve Sustained Economic Growth; International Monetary Fund; Occasional Paper 99

Thorne, Alejandro (1995) Lecture at the Johnson Graduate School of Management's Seminar on The Financial Crisis in Latin America; Cornell University, April

Tratado de Libre Comercio Entre Los Estados Unidos Mexicanos, La República de Colombia y La República de Venezuela, 1994

United Nations (1986) Standard International Trade Classification, Rev. 3; Department of International, Economic, and Social Affairs; Statistical Office; Statistical Papers; Series M, No. 34, Rev. 3

United Nations (1989) Classification by Broad Economic Categories. Defined in Terms of SITC, Rev. 3; Statistical Papers; Series M, No. 53, Rev. 3

United Nations (1991) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XXXIX, No. 11

United Nations (1991) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XXXIX, No. 12

United Nations (1991) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XL, No. 4

United Nations (1992) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XL, No. 22

United Nations (1992) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XL, No. 20

United Nations (1992) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLI, No. 7

United Nations (1993) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XXXIX, No. 26

United Nations (1993) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XXXIX, No. 23

United Nations (1993) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLII, No. 8

United Nations (1993) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLII, No. 26

United Nations (1993) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLII, No. 28

United Nations (1993) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLII, No. 16

United Nations (1994) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLI, No. 25

United Nations (1994) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLI, No. 30

United Nations (1994) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLI, No. 28

United Nations (1994) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLIII, No. 6

United Nations (1994) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLIII, No. 24

United Nations (1994) Commodity Trade Statistics. According to the Standard International Trade Classification; Statistical Office of the United Nations; Series D, Vol. XLIII, No. 29

United States Department of Agriculture (1994); Nafta: An Early Assessment. A Report by the Nafta Economic Monitoring Taskforce; USDA-ERS; October

United States Department of Agriculture (1995); Nafta: Year One. A Report by the Nafta Economic Monitoring Taskforce; USDA-ERS; April

Valdés, Constanza (1994); "Mexico's PROCAMPO Agricultural Reform Program"; in International Agriculture and Trade Reports. Western Hemisphere. Situation and Outlook Series; USDA-ERS; WRS-94-2; June 1994

Valdés, Constanza (1995); "Peso Devaluation: The Impact on Ag Trade"; in Agricultural Outlook; USDA; April, 1995

## GLOSSARY OF ABBREVIATIONS

AGROSEMEX	New Mexican National Agricultural and Livestock Insurance Company
ANAGSA	Mexican National Agricultural and Livestock Insurance Company
ANDSA	Mexican Food Warehouse (branch of CONSAUPO)
ASERCA	Mexican Agricultural Exchange Market
ATPA	Andean Trade Preference Act
BANDAGRO	Venezuelan Agricultural Development Bank
BANRURAL	Mexican Rural Bank
BORUCONSA	Mexican Food Warehouse (branch of CONASUPO)
CACM	Central American Common Market
CARICOM	Caribbean Community
CARIFTA	Caribbean Free Trade Agreement
CEIMSA	Mexican Import and Export Company
CMA	Venezuelan Agricultural Marketing Company
CONASUPO	Mexican Food Marketing Company
DICONSA	Mexican Food Retailing Company
ECLA	United Nations' Economic Commission for Latin America (spanish acronym: CEPAL)
EMP	Colombian Economic Modernization Program
FCA	Venezuelan Agricultural Credit Fund
FERTIMEX	Mexican Fertilizer Manufacturer
FONCACAO	Venezuelan Cocoa Fund
FONCAFE	Venezuelan Coffee Fund
FTA	Free Trade Agreement
G-3	Group of Three
ICA	Colombian Agricultural Research Institute
ICAP	Venezuelan Agricultural Credit Institute
IDB	Inter-American Development Bank
IDEMA	Colombian Agricultural Marketing Institute
ISI	Import Substitution Industrialization
LACs	Latin American Countries
LAFTA	Latin American Free Trade Association

LAIA	Latin American Integration Association
MERCOSUR	Southern Cone Common Market (spanish acronym)
NAFTA	North American Free Trade Agreement
NICs	Newly Industrializing Economies
NTBs	Non-Tariff Barriers
OAS	Organization of American States
PACE	Mexican Marketing Support Program for Ejido Areas
PITSA	Venezuelan Investment Program for the Transformation of the Agricultural Sector
POR	Official Price of Reference
PROCAMPO	Mexican Program for Direct Support to Rural Areas
PROEXPO	Colombian Export Promotion Fund
PRONASE	Mexican Seed Manufacturer
PRONASOL	Mexican National Program of Solidarity
QRs	Quantitative Restrictions
SAM	Mexican Food System
SELA	Latin American Economic System (spanish acronym)
SIMTAP	National Technology System of Colombia
SITC	Standard International Trade Classification
UMATA	Agricultural Technical Assistance Unit (Colombia)

OTHER A.R.M.E. WORKING PAPERS

- |           |   |  |
|-----------|---|--|
| No. 96-08 | Old-Growth Forest and Jobs  | Jon M. Conrad  |
| No. 96-09 | The Economic Threshold With a Stochastic Pest Population: An Application to the European Red Mite                         | Jean-Daniel Saphores<br>Jon M. Conrad  |
| No. 96-10 | Competitive Electricity Markets in New York State: Empirical Impacts of Industry Restructuring                            | Robert Ethier<br>Timothy D. Mount  |
| No. 96-11 | Do Participants in Well Water Testing Programs Update Their Exposure and Health Risk Perceptions?                         | Gregory Poe<br>Harold van Es<br>Maxine Duroe<br>Christopher Crossman<br>Timothy Vandenberg<br>Richard Bishop |
| No. 96-12 | A Hedonic Approach to Estimating Operation and Maintenance Costs for New York Municipal Water Systems                     | Todd M. Schmit<br>Richard N. Boisvert  |
| No. 96-13 | The Productivity of Dairy Farms Measured by Non-Parametric Malmquist Indices  | Loren W. Tauer   |
| No. 96-14 | A Unique Measure of the Welfare Effects of Price Support Programs for Corn on Family-Farm Households by Size Distribution | Tebogo B. Seleka<br>Harry de Gorter  |
| No. 96-15 | Economies of Size in Water Treatment vs. Diseconomies of Dispersion for Small Public Water Systems                        | Richard N. Boisvert<br>Todd M. Schmit  |
| No. 96-16 | Developing a Demand Revealing Market Criterion for Contingent Valuation Validity Tests                                    | Daniel Rondeau<br>Gregory L. Poe<br>William D. Schulze   |