

**TWO DECADES OF ADJUSTMENT AND  
AGRICULTURAL DEVELOPMENT IN LATIN  
AMERICA AND THE CARIBBEAN**

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## I. INTRODUCTION

This paper analyses two decades of economic adjustment in Latin America and the Caribbean, focusing on its impact on the agricultural (and in some cases, the rural) sector. A critical evaluation of the dramatic structural changes that took place in the region is merited in the face of the new international financial crisis that is affecting the continent, especially since the agricultural sector has not been given sufficient significance in the reform process.

The context of such an analysis gradually changed during the 1990s. The Washington Consensus, which was previously predominant among the international financial institutions (IFIs), gave primary importance to the correction of relative prices; it has been complemented or partly replaced by neo-institutional and even neo-structuralist ideas, in view of the continuing existence of serious market failures and the negative effects of over-adjustment in relation to the so-called “minimal state” (Killick, 1989, 1995; Streeten, 1993; ECLAC, 1996; Ramos, 1997). This paper's analysis of the effects of adjustment on the agricultural sector contributes to a more qualified view of the overall process of reforms in Latin America and the Caribbean not only by investigating concretely the sectoral impact, but also by comparing original assumptions and expectations with implemented reforms and outcomes.

The import substitution industrialization (ISI) model, which was implemented throughout much of the region during the post-war period until the early 1980s, discriminated against agriculture through exchange rate overvaluation, export taxes, protection of the industrial sector and direct market interventions. In particular, the overvaluation of the exchange rates was related to a spur in imports during the 1970s, while the interventionist price policies were blamed for causing reduced growth and poor export performance (Krueger and others, 1991). The agricultural sector did reasonably well in the 1970s and the first half of the 1980s, however, as price discrimination was combined with a substantial package of support measures (e.g., public investment, subsidized credit and agricultural services).

This paper demonstrates that the assumed bad performance of the sector during the 1980s (the so-called lost decade) has to be qualified in view of the available macroeconomic and sectoral data, in particular with regard to the first half of the 1980s. Substantial differences can be observed between the performance of the macroeconomy and the behaviour of the Latin American and Caribbean agricultural sector, both during and after this period, for the region as a whole and among individual countries. Furthermore, the shift toward an export-led growth model (Weeks, 1995; Bulmer-Thomas, 1996; Thorpe, 1997) did not overcome the so-called paradox of agriculture, in which verbal recognition of the sector's importance in the economy was

contradicted by low investment priorities and deficient (or even absent) sectoral policy (Weeks, 1995; Spoor, 1997; Reca and Echeverría, 1998).

The paper also seeks to contribute to an overall review of agricultural (and rural) development policies in Latin America and the Caribbean. There is a tendency to focus on economic dynamism in certain sectors, most often those linked to international capital and transnational corporations (TNCs), while ignoring the marginalization of others, including the most populous small farmer and peasant sectors. Although this issue falls outside the main scope of the paper, the analysis points toward a new role for the State, one that does not return to the interventionist agenda, but rather takes a more indirect, albeit activist, public role with regard to this important sector (De Janvry and Sadoulet, 1993; Spoor, 1995, 1997).

To establish an empirical foundation for such an effort, data are presented and analysed on the performance of the macroeconomy and the agricultural sector, supported by country-based data for nine Latin American and Caribbean countries. These data not only indicate the variation in growth performance among the economies (with substantial spread around the mean), but also represent a very large share of the production and exports of the region's agricultural sector. The countries included in the sample are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico and Peru.<sup>1</sup>

The main propositions put forward in this paper are the following. First, the agricultural sector in Latin America and the Caribbean was structurally underestimated in its importance, before, during and after the economic adjustment reforms. This is particularly striking given that the success of the export-led growth model is still largely based on agricultural exports. Second, the debt crisis of the early 1980s generally hit agriculture later, and the performance of the agricultural sector during the lost decade of the 1980s, while showing great diversity among (and within) countries, was generally better than the region's macroeconomic crisis would suggest, particularly in the first half of the decade. In fact, the main crops for both domestic and export markets experienced a perhaps unexpected increase in land productivity, which was surprisingly high if compared with that of the 1990s and not in line with the previously accepted idea of agriculture as a stagnant sector. Its residual treatment within the predominantly macro-oriented reforms make these observations even more relevant.

Third, with the exception of early reformers such as Chile, and partially also Bolivia, Costa Rica and Mexico, the economic reforms in the agricultural sector were basically implemented during the second half of the 1980s or even later. It is therefore difficult to identify simple causal relations between reforms attributed to the 1980s and the overall recovery of the 1990s, as in a number of cases the contraction in agriculture (and the rapid recovery of agricultural exports) preceded, coincided with or followed the implementation of sectoral and macroeconomic reforms that were intended to eliminate the supposed bias against agriculture.

Fourth, the reforms also had a negative impact on sectoral performance as an outcome of the elimination of subsidies, credit and technological support services. Wherever possible, these effects have to be differentiated from the unfavourable development of international market

prices for the traditional Latin American agro-exports in the 1980s, at least compared with the late 1970s. The sectoral data suggest that at least in some instances, earlier public interventions in market-led modernizations paid off (e.g., Chile and Costa Rica). In other cases, in which long-term public support was followed by a process of market liberalization and deregulation, recovery came only with the use of careful measures of "reregulation" during apparent contractionary periods (e.g., Bolivia, Brazil and Colombia, but also Chile).

Fifth, the new development model for Latin America and the Caribbean, which was introduced with the structural adjustment of the 1980s and early 1990s (Smith, *et al.*, 1993; Teitel, 1992; Bulmer-Thomas, 1996), is quite exclusionary (Kay, 1995; Reca and Echeverria, 1998). The dynamics of economic growth are largely to be found within the sectors of commercial farmers who have been able to establish linkages with foreign, mostly transnational, capital, thereby integrating themselves in domestic and international agribusiness complexes. The early optimism about the options for small farmers and peasants to modernize through contract farming for agribusiness has not been sufficiently justified in practice (ECLAC, 1995; 1998a). Furthermore, there are indications that the gap (in levels of technology, productivity and income) between the commercial and entrepreneurial farmers and the "non-viable peasants" (*campesinos no-viables*) has grown larger than ever (Kay, 1995; Bulmer-Thomas, 1996; Reca and Echeverria, 1998). Economic policies directed toward modernizing the latter group are largely absent, as are social policies to mitigate the human costs of economic adjustment in view of continuing high levels of rural poverty (ECLAC/IICA, 1998).

The paper analyses these five propositions in the following three sections. The second section investigates the main assumptions behind structural adjustment, in particular the vision of a stagnating sector and the overall bias against agriculture, with an overview of the macroeconomy and the place of the agricultural sector in the region's economies before the reforms, during the crisis and in the post-crisis period. This picture turns out to be more mixed and less straightforward than is generally assumed. The crisis hit the Latin American economies at different moments, particularly in the agricultural sector. Comparing the selected countries reveals three types of development in the 1980s: early crisis (1980-1985), late crisis (1985-1990) and prolonged crisis (1980-1990). The first two types seem to coincide with observed patterns of swift and slow recovery.<sup>2</sup> This somewhat qualifies the overall picture of a lost decade, especially when one takes into account that the first half of the 1980s saw a substantial increase in land productivity, in contrast to the second half of the decade.

The third section reviews the main reforms of the stabilization and structural adjustment programmes, distinguishing between macroeconomic and sectoral reforms. The analysis concentrates on those reforms that deal with trade policy (*apertura*, or openness, and exchange rate devaluation); with fiscal, credit and interest rate policies; and finally with the reduced public role in support services (e.g., credit provision, education, extension and research). Instead of following a standard periodization of pre-reform (before 1980), crisis (early 1980s), reform (1980s) and post-reform recovery (1990s), the paper reveals a diversity in the sequencing and implementation of the reforms, as well as substantial differences in macroeconomic and sectoral performance per country.

The fourth section summarizes the analysis of the reforms, their sectoral impact and the discrepancy between original assumptions on performance, implementation and sequencing of reforms and outcomes, as presented in the second and third sections. Concluding remarks refer to the originally formulated propositions, in view of the data that were presented and analysed in the paper. The importance of putting agricultural policy on the agenda, with a renewed public role in agricultural (and rural) development in Latin America and the Caribbean is emphasized, as part and parcel of a second generation of reforms in several of the economies in the region.



## II. ANTI-AGRICULTURE BIAS AND GROWTH PERFORMANCE

Structural adjustment was primarily geared to restructure the economies of Latin America and the Caribbean in order to be able to confront external shocks, repay foreign debt and regain sustained growth rates. With the emerging crisis of the early 1980s, in particular 1982-1983, the macroeconomy had to be stabilized. This was mainly attempted through fiscal and credit policy adjustments, while exchange rate alignment was used to improve export incentives. The latter was expected to have an important impact on the agricultural sector, which until then had been confronted with price disincentives caused by controls, taxation and consumer subsidies.

It is fairly easy to find evidence of relative domestic price discrimination against tradables, in most cases with a severely overvalued exchange rate and export taxes (Krueger and others, 1991). It is more difficult, however, to argue that there was an overall resource transfer out of the agricultural sector, especially when one considers credit subsidies, which are transferred through default in times of inflation, and flexible policies on bad debts, public investment programmes and subsidized support services. While presenting the case of a bias against agriculture in Brazilian domestic price policy, Brandao and Carvalho (1991, pp. 77-78) therefore note that under ISI, transfers were positive if credit is included in the calculations.<sup>3</sup> Buainain and de Castro Resende (1995) further conclude that Brazil's complex of interventionist policies, including a minimum price programme (MPP), actually sustained high growth rates in the agricultural sector until the introduction of adjustment in 1987.<sup>4</sup>

### 1. From sustained growth to crisis in the lost decade

What, then, was the actual performance of agriculture in the 1970s and 1980s? While Latin America's GDP grew at high and sustained average rates of 5.9% in 1970-1975 and 5.5% in 1975-1980, the agricultural sector did reasonably well with GDP growth rates of 3.4% and 3.6% respectively. Table 1 shows that in the early 1980s the debt crisis and a general depression in the world economy hit the national economies of the region very hard, causing a severe drop in average GDP growth to only 0.3% in 1980-1985. The agricultural sector, while acting as a buffer for the domestic economy, had its growth rate diminished to 2.7%; this is consistent with the increased share of agriculture in total GDP. When some agricultural prices were still controlled, real growth is sometimes overestimated or a smaller increase is calculated than the total GDP deflator would indicate. However, the product data in table 1 seem reasonably consistent with growth rates of volume output.

**Table 1**  
**LATIN AMERICA AND THE CARIBBEAN: AVERAGE GROWTH OF THE**  
**AGRICULTURAL SECTOR, 1970-1995**  
 (Percentages)

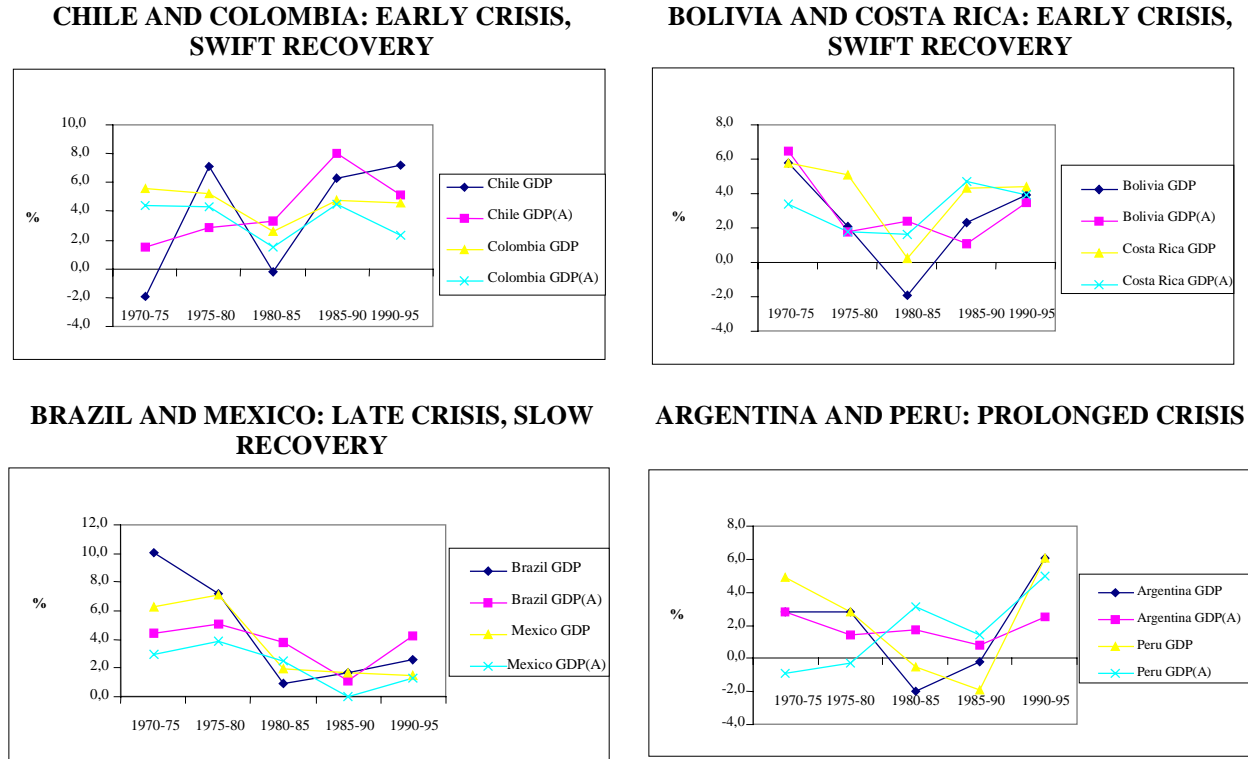
Indicator	Growth Rate				
	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995
Total GDP	5.9	5.5	0.3	1.6	3.3
Agricultural GDP	3.4	3.6	2.7	1.3	3.1
Agricultural/total GDP <sup>a</sup>	..	8.4	9.4	9.3	9.3
Agricultural Product					
Total value	2.5	3.5	2.9	1.7	2.7
Crops	..	2.9	3.1	2.3	1.6
Animal Products	..	4.2	2.8	2.2	2.7
Cereals	..	3.0	3.8	1.0	1.1
Oil Products	..	8.6	4.6	4.9	3.3
Roots and Tubers	..	-0.8	-0.2	0.9	-0.3
Vegetables	..	3.8	2.7	3.2	1.9
Fruits	..	3.3	2.8	3.1	2.9

Source: ECLAC/IICA, *Panorama de la agricultura de América Latina y el Caribe en las últimas décadas*, Santiago, 1998, FAOSTAT, 1998.

<sup>a</sup>End of period.

Gradually declining population growth rates caused the sectoral per capita GDP growth rate to improve toward the end of the 1970s, while in the early 1980s it was far from stagnant. Because the share of agricultural GDP was only around 8-9% of total GDP, the influence of this buffer was relatively limited. However, the rural population of Latin America and the Caribbean was still nearly 43% in the first half of the 1970s and around 35% a decade later, which indicates the importance of the sector in terms of income and employment (ECLAC/IICA, 1998). Individual countries were much more differentiated than the aggregate data of table 1 would suggest. Figure 1 depicts the growth rates of total GDP and agricultural GDP for the project countries (except Jamaica). The countries are classified according to their patterns of crisis and recovery: early, late or prolonged crisis during the 1980s, followed (though not always directly) by adjustment with swift or slow recovery. Chile, Colombia, Bolivia and Costa Rica experienced an early crisis with a swift recovery that was already evident in the 1985-1990 period. Brazil and Mexico show a pattern of decline that culminated in a late crisis with slow recovery. In the case of Brazil, the GDP growth rate had already dropped to 0.9% in the first half of the 1980s, but this was moderated by a surprisingly good performance in agriculture with a 3.8% annual sectoral GDP growth. Finally, for various reasons (such as political turmoil), Argentina and Peru underwent a prolonged crisis in the 1980s.

**Figure 1**  
**GROWTH OF GDP AND AGRICULTURAL GDP, 1970-1995: EARLY, LATE OR PROLONGED CRISIS**  
**WITH SWIFT OR SLOW RECOVERY**



Source: Author's calculations.

The argument that the region's agricultural sector reveals a different growth pattern than do the national economies as a whole is strengthened by data on the yields of the main crops, both for the domestic market and for export. Table 2 shows the growth rates of land productivity for coffee, cotton, fruit, maize, potatoes, rice, soybean, sugarcane and wheat, between 1970 and 1995. The yearly increases in yields, averaged for all crops, were substantially better in 1980-1985 (with 3.5%) than in 1975-1980 (1.2%) and 1970-1975 (2.1%). The rise in land productivity dropped substantially between 1985 and 1990, while during the first half of the 1990s, yield increases were restored, albeit at a lower level than the first half of the lost decade.<sup>5</sup> Individual crops varied considerably from the average, most notably coffee, fruit, maize and soybean.

While using annual averages for five-year periods, in most cases the spread is very high. Also, labour productivity increased at a higher rate than in other sectors in the 1970s (2.2% versus 1.8% in 1973-1980) and 1980s (1.9% versus -1.1% in 1980-1990) (ECLAC, 1996, pp. 91-92).<sup>6</sup> Both observations somewhat contradict the idea that the bias against agriculture had led to stagnation in the 1980s and that adjustment, which came mostly in the late 1980s or early 1990s, would particularly benefit the sector.

**Table 2**  
**LATIN AMERICA AND THE CARIBBEAN: GROWTH RATE OF YIELDS**  
**OF MAJOR CROPS, 1970-1995**  
 (Annual percentages)

Crop	Growth rate				
	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995
Coffee	7.3	-0.9	6.4	-0.1	-0.9
Cotton	2.0	1.1	5.0	4.6	3.7
Fruit	-0.8	0.3	-0.6	0.6	1.4
Maize	1.0	3.5	2.7	-0.5	5.5
Potato	1.5	1.5	4.1	1.1	2.2
Rice	1.3	1.1	4.2	0.8	4.2
Soybean	6.4	1.4	1.7	0.7	3.2
Sugarcane	-0.3	1.1	1.4	0.4	0.1
Wheat	0.2	2.0	6.2	0.2	2.4
Average	2.1	1.2	3.5	0.9	2.4

Source: Author's calculations, on the basis of FAOSTAT (1998).

## 2. The export-led growth model and agricultural exports

The production of tradables is the agricultural subsector that is most strongly linked to the macroeconomy and external markets. This area displays some interesting phenomena. Agricultural exports grew impressively in the 1970s (benefiting from substantial international price increases for traditional agricultural exports). This contradicts at least part of the argument that the ISI model caused domestic price discrimination against tradables, and it is coherent with a rather stable insertion of agricultural exports into world markets.<sup>7</sup>

**Table 3**  
**TOTAL AND AGRICULTURAL EXPORTS (1970-97)**  
 (Average annual percentages)

Country and type of export	Growth rate					
	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-1997
Total Latin America and the Caribbean						
Total Exports	22.4	26.1	0.0	6.4	12.3 <sup>a</sup>	
Agricultural Exports <sup>b</sup>	18.8	13.2	-0.4	2.8	6.4 <sup>a</sup>	9.6
Nine Selected Countries <sup>c</sup>						
Average Total Exports	17.8	21.9	-1.4	10.0	13.1	6.9
Agricultural Exports <sup>b</sup>	23.0	12.9	-1.3	12.9	13.1	11.2
Agricultural /total exports <sup>d</sup>	59.3	52.9	33.8	36.3	27.5	24.4

Sources: FAOSTAT (1998); ECLAC/IICA, *Panorama de la agricultura de América Latina y el Caribe en las últimas décadas*, Santiago, 1998; IMF Trade Statistics Yearbooks.

a Fell in 1991-1993.

b Not including forestry and fishery exports.

c Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico and Peru.

d Including forestry and fishery exports.

Average growth of total exports came to a halt in the period 1980-1985, as an outcome of the general crisis, and agricultural exports (in value) dropped to similar near-zero levels. This decrease is partly explained by a severe external shock, in particular during 1982-1983, when

agricultural export prices dropped dramatically. Although wild fluctuations occurred in agricultural export values and volumes (measured per product), a careful evaluation of the latter indicator, using FAOSTAT data for major commodities such as coffee, cotton, maize, meat, rice, soybean and wheat, shows an average growth rate of 12.2% per year in 1980-1985 and only 1.7% per year in 1985-1990, when some prices recovered.

The share of agriculture in the region's total exports, particularly when forestry and fishery products are included, gradually decreased during the two decades under analysis, but it still remained fairly high (see table 3). For some countries, such as Argentina, Brazil, Colombia and Costa Rica, the share was substantially higher than the average. For example, in Argentina the share diminished from 71.4% in 1975-1980 to 54.4% in 1990-1995, and in Brazil it fell from 58.3% to 32.7%. In Chile, with rapidly growing fruit, fishery and forestry exports, it increased from 17.1% to 25.9% (FAOSTAT, 1998).

**Figure 2**  
**VALUE OF TOTAL AND AGRICULTURAL EXPORTS (1970-1997)**

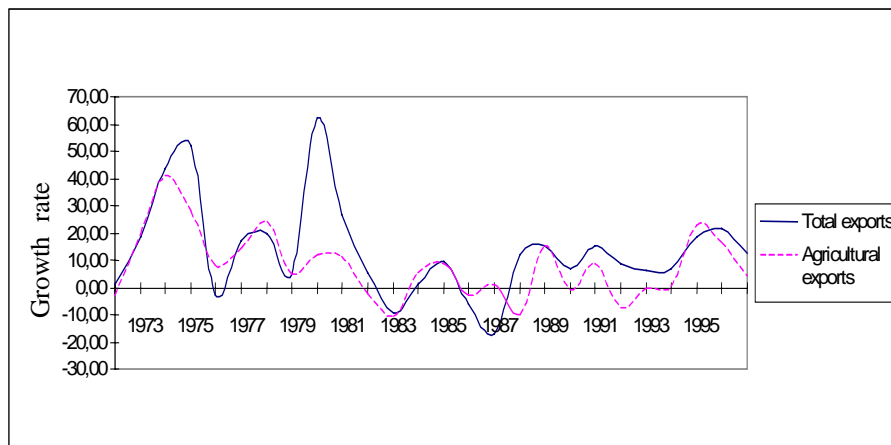


Figure 2 shows that behind the averages of table 3, there is a rather consistent pattern of fluctuations, with somewhat more extreme outliers for total exports and several dips concentrated in very short periods, such as 1981-1983, 1985-1987, 1989 and 1991-1993 (the latter for agricultural exports only). The export fluctuations themselves were influenced by the volatility in international prices. A sample of important export crops for Latin America and the Caribbean, including coffee, cotton, maize, rice, soybean, sugar and wheat, demonstrates violent fluctuations in export prices with major falls in the 1980s (see figure 3). Furthermore, the correlation between the growth rate and the fluctuations in the weighted export unit value index is rather high ( $R^2=0,64$ ) (FAOSTAT, 1998). This is consistent with an observation made in an important evaluative study of adjustment:

The relatively constant rate of increase in productivity suggests that the drop in agricultural growth in the 1980s was due more to problems of demand than supply. Since exports grew faster than agricultural output, the loss of momentum may have been due in

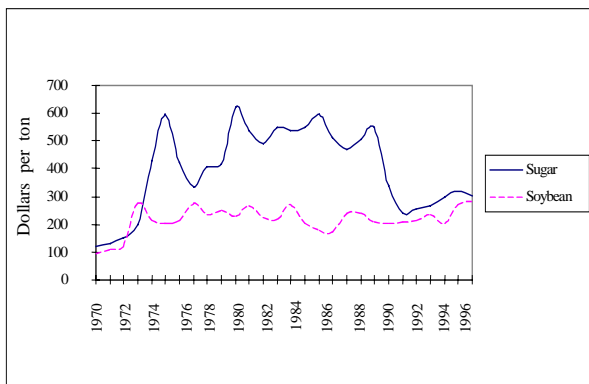
part to a decline in domestic demand and in part to changes in profitability connected with the fall in international prices (ECLAC,1996, pp. 91-92).

In particular, the drop in prices for cotton, maize, rice and wheat in the 1980s corresponded with the drop in export values, during a period in which production and export volumes on average were still growing substantially.<sup>8</sup>

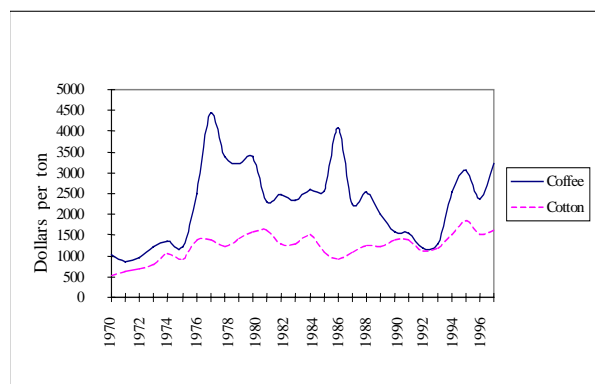
The influence of world market prices on the region's main agricultural products (with violent fluctuations that continued into the late 1980s and 1990s) strengthens the view that the agricultural sector was not stagnant in the early 1980s and that the sectoral crisis generally occurred later, in some cases as a consequence of the adjustment that was undertaken to respond to a macroeconomic (i.e., debt and fiscal) crisis.

**Figure 3**

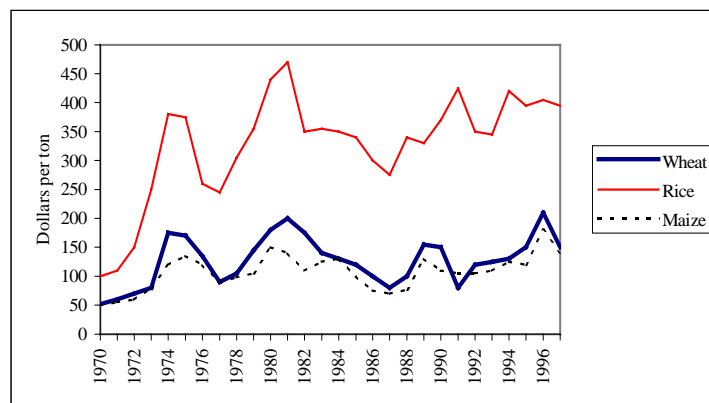
**EXPORT PRICES OF SUGAR AND SOYBEAN, 1970-1997**



**EXPORT PRICES OF COFFEE AND COTTON, 1970-1997**



**EXPORT PRICES OF WHEAT, RICE AND MAIZE, 1970-1997**



### III. STRUCTURAL ADJUSTMENT AND THE AGRICULTURAL SECTOR

In the aftermath of the second oil crisis of the late 1970s, the Latin American debt crisis erupted when interest rates rose sharply following a decade of vast borrowing of cheap capital (ECLAC, 1995, p. 23). The crisis announced the demise of the ISI model. As shown above, the agricultural sector sustained its growth rates until the mid-1980s. Latin American exports were very dependent on the agricultural sector, but overvaluation of domestic currencies did not favour the production of tradables. Nevertheless, the growth of agricultural exports during the peak of the ISI era was quite impressive (see table 3). When they did contract in the early 1980s, the drop in international prices was largely to blame.

Apart from stabilization programmes, the early adjustment measures were directed primarily toward opening the national economies to foreign markets (Smith *et al.*, 1993; Ramos, 1997). Some countries such as Mexico had already lowered their high import tariffs in the early 1980s. Chile did so as early as 1974, when the new military regime followed a strict neo-liberal approach in economic policies (Weeks, 1995; Krueger and others, 1991).

The need to restructure the Latin American and Caribbean economies in order to resume sustained growth rates was related to their decreased ability to repay their foreign debts. This became an even higher priority when countries like Bolivia and Mexico declared a debt moratorium in the early 1980s, which sent a shock wave through the international financial system. At the macroeconomic level, structural adjustment essentially meant the following economic transformations. First, trade policy was adjusted to lower import tariffs, eliminate quota systems and align the overvalued exchange rates through real depreciation. The latter meant eliminating administrative controls and, in some cases, multiple exchange regimes. Second, fiscal balance was restored and credit volumes, which had been largely subsidized, were squeezed. Third, the size of the State was reduced, because it was perceived as the main cause of market distortions and the source of bureaucratic failures. Finally, domestic markets were liberalized to provoke a price-led supply response.

At the level of the agricultural sector, adjustment focused mostly on liberalizing domestic market prices, eliminating sectoral institutions and squeezing credit volumes. At the same time, the previously important agenda of land redistribution through administrative reforms was replaced by allocation through land markets (Gomez Oliver, 1994; Weeks, 1995; Spoor, 1997; Thorpe, 1997). The near absence of specific agricultural adjustment policies introduced another bias that reinforced the paradox, in which the agricultural sector became residual in policy making in the 1980s and early 1990s despite its economic importance. In response to the negative impact of this residual treatment of the sector, however, some Latin American and

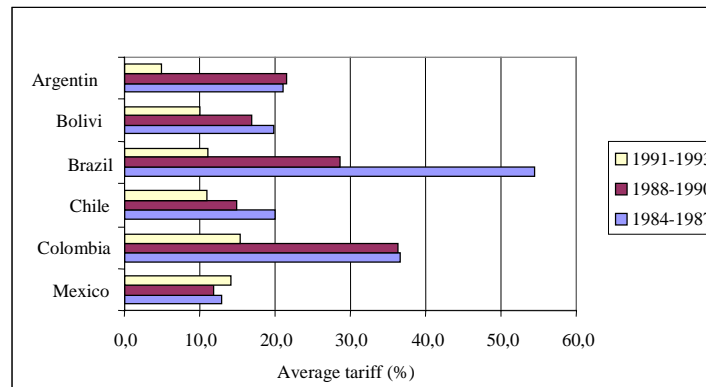
Caribbean governments reintroduced sectoral policies (i.e., second generation reforms), such as occurred in Brazil and Colombia in the early 1990s, to improve performance after an initial post-reform crisis.

### 1. The macroeconomic reforms

The trade regime was fundamental in the structural adjustment programmes of the Latin American and Caribbean countries. Indicators of the degree of openness of the region's economies show an impressive change overall pointing to increased integration into a dynamically developing world market.<sup>9</sup>

The ECLAC Agricultural Unit recently compared three subperiods, 1984-1987, 1988-1990 and 1991-1993. These subperiods encompass the decade in which most changes in trade policy took place, except for Mexico and Chile, which implemented changes earlier (ECLAC/IICA, 1998). Figure 4 presents a sample of these changes using the average import tariffs on food, which are indicative of the trend toward external market liberalization. The tariff barriers that were crucial to the ISI model had indeed been dramatically lowered by the mid-1990s, although it should be noted that the main reforms in this field were implemented in the late 1980s and deepened in the early 1990s, which is much later than originally thought.

**Figure 4**  
**TARIFFS FOR FOOD IMPORTS**



Source: ECLAC/IICA, *Panorama de la agricultura de América Latina y el Caribe en las últimas décadas*, Santiago, 1998.

Weeks (1995, pp. 70-73) characterizes the change in trade regimes for 17 Latin American countries for the mid- and late 1980s, differentiating between economies that are highly liberalized, moderately liberalized or not liberalized. The study includes all of the countries discussed in this paper except Jamaica, which makes it possible to use this differentiation and expand it into the 1990s (see table 4, and compare with figure 4). All Latin American and Caribbean economies have reformed their trade regimes to some degree, such that the non-liberalized category no longer applies. While in the late 1980s three economies could still be considered non-reformers (measured by the degree of liberalization), by the mid-1990s Argentina and Peru demonstrated a high degree of liberalization and Brazil was moderately



liberalized. Only Mexico, dropped to a lower category, largely as a result of its incorporation into the North American Free Trade Agreement (NAFTA): depending on whether liberalization is measured for internal or external markets, Mexico might now be considered moderately liberalized, whereas initially, as an early reformer, it was classified as highly liberalized.

**Table 4**  
**DEGREE OF TRADE LIBERALIZATION**

Degree of Liberalization	Country and Period	
	Mid-to late 1980s	Mid-to late 1990s
High	Bolivia, Chile, Mexico	Argentina, Bolivia, Chile, Peru
Moderate	Colombia, Costa Rica	Brazil, Colombia, Costa Rica, Mexico
None	Argentina, Brazil, Peru	--

Source: Adapted from Weeks, J. (Ed.), *Structural Adjustment and the Agricultural Sector in Latin America and the Caribbean*, London, MacMillan, 1995.

Another important aspect of the changing trade regime involved exchange rate policies. Actually, both the first stabilization programmes and the structural adjustment policies focused on depreciation of the real exchange rates of Latin American currencies. This was seen as another fundamental policy reform not only for stabilization, but also the elimination of the existing price bias against agricultural exports, which resulted from the overvaluation of domestic currencies.

**Table 5**  
**REAL EXCHANGE RATE MOVEMENTS**  
**IN SELECTED LATIN AMERICAN AND CARIBBEAN ECONOMIES**

Country	1980-1985	1985-1990	1990-1995
High liberalized in late 1980s			
Bolivia	--	++	++
Chile	--	++	+-
Mexico	-+	+-	-+
Moderately liberalized in late 1980s			
Colombia	--	++	--
Costa Rica	+-	+-	+-
Not liberalized in late 1980s			
Argentina	++	+-	--
Brazil	++	+-	+-
Peru	--	+-	--

Note: +: depreciation of the real exchange rate; -: appreciation of the real exchange rate. Base year (point of reference) = 1990.

Source: Author's calculations, on the basis of ECLAC/IICA, *Panorama de la Agricultura de América Latina y el Caribe en las últimas décadas*, Santiago, 1998; and IDB, *Economic and Social Progress in Latin America, 1992 Report*, Washington, Inter-American Development Bank, 1992.

Tables 4 and 5 show that the degree of liberalization of the selected economies does not always correspond with the expected development of the exchange rate. For example, Colombia still had very high tariffs at the end of the 1980s, but it managed to have real depreciation of its currency during that period. The same is true of Brazil. Chile and Bolivia, however, seem to fit

into the scheme that was expected to appear during adjustment: high protection and an appreciated exchange rate led to crisis, which stimulated high liberalization and real depreciation, which, in turn, led to recovery. Other countries, such as Peru and Argentina, show appreciated real exchange rates in combination with strong or moderate reforms in trade regimes; this is partly explained by the inflow of foreign direct investment (FDI) that (re)penetrated the region in the 1990s. Although opinions differ on the influence of *apertura* and the real exchange rate on the agricultural sector (Weeks, 1995; Hopkins, 1995), in some countries these developments did not provide sufficient improvement for agricultural commodities to penetrate export markets. However, the reforms in the trade regime deepened in the 1990s toward a wider liberalization of regional markets and the consolidation of regional free trade associations such as NAFTA, in which Mexico is a member; the Southern Common Market, which incorporates Argentina, Brazil, Paraguay and Uruguay, with Bolivia and Chile as associate members; and various pacts among Andean countries.

Finally, apart from the trade and exchange rate regimes, fiscal policy was the other fundamental target of structural adjustment, focusing on a rapid stabilization of the economies after periods of sometimes galloping inflation. Orthodox and heterodox anti-inflationary programmes were designed to re-establish the major balances in the economies using combinations of fiscal and monetary policy. These included the Austral Plan (1985) and the Convertibility Plan (1991) in Argentina, the mega-stabilization programme in Bolivia (1985), the series of stabilization programmes embodied in the Cruzado, Bresser, Summer, Collor and Cardozo plans in Brazil (1986-1994) and stabilization efforts in Mexico (1987-1988, and again in response to the crisis of 1994) (Bruno and others, 1992; Killick, 1995; Dijkstra, 1997).

As we have seen, only in some cases, such as Chile and Mexico, was the trade regime radically changed jointly with the fiscal reforms. Others, such as Argentina and Brazil, continued assessing high tariffs in the midst of stabilization plans; Argentina also imposed substantial export taxes until the early 1990s (Maletta, 1995, p.132). Countries thus display large differentiation in their reforms, which is an important point for understanding the impact of adjustment on the agricultural sector.

## **2. Sectoral Reforms in Agriculture**

In a context of dynamically changing international markets, it is difficult to clearly separate the effects of macroeconomic reforms (e.g., trade regime, exchange rates and fiscal reforms) from those that are more particularly focused on the agricultural sector (Gomez Oliver, 1994). Nevertheless, some crucial changes warrant a critical analysis, such as the liberalization of domestic prices, the reforms in rural finance and credit, the gradual reform or elimination of parastatal marketing and service institutions and the changing access to land through market-led distribution.

Throughout most of the 1980s, price policies in many Latin American and Caribbean economies, including Argentina, Brazil, Colombia and to a lesser degree Mexico, retained aspects of the previously dominant package, with minimum price programmes, “buyer of last

resort” policies, consumer subsidies and even large-scale procurement programmes. Radical reforms were only implemented in the 1990s. In Brazil, for example, the combination of various supportive policies for agriculture (e.g., minimum prices, subsidized credit and state procurement) remained in force until 1987, when the first reform programmes were implemented (Buainain and de Castro Rezende, 1995); in Colombia, such practices continued through the early 1990s. In Chile, *Comercializadora de Trigo S.A.* (COTRISA) continues to purchase grain even now.

In other cases, such as Mexico, restrictive fiscal policy focused particularly on squeezing the large volume of agricultural subsidies, which unfortunately also affected the previously high level of public investment. According to Gomez Oliver (1995, p. 27), public investment rapidly decreased from 12% of budgetary expenditure in 1980 to less than 6% in 1989. The level of agricultural subsidies in Mexico, in particular through credit, was very high until the early 1980s, but it fell dramatically during the decade, from 22% of agricultural GDP to less than a quarter of that level (Gomez Oliver, 1995).

Credit policy was reformed mainly for fiscal reasons. Most governments had used rural credit as a distributive instrument rather than for financial intermediation, although the banking system suffered enormous losses. Furthermore, during the 1980s the predominant ideas about credit moved away from using subsidized credit to promote technological innovation, and using development banks to reach peasant farmers, towards an emphasis on positive real interest rates, viable rural financial institutions and market-led access to credit. This led to a concentration of access to formal credit, which mainly favoured commercial producers and excluded many peasant farmers (Thorpe, 1997, pp.21-22). The total volume of credit also dropped enormously, while real interest rates surged to high levels. According to Buainain and de Castro Rezende (1995, p.159), in Brazil rural credit loans contracted from a level of around US\$ 25 billion in 1980 to around US\$ 6 million in 1990; the major drop took place after the introduction of a policy of squeezing credit in 1987, which caused the real interest rate to rise from -33.3% in 1986 to 7.0% in 1987! In Mexico, real interest rates remained negative until 1988, but credit volume decreased by 40% at constant prices; after 1988, credit volume rose, with positive real interest rates (Salcedo Baca 1998, pp. 26-27). In Nicaragua, which has not been incorporated into the database used for much of this analysis, the Opposition National Union (UNO) government that rose to power in 1990 heavily cut the formal credit of the National Development Bank (BANADES), largely for fiscal reasons. In a matter of two years, the number of peasant families that received credit dropped from 97,217 to only 34,682, excluding most small producers (Spoor, 1995, p. 206).

Some alternative forms of rural finance (re)appeared in the 1980s and early 1990s, partially bridging the gap created by reducing credit volumes. These included the traditional money lenders, savings and credit schemes operated by non-governmental organizations (NGOs) (focused on micro finance) and finance related to contract farming for domestic and international agribusiness. Nevertheless, the fundamental change in rural financial markets, with the squeezing of formal credit, negatively influenced agricultural production, in particular affecting those small producers who had benefited from previously generous credit policies. Such policies provided a

form of income support during the non-harvest season, as well as access to scarce working capital which otherwise would only be available at very high interest rates. In the post-reform rural financial markets, most small producers have limited access to credit. The liberalization of the region's financial markets generated high real interest rates that are largely prohibitive for peasant producers.

Mosley *et al.* (1991) note that structural adjustment programmes (SAPs) implemented institutional changes very gradually, in particular with regard to instruments of market intervention. This was due to the political interests behind the existing parastatal structures and the employment effects of deregulation and privatization. Whether this gradual change was positive for agriculture needs to be examined. Parastatal marketing organizations, sometimes in combination with development banks, were very strongly present in Latin America and the Caribbean, as part of the strongly interventionist, inward-looking model of ISI. Huge companies such as the National Basic Commodity Corporation (CONASUPO) in Mexico, ENABAS in Nicaragua, the Agricultural Marketing Institute (IDEMA) in Colombia and the National Postal Service (CAN) in Brazil were active in the foodstuffs sector, while other state agencies marketed important agricultural exports (e.g., coffee, cotton, meat and sugar) and inputs such as fertilizers and pesticides. These institutions operated as near monopolies for many years and most were not eliminated until the early and mid-1990s. In some cases, such as Mexico, they were replaced by others (see Salcedo Baca, 1998).

Adjustment tended toward "state minimalism" (Streeten, 1993), which affected public support systems such as extension, education and research. In part this was an outcome of the restrictive budgetary policies, but it also represented a clear shift in thinking about the provision of public goods, introducing market-led principles of cost recovery for services and private investments in these areas. Although the critique on the previous bureaucratic system was largely justified, in particular for failing to reach the peasant farmer, the issue of differential access has been underestimated, to say the least, throughout the process of privatization and deregulation. The market-led distribution of support services for the agricultural sector tends to exclude marginal peasant farmers (*campesinos no-viables*), while giving larger commercial farmers sufficient access.

With the elimination of most of the direct marketing intervention instruments, intervention in agricultural markets was minimal by the late 1980s and early 1990s. In some cases, price controls were replaced by the more indirect price bands (e.g., Brazil, Chile, Colombia and El Salvador), which focused on dampening the effects of extreme world market price fluctuations on the domestic market, through the use of variable import tariffs (both negative and positive). Other countries retained the minimum price policies, but state agencies lost their capacity to buy market surpluses, such that the minimum prices had only a token significance.

Finally, the liberalization of input and output markets, deregulation and openness toward external markets was accompanied by a transition from traditional redistributive land reform policy, to the establishment of land markets, which let the market decide the issue of access to

land. In some countries, such as Chile, access to water was also turned over to the market. This transition has brought about processes of decollectivization, as occurred in Honduras, Nicaragua and Peru, and the privatization of communal lands, such as the *ejidos* in Mexico.<sup>10</sup>

The deregulation of land markets and the issuing of private property titles were expected to provide long-term security for investments and to make land suitable as collateral for credit. Like other markets, however, land markets were often “missing”, and the highly skewed distribution of assets and power in Latin American agriculture severely limited access for small producers through the market, following the withdrawal of state regulation. Interestingly enough, this field display strong differences in reform performance: a reformist country such as Bolivia, for example, has not followed this line with respect to land (Morales, 1991).

More recently, Latin American and Caribbean countries have opened their doors for foreign ownership of land. In some countries, such as Argentina and Chile, this has led to large purchases by transnational companies not only of productive land, as in the forestry sector, but also of non-productive parks and nature areas, as a sort of long-term investment. Property legislation, both domestic and in relation to FDI, fundamentally changed over the past two decades. In that sense, an analysis of the agricultural sector should not focus solely on narrowly defined markets, prices and institutions, but rather should include the dramatically changed rules of the game, which for some countries has caused a major loss of national control over resources, through the transnationalization of the privatization process that was initiated with structural adjustment.

All these fundamental changes in product and factor markets in Latin America and the Caribbean have influenced not only economic growth, but also income and asset distribution in rural areas. Although this fundamental issue should be addressed in a separate paper, it should be present within any analysis of structural adjustment in the agricultural (and rural) sector. In the 1970s, rural poverty and indigence (i.e., extreme poverty levels) decreased from 62% and 34%, respectively, in 1970, to 54% and 28% in 1980. By 1990 both indicators had risen again to 56% and 33%, and they stagnated in the first half of the 1990s at 55% and 33% (ECLAC/IICA, 1998). Preliminary data for 1996 suggest an improvement, but the severe crisis that hit the region in the second half of 1998 will most probably negatively affect these indicators.



#### **IV. CONCLUDING REMARKS: DYNAMISM AND MARGINALIZATION**

An analysis of the impact of structural adjustment on agriculture might focus exclusively on the aggregate economic indicators of the macroeconomy and the agricultural sector, following a standard periodization (i.e., pre-reform, crisis, reform and post-reform recovery), using aggregate data and emphasising the recovery after the lost decade of the 1980s (for a critique see Spoor, 1997). This paper, in contrast, uses a more unconventional approach to demonstrate that the indicators for the agricultural sector, in particular country and product data, present a rather mixed picture.

This mixed picture can be summarized in the following manner. First, moving beyond the general focus on macroeconomic indicators an analysis of product-based and aggregate sectoral data indicates that the lost decade argument should be qualified, at least for agriculture. Also, the price bias against agriculture (caused by exchange rate overvaluation and domestic price policies) may not have been so predominant as generally assumed in view of wide-scale compensatory measures such as subsidies, trade protection and credit, as was shown for Brazil and Mexico and even for early reformers such as Bolivia and Chile.

Although the debt crisis hit most Latin American and Caribbean countries hard during the first half of the 1980s, a number of countries show an early crisis (with swift recovery), some a late crisis (with slow recovery) and others a prolonged crisis. The position of agriculture in a region that is normally seen as urbanized is somewhat peculiar. Both before and after reform, agricultural exports (including forestry and fishery products) formed an important share in total exports of the region. In spite of the bias against agriculture mentioned above, agricultural exports grew at very high percentages in the 1970s, benefiting from high world market prices. In the early 1980s, they suffered under the substantial drop in international prices: while physical export volumes continued to grow, the growth of agricultural export values stagnated. The agricultural sector continued to grow in terms of output and its share in GDP during the first half of the 1980s, under the influence of substantial factor productivity increases (i.e., land and labour). Agriculture, which is still crucial for a large section of the population, seems to have functioned as a buffer in the macroeconomic crisis, challenging the idea of a stagnating sector in the 1980s. During the 1970s (under ISI), the sector had actually developed rapidly in spite of price discrimination. These observations might provide some clues to answer the question of why adjustment had a quite differentiated sectoral impact.

Second, most of the macroeconomic stabilization reforms and some of the structural adjustment reforms were introduced in the early 1980s, during or in response to the debt crisis. In the agricultural sector, however, economic and in particular institutional adjustment largely took

place in the late 1980s and early 1990s, with some notable exceptions such as Bolivia and Chile. Although this has to be investigated on a case-by-case basis, reforms oriented toward the agricultural sector were sometimes implemented in response to stagnation, but in other cases they coincided with or even contributed to stagnation, such as in Brazil in the late 1980s and Colombia in the early 1990s. Some of these more complex effects of adjustment have been analysed above by looking at the impact of trade and exchange regimes, fiscal and credit policy reforms and the liberalization and deregulation of product and factor markets. It was also noted that they sometimes preceded the reforms (e.g., Brazil, Chile and Mexico), while in other cases were implemented as part and parcel of second generation reforms (such as in Brazil and Mexico, and more recently in Argentina). In particular, they partly fill the institutional gap caused by the promotion of a minimal state during the first phase of structural adjustment. Some new initiatives that focus on the agricultural sector, the participation of small farmers and technological innovation include the Rural Assistance Programme (PROCAMPO) in Mexico; the Colombian Fund for Scientific Research and Special Projects (COLCIENCIAS) and the Rural Capitalization Incentive (ICR) in Colombia; and various programmes related to the Popular Participation Act and the process of decentralization in Bolivia.

Third, this analysis of the impact of structural adjustment on the agricultural sector does not support the mainstream idea of crisis-reform-recovery-growth. The 1990s (until the crisis at the end of the decade) indeed represented recovery in terms of productivity, output growth and exports, but with significant differences among countries and with severe fluctuations. Furthermore, in comparison with the 1970s, the recovery of these indicators is not very impressive. Indeed, the impact of adjustment was more complex than its designers originally expected. Incentives provided through market liberalization, exchange rate alignment (with its contradictory movements) increased openness and deregulation improved the position of those in the market who produced tradables, provided that they were not resource poor, which would limit any price-led supply response. For the latter category of mostly peasant farmers, adjustment policies had negative effects through the elimination of subsidized credit and institutions that were involved in agricultural support services. Improved export prices, decreased taxation and other adjustment-related incentives for producers did not always compensate for the effects of state withdrawal. In an economic analysis of Bolivia, Morales (1991, p.66), noted that “public resources for agriculture have been very limited in Bolivia,” and that “macroeconomic stability and more appropriate relative prices are not sufficient to bring about large-scale agricultural production and productivity growth. Adjustment programmes, such as the NEP [New Economic Policy, MS], need the complement of government support, in particular in the form of more effective governmental investments in agriculture.”

The most dynamic response to adjustment came from medium-sized and large commercial producers, who linked domestic capital with that of mostly transnational agribusiness, and from entrepreneurial small farmers, who were mostly involved in fruits and vegetables. The major growth sectors in Latin American and Caribbean agriculture are meat, oil products, vegetables and fruit (Dirven, 1997; ECLAC/IICA, 1998, p. 21). The first two categories represent strong economics of scale in production; the latter two (and also flowers) represent mostly dynamic small and medium-sized producers who gradually entered into



contract farming schemes with agro-industrial production and processing chains (ECLAC, 1995; 1998a). Countries such as Chile, Costa Rica and Mexico saw an enormous expansion of the horticultural sector, and other non-traditional agricultural exports as well, with Brazil and Chile showing strong growth in fruits; Argentina, Bolivia and Colombia boosted their oil-producing crops (ECLAC, pp. 21-27). Particularly in the 1990s, substantial growth occurred in both non-traditional agricultural exports for niche markets and the new traditional exports for bulk markets (e.g., soybean, wood pulp, plywood, etc.).

The large inflow of FDI in the agribusiness sector revolutionized technology, not so much in the production sector, where the gap in factor productivity grew evenly with the developed world (ECLAC/IICA, 1998), but in processing and marketing, particularly of the food system. A rapid transnationalization process emerged, with conglomerates of TNCs dominating food markets. This transformation was aided by the processes of privatization of the financial, communications and energy sectors, which previously were monopolized by the state, and of parastatal marketing companies. These processes, which took place largely during the early to mid-1990s, contributed to the concentration of market power that is currently visible in Latin American and Caribbean economies.

Returning to the set of propositions presented at the outset of this paper, agriculture in Latin America and the Caribbean received less discrimination under ISI than was originally perceived, and it also performed better in the 1980s, particularly in the first half, than the lost decade concept would suggest. It was treated as the stepchild of the economy in the reforms (Spoor, 1997), mostly receiving residual treatment and even contradictory signals (in terms of institutional gaps relating to agricultural services, the absence of rural finance, low levels of public rural investment and sometimes appreciating real exchange rates).

Market deregulation and the privatization of marketing and services parastatals that took place in most countries in the region during the late 1980s and early 1990s were expected to produce efficient private market structures. This was a much more complicated process than originally envisaged. Only in the early 1990s did a broader recognition of the existence of “missing markets” penetrate development debates (De Janvry and Sadoulet, 1993). Furthermore, the policy toward a minimal state severely undermined governments’ capacity to develop and implement specific sectoral policies, which were very necessary for the agricultural sector in an era of fundamental changes in markets, institutions and relative prices. This was not only caused by the physical downsizing of the state, but also by the dominant “pro-market”, “anti-state” political tendencies. An example in this respect can be found in the post-1990 adjustment process in Nicaragua (Spoor, 1994; 1995; De Groot and Spoor, 1994).<sup>11</sup>

In reviewing two decades of adjustment, however, it should also be stressed that this context has changed somewhat. A wave of second generation reforms has placed renewed emphasis on building new central, regional, local, public and private institutions and the formulation and implementation of agricultural and rural development policies.<sup>12</sup> The need for reintroducing an important public role in agricultural and rural development is indeed more widely recognized as a means of improving and strengthening the existing dynamism that certain

entrepreneurial subsectors clearly show (in particular versus export markets, but also in terms of expanding domestic food markets, as in Brazil). It is also crucial for coherently tackling the largely underestimated problems of marginality and poverty experienced by large numbers of landless and land-poor peasant farmers in Latin America and the Caribbean. New attempts to integrate them in, rather than exclude them from, processes of improved technology, credit markets and local and regional markets should therefore be combined with an emphasis on badly needed safety networks, social security and poverty alleviation programmes.

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## Notes

<sup>1</sup> This selection follows, for comparative reasons, the recent ECLAC research project "Growth, Employment and Equity" (1997-1999), Division of Economic Development, ECLAC, Santiago.

<sup>2</sup> Observation by Martine Dirven (personal communication, February 1999).

<sup>3</sup> They also correctly point out that most credit went to commercial farmers, and therefore a large section of the agricultural sector was taxed. Nevertheless, their conclusion undermines the idea that tradables were suppressed, as these were actually produced by the large commercial farmers.

<sup>4</sup> They note that by then the cost of the programme had become unsustainable in budgetary terms.

<sup>5</sup> FAO (1996 p.170) notes that between 1990 and 1995 average yields improved by 3.3% per year compared with 1.3% in the 1980s, while—contrary to the 1980s—the cultivated land area decreased by 2.2% per year. The former data do not correspond with the product-based data in table 2, which were also calculated on the basis of the FAO data. The difference might come from using a selected group of major crops, but it is left unexplained.

<sup>6</sup> An inverse relation can be observed between the rate of increase (or decrease) in sectoral labour productivity and a decrease (or increase) in employment (Martine Dirven, personal communication, February 1999).

<sup>7</sup> According to FAOSTAT data, Latin American agricultural exports as a share of world agricultural exports remained stable during the period 1960-1985 (annual averages for the five-year subperiods were 11.9%, 11.1%, 11.0%, 11.9% and 11.7%). It dropped to 9.9% in 1985-1990 and 8.0% in 1990-1995 (explained by a significant drop in agricultural exports from the Caribbean).

<sup>8</sup> In the case of coffee, some of the dips in prices coincide with increased volume, and vice versa. This can be explained by the presence of dominant producer countries such as Brazil and Colombia.

<sup>9</sup> The analysis presented here is not fully coherent with the "indexes of structural reform" developed by Morley, Machado and Pettinato (ECLAC, 1999), measuring commercial, financial, capital account, tax, and privatization reforms. This paper includes only the impact of the trade and exchange rate regime, fiscal reforms and specific reforms that affected the agricultural sector.

<sup>10</sup> Land has become an even more contested asset than it was during the implementation and regulation of land reform. In countries where rural insecurity and violence play an important role, such as in Colombia and Peru, land markets are weakly developed and the "rule of law" is largely absent.

<sup>11</sup> A (late) recognition of these institutional bottlenecks can be seen in the World Development Report (World Bank, 1997), which stresses the necessity for good governance and capacity building.

<sup>12</sup> The realization that economic adjustment and modernization have contributed to, rather than mitigated, severe processes of resource degradation also contributed to this gradual change (Gligo, 1995).