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**Economic Commission for Latin America and the Caribbean**

**LATIN AMERICAN COMMODITY EXPORTS: POLICY ISSUES \*/**

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## FOREWORD

The purpose of this report is to present an overview of opportunities for cooperation existing in relation to commodity issues of particular relevance to Latin American countries. In so doing, the report draws on past research and documentation in the Economic Commission for Latin American and the Caribbean on the matter of commodity exports. In particular, the report is intended to supplement the detailed analysis contained in the previous ECLAC document: Exportaciones latinoamericanas de productos básicos: situación y perspectivas (LC/R.778, 11 July 1989). Unlike this document, which is mainly analytical and descriptive, the present report concentrates on issues that are particularly relevant for Latin American countries, with a view to formulating policy recommendations for multilateral cooperation. Although some duplication between the two documents cannot be avoided, it is nevertheless recommended that they be read together. The recommendations formulated in this report are generally in line with the Guatemala Declaration and Programme of Action on Commodities, adopted by the Regional Conference on Commodities in Guatemala in January 1987.

Note: Throughout this report, the terms "Latin America", "Latin American countries", and other related terms, are abbreviations meant to indicate all developing countries in Latin America and the Caribbean.

## I. THE LATIN AMERICAN COMMODITY EXPORT SECTOR: OVERALL SETTING

### A. PARTICULAR FEATURES OF LATIN AMERICAN COUNTRIES

Latin American countries, in spite of their diversity, share some common features which differentiate them from developing countries in other regions. These common features explain the particular importance that certain issues assume in the commodity area, and the policy responses which are possible and necessary.

#### 1. The natural resource endowment

Latin America is a vast continent richly endowed with natural resources. Often, past development strategies, particularly those based on import-substitution, neglected the potential of this natural wealth, which is one of the major assets of the continent. Even though this potential is not fully exploited, Latin American countries produce virtually the whole range of major commodities traded internationally. However, there are certain differences with other commodity-exporting regions as regards the relative importance of the various types of commodities exported.

Compared with Africa, whose commodity exports are to a large extent composed of tropical beverages and minerals, and parts of Asia, which rely on exports of vegetable oilseeds and oils, Latin America has a diversified export structure with temperate-zone agricultural commodities accounting for a substantial share of regional exports. Food is the major commodity export group for Latin America, and the one where the region exhibits the highest share of world exports (12 per cent), followed by ores and metals (11.6 per cent), although this participation, like that for all other commodity groups, has declined significantly since 1955 (see tables 1 and 2).

Differences in the commodity composition of exports are relevant to the extent, among other things, that different categories of commodities face different barriers in external markets. They have an influence, for example, on the participation of Latin American countries in international negotiations, such as the membership of several of these countries in the Cairns Group of agricultural exporters established in the context of the Uruguay Round of trade negotiations<sup>1/</sup>.

Table 3 shows the major Latin American export commodities and exporting countries. It can be seen from this table that: (i) Some commodities play a prominent role in the exports of Latin American countries, but less so in the exports of other developing regions. These commodities include orange juice, shrimps and temperate-zone fruits such as grapes. Other fruits like apples and pears, as well as cut flowers, are also export items of growing importance. (ii) For a number of commodities, Latin American countries are major suppliers to the world market. These include coffee and bananas (of which, the bulk of world exports come from the region), sugar, soya beans and oils, sunflower oil and oilcakes, and metals and minerals such as copper and bauxite. (iii) Exports of most individual commodities are concentrated in a few countries. This concentration explains the diverse interests of individual countries as exporters, which has an important bearing on the prospects and mechanisms for regional cooperation in this area.

<sup>1/</sup>

The members of the Cairns Group are Argentina, Australia, Brazil, Canada, Colombia, Chile, Fiji, Hungary, Indonesia, Malaysia, New Zealand, Philippines, Thailand and Uruguay.

## 2. The stage of economic development

Most Latin American countries, while pertaining to the broad category of developing countries, are in an intermediate stage of economic development compared with countries of other regions.

Many Latin American countries now have a consolidated manufacturing base which differentiates them from countries in Africa and large parts of Asia. This is reflected, among other indicators, in the share of manufactured goods in Latin American exports, which is shown in table 4. Despite (and to some extent because of) the fact that inward-looking development strategies were widespread in the region during much of the post-war period, and although primary commodities are still the main source of foreign exchange, manufactured goods accounted in 1988 for over one-third of combined Latin American exports. This share has been rising steadily, increasing ten-fold since 1955.

Countries which are endowed with a rich natural resource and a manufacturing base are in a good position to optimally exploit their natural resources by taking advantage of linkages existing between the commodity and manufacturing sectors. The existence of an industrial infrastructure and mentality facilitates the process of incorporating technological innovations and adding value through processing in the commodity sector, thereby enhancing the contribution of the sector to the growth of the overall economy. In particular, the potential of Latin American economies for incorporating technological progress would appear to be crucial in increasing the international competitiveness of commodity exports. The recognition that greater international competitiveness should come about from the deliberate and systematic absorption of technical progress is a central idea of a recent ECLAC proposal on policies for Latin American and Caribbean development in the 1990s<sup>2/</sup>.

The above considerations lead to the more general notion that the role of commodities can be properly understood only by assessing the linkages between the sector and the rest of the economy, rather than looking at commodities in isolation.

## 3. The orientation of current development policies

The linkages existing between the commodity sector and other sectors of the economy not only depend on technical factors (such as those underlying the technical coefficients of an input-output reverse matrix). To an important extent, they are also a function of the role that the commodity sector is assigned to play in the economy, in turn determined by the overall development strategy pursued by the country.

When import-substitution strategies focussing on the manufacturing sector were applied by many Latin American countries, commodity exports were seen mainly as providers of the foreign exchange needed to finance imports of those goods which could not be produced domestically.

The role of commodities as suppliers of foreign exchange to the rest of the economy was just as important as many Latin American countries recently turned towards import liberalization

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<sup>2/</sup> ECLAC, Changing production patterns with social equity (LC/G.1601 (SES.23/4)), Santiago, Chile, 19 March 1990.

and outward-oriented policies<sup>3/</sup>. Following initial and inconclusive (with the notable exception of Chile) attempts at such policies in the region, in the mid-1980s Mexico and Bolivia undertook comprehensive trade reforms. In mid-1989, Venezuela introduced a major import liberalization programme, followed by Colombia in early 1990 and Brazil, which in mid-1990 announced a series of important trade liberalization measures.

The emerging consensus in the region on the benefits of industrialization in the context of more open economies gives commodities an additional role. Commodities now provide a base on which to build up processing activities allowing countries to combine international competitiveness based on natural resource advantages with industrialization. Such activities, because of their linkages with the rest of industry and services, not only heighten the value of the resources, but contribute to a process of technological and organizational change strengthening competitiveness. The processing of commodities before export may therefore become a central element of the new economic development strategies now being adopted in the region.

#### 4. Market dependency

Regarding export destination, Latin American commodities exhibit two notable features which differentiate them from manufactures. The first feature is their heavier reliance on the markets of developed countries: in 1986-1988, on average, these markets absorbed three-fourths of commodities sales, whereas the proportion was only two-thirds for total exports. The second feature refers to the relative importance of the two major export destinations, the United States and the EEC. In 1986-1988, the United States provided a market for 35 per cent of the region's total exports (rising to nearly 38 per cent in 1989), with the EEC coming second with a 21 per cent share (22 per cent in 1989). In contrast, for commodities the EEC was the main market and the United States second in importance (33 per cent of the region's commodity exports went to the EEC as against 28 per cent to the United States in 1986-1988). It follows that the United States is the major market for the region's exports of manufactures, whereas the EEC is the main destination for commodities (see table 5).

The United States is, however, the major market for commodities exported by Central American countries (with the exception of Nicaragua, although this could change in the future) and by a few Caribbean countries such as the Bahamas. It also receives most commodities exported by Mexico and Ecuador. Most South American countries, as well as some Caribbean countries with traditional close trade links with the United Kingdom, depend more on the EEC as a market outlet for their commodities. Japan is the major market only for Venezuela, due to the importance of aluminium exports to that country.

The duality in the region's exports of manufactured goods and commodities as regards the two export markets is related to the different import structures of the United States and the EEC. In common with Latin America, the U.S. has a diversified natural resource endowment. The share of commodities in its import trade is therefore lower than in the case of the EEC, which must rely more on external sources for its raw material supplies.

<sup>3/</sup>

For a brief account and information sources on these cases, see Peter J. West, Foreign trade in Latin America: post-war developments and future prospects, ECLAC, 10 October 1990 (mimeo).

Because of this market reliance, the current situation and developments in trade relations with the United States and the EEC are highly relevant and deserve more research, in particular regarding relative market access conditions for Latin American exporters (for example, African exporters have preferential access to the EEC market), the new situation arising from the single European market in 1993, and the prospects for bilateral and multilateral trade agreements such as those contemplated under the "Enterprise for the Americas Initiative" launched by the U.S. President in June 1990.

In contrast, developing countries, including those of Latin America, are only of marginal importance as markets for Latin American commodities. Paraguay is the most notable exception, as over half of its commodity exports go to neighbouring countries. The regional market is also significant for other comparatively small countries such as Uruguay, Bolivia and Trinidad and Tobago, and, to a much lesser extent, for Argentina, Chile, Peru and some Caribbean countries. This indicates the potential for increasing trade to developing countries through the expansion of the Global System of Trade Preferences among Developing Countries and, more importantly, of current efforts in the region to reactivate economic integration. These efforts are likely to have received new impetus from the recent shift towards more open trade regimes outlined above. Integration is no longer seen as a substitute for the liberalization of trade with the rest of the world, but rather as a means of strengthening the competitive base from which to penetrate world markets. This opens up new perspectives to cooperation in commodities, beyond merely expanding trade flows, involving areas such as marketing, processing and technology.

## B. AREAS FOR POLICY ACTION

In the past, international cooperation in commodities was concentrated on actions to stabilize world prices through commodity agreements among producers and consumers. Today, the level and stability of world prices are as important issues as ever, but the chances of a revival of international cooperation of this kind are meager. For this reason, Latin American countries, while keeping on trying to reactivate and improve past approaches, should not overlook other options open to them<sup>4/</sup>. Examples of these are cooperation among themselves and with producers of other regions such as that instrumented through the Association of Tin Producing Countries (with which Brazil now appears to be closely collaborating), and fully using risk management techniques such as those provided by commodity exchanges.

Furthermore, the level of final prices is only an issue in relation to the costs of production (themselves largely a function of technologies applied) and other aspects impinging on the value added retained in producing countries. The problems and opportunities arising in the commodity sector are therefore very broad. They are better perceived by examining commodities in the context of the overall economy. In particular, the above considerations on the role of commodities in economic development point to four areas which are particularly relevant for Latin American countries at the present juncture: technology, market access, marketing and distribution, and processing. These four areas are interrelated; improvements in any one area can hardly be achieved without actions in other areas. This will be seen in the following chapter, where they are reviewed in turn.

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<sup>4/</sup> For a comprehensive analysis of problems and policies relating to commodities, see ECLAC, Exportaciones latinoamericanas de productos básicos: situación y perspectivas (LC/R.778), Santiago, Chile, 11 July 1989.



## II. SELECTED ISSUES

### A. TECHNOLOGICAL CHANGE

The impact of technological change on the commodity sector of Latin American countries is highly complex and differentiated. On the one hand, many of the comparative advantages of these countries based on natural resource endowment and surplus labor have been eroded by innovations introduced by competitors. But on the other hand, technological change also offers Latin American countries new production and trade opportunities if it is exploited promptly. Which of these forces is likely to predominate is a question of great importance and policy relevance for individual countries and exporters.

#### 1. The impact of technological change

Changes in technology are having an impact on the demand for many commodities as well as on their production, affecting the competitive position of Latin American producers in world trade. A large number of these changes are well known and have been amply documented<sup>5/</sup>, although further disaggregated commodity and country studies are still needed to shed light on the many dimensions of this complex issue. Here, the broad trends relevant from a policy perspective will be indicated.

##### (a) Impact on commodity demand

Demand for commodities has been affected, in most cases adversely, both by the substitution of traditional categories of raw materials by new materials and by a reduction in the use of raw materials resulting from improvements in production processes and downsizing of the finished products. The aggregate effect of such changes is reflected in variations of the physical amount of traditional raw material necessary to produce a unit of output. This amount has been termed the intensity of use of the raw material. As an approximation to this concept at an aggregate level, the amount of raw material input per unit of GDP has also been used.

Studies on the evolution of the intensity of use suggest that for individual materials and countries, this intensity rises up to a certain threshold and then shows a declining trend as the economy matures. The evolution observed in the use of raw materials in the industrialized countries, which provide the major markets for Latin American commodities, fits into this pattern. As far as developing countries are concerned, an implication is that at a given point of time, the intensity of use will be higher for middle-income countries than for low income ones, whose intensity will rise over time up to a certain threshold; that is, the intensity of use is correlated with the level of economic development.

Moreover, the use-intensity at a given level of economic development is expected to be lower in countries which are late-comers to economic development, as these may be able to leapfrog the

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<sup>5/</sup> See ECLAC, The potentialities of present technological capabilities in the Latin American commodity sector (LC/L.505), Santiago, Chile, 6 June 1989; Comercio internacional e inserción de América Latina (LC/R.822), Santiago, Chile, 29 December 1989.

material-intensive stages of industrialization by adopting more up-to-date material-savings technologies.

The above considerations help to explain the general trends in the growth of commodity demand in many developing countries. ECLAC has found evidence that, in developing countries, the increase in intensity of use associated with economic development (as a result of high population growth, the need for large infrastructure works, and an expansion of per capita consumption) may be expected to more than compensate for the reduction in intensity resulting from the adoption of technologies already developed in more advanced countries. Therefore, contrary to the situation in developed countries, the amount of materials and energy needed to produce an additional unit of GDP in many developing countries may be expected to expand for some years to come.<sup>6/</sup>

A mixed picture hence emerges as regards use-intensity. In developed as well as in developing countries, some materials have been losing their competitive edge against other natural, synthetic or compound materials. Per capita consumption of traditional materials in a large number of developing countries is not expected to reach the level attained earlier in developed countries. But on the other hand, there still seems to exist a good potential for future materials growth in developing countries, particularly in those which are able to reactivate their economies and sustain economic growth, as has been the case in the newly industrialized countries.

Moreover, the broad tendencies usually conceal a differentiated performance in individual products. Some traditional materials have regained ground lost to competitors, thanks to efforts undertaken by producers (the cases of wool, cotton, natural rubber and aluminium are illustrative). In addition, some end-uses have registered important improvements in intensity, even when the overall growth in consumption of the product in question is negative. For this reason, it is possible to identify some end-uses (e.g., the electrical and electronics sector in copper) which are expanding faster than industrial production both in the industrial world and in developing countries. This underscores the importance of systematic R&D for the purpose of finding new uses and products.

#### (b) Technological change and the supply of commodities

On the supply side, recent advances in production technologies have led to a shifting pattern of international competitiveness. Some producers have been able to use technological innovations to their advantage and thus counter the comparative advantages previously held by their competitors.

This has been particularly clear in the mining and metal-working sectors. In these sectors, besides the advances in mineral exploration, most of the new technologies currently in use have emerged or have been improved during the last decade, with the aim of saving energy, reducing operational costs and improving quality in response to successive oil price rises and in order to face competitive imports. Producers introducing these innovations, particularly in developed countries, have been able to narrow their production cost differentials with Latin American producers which

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<sup>6/</sup> ECLAC, The potentialities of present technological capabilities in the Latin American commodity sector, op. cit.

have long held a comparative advantage based on factors such as low labour costs and high-grade ores<sup>7/</sup>.

In agriculture, various studies of the region support the view that the use of non-traditional inputs and technological changes have played a much more important role in raising output in this sector than the contribution of other factors such as increases in acreage and manpower. This conclusion applies mainly to the period, particularly since the 1970s, when the impact of the "Green Revolution" based on the adoption of high-yielding varieties for rice, wheat, maize and other crops, together with an increased use of inorganic fertilizers and irrigation, was felt most strongly. It should not be forgotten, however, that the improved technologies and inputs were concentrated in modern large and medium-size farms producing for export and urban markets, and were dramatically lacking in the small farming sector. Small farmers were bypassed by such innovations and continued to produce staple foods by traditional methods. At the same time, the number of small-scale peasant farms increased, while their average size decreased. This contributed to the international competitiveness of the modern export sector, as peasant farming became the source of cheap surplus labor for the more modern sectors<sup>8/</sup>.

In the 1980s, in Latin America the sector suffered from the impact of economic recessions and labor productivity increased only modestly. Hopes for attaining an upsurge in productivity, in Latin America as well as in other countries, are now placed on current research in the field of biotechnology. This technology has been given strong impetus by recent advances in such areas as genetic engineering, tissue culture and clonal propagation.

The fruits of biotechnological research are starting to appear at the production frontier, and may soon be expected to invade the whole territory. This poses a severe challenge, of which Latin American countries should be aware. On the one hand, the biotechnological revolution holds promises of a reduction in the dependence on agrochemical inputs, leading to substantial cost reductions and general gains in productivity, a wider variety of goods suited to local production conditions and nutritional requirements, and a shorter time lag in the development and adoption of the new varieties than in the case of the Green Revolution.

But on the other hand, a feature of the new biotechnologies, which differentiates them from the Green Revolution, is their predominantly private character. Whereas the major initiators of the Green Revolution were public or quasi-public research organizations, biotechnological research is to a large extent conducted by transnational corporations, and the returns on this research are private<sup>9/</sup>.

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<sup>7/</sup> In the case of copper, for example, management and technology improvements enabled U.S. producers to cut average production costs from \$0.85 per pound in 1982 to \$0.50 in 1989 (average production costs for Chile's state-owned CODELCO, the largest Latin American copper producer, are running at about \$0.40 per pound) (Latin American Commodities Report, June 6, 1990).

<sup>8/</sup> See FAO, The State of Food and Agriculture 1989, FAO Agriculture Series No. 22, Rome, 1989, pages 47-48.

<sup>9/</sup> For an analysis of the structure and production characteristics of the biotechnological industry, see: United Nations Centre on Transnational Corporations, Transnational Corporations in Biotechnology, United Nations, New York, 1988.

This is illustrated by an examination of current biotechnological research on Latin America's major export commodity, coffee. While there is some research on coffee in countries such as Colombia and Costa Rica, most investigations are being conducted by private enterprises, particularly the handful of giant, transnational food corporations which control the highly concentrated coffee processing industry in the developed countries. These stand to gain the greatest benefits from the new technologies. In contrast, there are some inherent risks in biotechnologies for Latin American producers, which are today the major suppliers of high-quality arabica coffee. These include: genetic uniformity, which makes plants highly susceptible to disease and pests; overproduction and lower prices, from which only the largest producers who can afford to adopt new varieties are likely to survive; an increase in capital inputs together with a corresponding decrease in labor needs, resulting from the introduction of varieties with characteristics facilitating mechanical harvesting; and a transfer of production to other areas, as varieties may be introduced which can be cultivated even in temperate climates and particular coffee properties might be obtained in a diversity of coffee varieties and even in plants other than coffee.<sup>10/</sup>

The question of who undertakes the biotechnological research also has other implications. Some large agricultural and chemical conglomerates are engaged in research on new seeds which are tolerant to the herbicides produced by these same companies. Research is ongoing on a number of crops, including soybeans, tobacco, tomatoes, cereals, forest trees, sugar beets and potatoes. This research has already borne fruit in the case of cotton. It has been argued that, aside from environmental considerations, this kind of plant varieties keeps farmers dependent on the use of chemicals, thereby providing a captive market for the agricultural companies manufacturing the herbicides.

Some Latin American countries have successfully developed a substantial research capacity in the field of biotechnology. This is illustrated by the operation of a number of well-performing organizations and programmes (such as the Genetic Engineering and Biotechnology Centre in Cuba, the National Institute for Agricultural Technology in Argentina, the Research Centre for Genetic Engineering and Biotechnology in Mexico and the Brazilian National Biotechnology Programme (PRONAB)) as well as research centres operated by private firms<sup>11/</sup>.

## 2. Meeting the technological challenge

The above considerations point to the need, if the challenge of technological change is to be successfully met by Latin American countries, for actions with a two-fold purpose: trying to counter the negative impact of technological change on commodity demand in importing countries, on the one hand, and taking the greatest possible advantage of the potentialities of technological change to improve competitiveness, on the other.

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<sup>10/</sup> Rural Advancement Fund International, Coffee and biotechnology, RAFI Communiqué, Pittsboro, North Carolina, U.S.A., July 1989.

<sup>11/</sup> ECLAC, Changing production patterns with social equity, op. cit.

(a) Action to counter the negative impact of technological change on commodity demand

(i) Monitoring: A first requirement is monitoring, on a continuous basis, technological research and innovations everywhere in the world with the potential of affecting commodities. This sort of information should provide an essential input when designing policies affecting the commodity sector -e.g., regarding pricing and diversification. Given the common interest of all producers of the same commodity in this information and the usual difficulty in obtaining it - companies are usually willing to share only general information about their research-, the task of monitoring would be best undertaken on an individual commodity basis by commodity organizations grouping either producers or both producers and consumers<sup>12/</sup>. Such organizations might consider, when appropriate, setting up an "early warning system" to alert member countries of the need for immediate counteraction or longer-term planning.

(ii) New-uses: One of the measures that could be taken is research into new uses for the commodity, as indicated in section 1 (a) above. The aim would be identifying new end-uses allowing for an expansion of demand, as has been done by producers of commodities such as aluminium. In order to be effective, this should probably be combined with end-product research on varieties and qualities making the commodity particularly suited to identified new-uses, and with appropriate promotion efforts, as suggested below.

(iii) New markets: A third line of action would be to foster a gradual expansion of commodity exports towards those developing countries where the consumption of commodities is likely to increase most in the future. In this connection, an increase in intra-regional commodity trade in Latin America appears to be particularly promising and deserves high priority.

Some ECLAC studies suggest that intra-regional trade in commodities could be expanded considerably. Calculations based on mid-1980s trade figures showed that efforts to promote intra-regional trade in 47 products (at SITC five digits) might increase regional trade in commodities by more than US\$ 15 billion, of which US\$ 5.5 billion correspond to non-oil commodities. The potential for increasing this trade was found to be particularly rich for such products as maize, wheat, sugar, soybeans and its by-products, other oilseeds and oils, petroleum and its by-products, aluminum, copper and iron and steel<sup>13/</sup>. A recent meeting on the aluminum and tin industries in Latin America also found a high potential for increasing intra-regional trade in these metals without adversely affecting trade flows towards the markets outside the region and without requiring new, large-scale investments<sup>14/</sup>.

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<sup>12/</sup> In Latin America, for example, the producers' organizations UPEB and GEPLACEA currently monitor developments in technologies affecting bananas and sugar, respectively.

<sup>13/</sup> The increase in intra-regional trade would come about by the displacement of extra-regional producers. See ECLAC, Reorientación del comercio de productos básicos hacia América Latina (LC/R.506), Santiago, Chile, June 1986.

<sup>14/</sup> ECLAC, Report of the meeting on technological options and opportunities for development: the aluminum and tin industries in Latin American and the Caribbean (LC/R.837 {Sem.53/6}), Santiago, Chile, 6 December 1989.

Regional cooperation appears particularly necessary to remove obstacles to the growth of intra-regional trade. Prominent among these obstacles are non-tariff barriers, competition from subsidized extra-regional producers, high transport costs, insufficient or inadequate regional marketing channels and networks, and a still low level of commodity processing in Latin American countries.

(b) Improving competitiveness of commodity exports

As indicated earlier, one requirement for international competitiveness is taking full advantage of the potential offered by technological innovation. This applies to the commodity sector no less than to other sectors. Empirical research on developed countries has shown that commodity-based industries such as food, textiles, wood, paper and mining are major users of technology, which they import from other sectors of the economy where the technology is generated. Furthermore, it has been found that in such industries, productivity increases show a higher correlation with R&D spending than in other industries<sup>15/</sup>.

(i) Selective research and development: The fact that R&D resources are not unlimited calls for strict allocation of funds on the basis of technical analysis of the best opportunities.

In this connection, a general rule should be that any technology that can be obtained from abroad at an affordable cost should be imported. This seems a sensible approach for countries which typically lack a critical mass for research, especially as far as human and financial resources are concerned. In these countries, technology policy needs to put greater emphasis on encouraging the transfer, dissemination and adaptation of technical advances already made than on the generation of new technologies.

Besides the direct purchase of foreign technology, an important vehicle for the transfer of technology is direct foreign investment. The performance of the Latin American region in attracting foreign direct investment in the recent past has been inadequate: since the onset of the external debt crisis, the share of Latin America and the Caribbean in total world direct investment has gone down substantially, so that in the period 1986-87 it amounted to only 5.3 per cent compared with 12-13 per cent in the period 1977-1981. Therefore, forms of foreign investment should be promoted which make an effective contribution to the technological and managerial capabilities of the recipient economies<sup>16/</sup>. At any rate, an examination of the innovations introduced in recent years shows that the main limitations to the adoption of many new technologies, at least in the primary processing stage of metals, may arise not so much from their complexity and accessibility, but rather from the need to incur in large capital outlays.

However, in many cases local technological efforts are still required to adapt imported technology to local conditions. There is also a need to promote technological innovation in selected

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<sup>15/</sup> See A. Steven Englander, Robert Evenson and Masaharu Hanazaki, "R&D, Innovation and the Total Factor Productivity Slowdown", *OECD Economic Studies*, No. 11, Fall 1988, Paris; J.M. Benavente, "Las nuevas tecnologías y la economía de los productos básicos", *Información Comercial Española*, No. 672-673, August/September 1989, pages 208-209.

<sup>16/</sup> ECLAC, *Changing Production Patterns with Social Equity*, op. cit.

activities and areas where such innovation is not simply a matter of imitation. For these reasons, research and development activities should be placed high in the ranking of priorities for development financing<sup>17/</sup>.

The importance of selective allocation of adequate R&D spending is illustrated by the contrasting experiences of aluminum and tin. In the highly integrated aluminum industry, companies like Alcoa or Alcan allocate more than US\$ 100 million annually to research and promotion, which recently have been concentrated on end-product research. In contrast, research on new and traditional uses for tin has been undertaken mostly by the International Tin Research Institute (ITRI), which has an annual budget of less than US\$ 5 million.

Under these conditions, intergovernmental support for R&D in aluminum would have a modest impact, taking into consideration the large sums spent by major producers on these activities. Rather, measures specifically oriented towards increasing regional consumption, promoting products more suited to local needs and solving the problems of the industries of the region could bring substantial benefits to the regional producers. In contrast, in the case of tin, it appears necessary to intensify R&D activities, particularly in two areas: (i) development of new uses; and (ii) the reversal or the containment of the tide of substitution of other materials for tin<sup>18/</sup>. For this purpose, it is important to strengthen the financial bases of the organizations active in these areas.

Often producers tend to give priority to R&D spending only when they encounter a critical situation, such as the one faced by Bolivia's tin industry. When comparative advantage is lost, for example with the increasing level of impurities in concentrates and the decline of ore grades in general, the necessity to modernize becomes evident and in the time-lag between the decision to undertake such R&D and actual results, production performance may worsen considerably. Hence, there is a need to anticipate future changes in relative cost structures across the world in order to prepare for such changes by giving due consideration to technological research in investment planning.

(ii) Other policies: A number of other factors influence the environment in which technologies are developed and introduced. A first factor is that, for a number of commodities and end-uses, the nature of material substitution means that the functional relationship between price and demand is not necessarily reversible. In such cases, when a material loses a particular market on price-competitiveness grounds, the market may be lost forever even after such competitiveness is restored. Wide price fluctuations led users of commodities such as jute to seek synthetic replacements, the prices of which are more stable. Price stability at a remunerative but not too high level should therefore be a major concern for commodity producers, whether it is pursued through producer-consumer cooperation, producer cooperation alone or other mechanisms.

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<sup>17/</sup> As an example of research and development needs and priorities at the firm level, CODELCO's future plans for technological innovation to raise productivity are outlined by its Planning Director in: Jorge Bande, "Codelco to go for productivity, not just production", The South Pacific Mail, Santiago, Chile, June 1990, pages 5-7.

<sup>18/</sup> ECLAC, Report of the meeting on technological options and opportunities for development...Op. cit.

The experience with commodities like aluminium underscores the importance of keeping in close contact with the industry using the commodity as a substantial input. Research on new end-uses and functional properties can thus be oriented towards the effective requirements, current as well as anticipated, of the users. In this connection, establishing more direct commercial links between producers and end-users appears essential. This may take different forms according to the structure and degree of integration of the industry, including downstream investments in overseas markets (the Venezuelan aluminium industry has taken some steps in this direction), direct joint marketing by producers, the establishment of joint marketing ventures with buyers and end-users, or maintaining a permanent field office in the consuming country which will feed back information on consumer needs. There is ample potential for producer cooperation in this area.

In many cases, it is not enough to be able to compete with potential substitutes on technical grounds; it is also necessary to make users aware of the properties of the commodity concerned. Market promotion thus has an important role to play in gaining and maintaining markets. Appropriate brandnames have been effectively used for this purpose, for example, in the case of wool. To the extent that there is a need for generic promotion, rather than specific brand promotion, the externalities involved and the efficient use of limited resources call for joint efforts by producers.

Indeed, substitution is a fact of economic life. The overall economic setting has an important bearing on the technological process. The replacement of cane sugar by beet sugar, first, and then by a new breed of sweeteners was associated with protectionist policies in sugar's major markets. The oligopolist structure that prevailed in the world textile industry played an important role in the substitution of synthetic fibres for natural fibres. Meeting the technological challenge therefore calls for actions in several related areas, encompassing the production, marketing and access to the markets of the commodities involved.

## B. MARKET ACCESS

### 1. Trade barriers in developed countries

Border restrictions (tariffs and non tariff measures) on Latin American commodity exports to the United States, the EEC and Japan, which have traditionally been the major markets for these commodities, do not affect all commodities in the same manner. Whereas some commodities benefit from relatively free access, others are affected to varying degrees by an array of barriers, particularly non-tariff measures. Market access conditions for commodities are described below.

#### (a) Tariffs

Table 6 shows tariffs applied in the United States, the EEC and Japan to major commodities in raw and processed forms.

Many agricultural products are subject to high MFN (most favoured nation) tariffs in one or more developed countries. Especially high tariffs are applied to processed cocoa, coffee, processed beef and fish, fresh and preserved vegetables and fruits, sugar, processed cereals, manufactured tobacco, leather and leather products, yarn and woven fabrics. In addition, tariffs applied in these countries have a tendency to escalate with the stage of processing, giving rise to



higher levels of effective protection for processed products than indicated by the nominal rates. Such protection hinders processing of these commodities in producing countries<sup>19/</sup>.

The negative impact of high tariffs on Latin American countries is attenuated by preferential access granted to them under the Generalized System of Preferences (GSP) applied to imports of some products from developing countries. Exceptions in the United States are Bermuda, Cuba, Nicaragua and Paraguay, which are excluded from GSP benefits.

The GSP applies to many commodities in raw and processed forms. The list of products covered is periodically modified. All United States GSP rates are zero. In other countries, rates applying to raw commodities are only significant in the cases of meat, coffee and tobacco in the EEC; and meat and grains in Japan. However, many products of interest to Latin American exporters (for example, fish, dairy products, grains, vegetables and fresh fruit, particularly seasonal fruit) are excluded from the system, and there is some degree of tariff escalation. This is the case for the GSP rates applied by the EEC and Japan to meat, fish, leather, cocoa and tropical fruit; and by the EEC to coffee, tobacco and sisal.

English-speaking Caribbean countries have also been granted preferential access to the EEC market under successive Lomé Conventions between the EEC and the ACP (Africa, Caribbean and Pacific) countries. Tariff rates applied to eligible products are low or zero, but some tariff escalation exists for coffee, vegetable oil and tropical fruit.

In addition, most imports from these countries (except Suriname), as well as those from some other Caribbean island countries and from Costa Rica, El Salvador, Guatemala, Guyana, Honduras and Panama, can enter duty-free into the United States market under the Caribbean Basin Initiative (CBI). This treatment, which was initially for a twelve-year period, is now indefinite. Commodities from these countries benefitting from duty-free access under the CBI but not the GSP include sugar cane, beef and veal, and certain fruit, flowers and tobacco products. But key industries, such as canned tuna fish, footwear, certain leather and oil products, and textiles and clothing, are excluded (clothing from fabric made in the United States is admitted under strict quotas). Sugar is admitted duty-free under the GSP and the CBI within the limits of country quotas, above which high, prohibitive tariffs are applied.

Duty-free access similar to that granted under the CBI is now envisaged for Bolivia, Colombia, Ecuador and Peru. GSP benefits applying to these countries had previously been extended by an Andean Trade Package to a number of additional products including processed seafood, certain fruit and vegetables, wood, rugs and certain cotton products. Exports of some commodities from the four Andean countries are also granted preferences in the EEC in an effort to encourage diversification away from coca production.

Therefore, for many commodities, tariffs are low and in many cases zero. But market access is effectively controlled by non-tariff measures.

<sup>19/</sup>

See UNCTAD, Market access conditions and other factors and conditions pertinent to the development of viable diversification programmes (TD/B/C.1/AC/6), Geneva, 12 July 1989.

(b) Non-tariff barriers

Table 7 shows trade coverage ratios of non-tariff measures (NTMs)<sup>20/</sup> applied by developed countries to commodities, by broad categories. As can be seen, a high share of Latin American commodity exports are covered by NTMs in some or all of the major markets. Food products are affected in all three markets; oilseeds and vegetable oils, mainly in the United States and Japanese markets; agricultural raw materials, in the United States; iron and steel in the United States and the EEC; and fuels in the EEC. Processed commodities such as textiles, clothes and footwear are also greatly affected.

Such broad aggregates conceal differences for individual commodities. Therefore, countries are diversely affected because of differences in commodity composition of exports. Thus, in the food sector, imports from Argentina, Chile and Uruguay are most affected; in iron and steel, those from Argentina and Brazil; in textile products, those from Mexico, Uruguay, Peru and Venezuela; and in clothes, those from Colombia, Venezuela and Mexico<sup>21/</sup>.

The type of NTMs most commonly encountered by Latin American commodities are quantitative restrictions (including voluntary export restraint agreements). But there is a wide array of other measures. Meat, dairy products, sugar, tobacco and fruit and vegetables are most often affected by import quotas (global and bilateral), seasonal tariffs and quotas, discretionary import licensing, state monopoly of imports, sanitary and phytosanitary regulations and outright prohibitions. Variable levies are also applied to ensure that the imported products are sold at prices not lower than the domestically produced equivalents. Although the significance of these barriers is less obvious than that of tariff barriers, it should not be underestimated. In the case of sugar, for example, the tariff equivalent of import quotas imposed by major industrial trade partners, as estimated by the U.S. International Trade Commission, amounted to 102 per cent in the case of the United States, 170 per cent in the EEC, and 360 per cent in Japan<sup>22/</sup>. But such border measures are only one component of the elaborate system of protection of agricultural producers in developed countries. Producers' support schemes and large scale export subsidies are the other two components which lead to the well-known situation in world markets, where excess supply of subsidized agricultural products depresses prices and displace Latin American and other countries' exports of these products.

Regarding tropical products, anti-dumping and countervailing actions as well as quantitative restrictions are applied to flowers, plants and spices. Tropical fruits (including bananas) and nuts are subject to quantitative restrictions as well as taxes and other charges. Internal fiscal charges on

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<sup>20/</sup> Trade coverage ratios refer to the percentage share of trade subjected to various NTMs.

<sup>21/</sup> Reinaldo Gonçalves and Juan A. de Castro, "El proteccionismo de los países industrializados y las exportaciones de la América Latina", El trimestre económico, No. 222, Mexico, April-June 1989, pages 452 and 455.

<sup>22/</sup> U.S. International Trade Commission, Estimated Tariff Equivalents of U.S. Quotas on Agricultural Imports and Analysis of Competitive Conditions in U.S. and Foreign Markets for Sugar, Meat, Peanuts, Cotton, and Dairy Products. USITC Publication 2276, Washington, D.C., April 1990; Estimated Tariff Equivalents of Nontariff Barriers on Certain Agricultural Imports in the European Community, Japan, and Canada. USITC Publication 2280, Washington, D.C., April 1990.

sugar and selective taxes on bananas and tropical beverages such as coffee and cocoa are significant in certain countries.

A combination of NTMs are applied in the iron and steel sector, principally voluntary export restraints (VERs), basic import prices, anti-dumping actions and surveillance measures. In 1986, nearly half of Latin American exports of these products to industrialized countries were thus affected. Other minerals, ores and metals face anti-dumping actions in the EEC and the United States. In addition, some products are subject to national quantitative restrictions or surveillance measures in individual EEC member states; these measures are expected to be eliminated with the creation of the single EEC market in 1993<sup>23/</sup>.

In the textile sector, the restrictions imposed under the Multifiber agreement affected around 64 per cent of Latin American exports of textiles and clothes to developed countries in 1986.

(c) Potential effects of trade liberalization in agriculture

Assessing the impact of trade barriers on export performance is more difficult when non-tariff measures of various kinds are applied rather than tariffs. This is particularly true in the case of the agricultural sector, because of the complexity and magnitude of the protective systems in force. Given the importance of this sector in international trade (no less so in Latin American trade) and its crucial role in the Uruguay Round of trade negotiations, numerous estimates have been made of the possible effects of trade liberalization in agriculture<sup>24/</sup>. The results of these estimates vary widely according to the assumptions made, but they all tend to be quite significant, illustrating the magnitude of current restrictions to trade. Particularly relevant for Latin American countries are ECLAC's estimates of the impact of liberalization of trade in selected temperate-zone agricultural commodities<sup>25/</sup>.

As trade liberalization is expected to lead to higher world prices for the products concerned, net exporters would benefit and net importers would be adversely affected. On the basis of estimates of price increases for major Latin American temperate-zone agricultural commodities affected by protective regimes (wheat, maize, dairy products, meat, vegetable oils and oilseeds, and sugar), ECLAC estimated the potential net increase in the value of exports of these commodities. Sugar, meat, oilseeds and oilseed products would account for most of the increase in export earnings. Grains and dairy products would be mainly responsible for increased import costs.

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<sup>23/</sup> UNCTAD, Market access conditions..., op. cit., pages 12-13.

<sup>24/</sup> See for example "Review of Recent Government and Academic Studies on Trade Issues", Developments in United States trade policy and legislation relevant to the Uruguay Round of Multilateral Trade Negotiations, A Periodic Report Prepared for The United Nations Conference on Trade and Development By VanGrasstek Communications (UNCTAD/MTN/INT/CB/1/Add.32, Restricted); U.S. Department of Agriculture and Trade Analysis Division, Economic Implications of Agricultural Policy Reforms in Industrial Market Economies (by Vernon O. Roningen and Praveen M. Dixit), Staff Report No. AGES 89-36, August 1989.

<sup>25/</sup> ECLAC, Comercio internacional de productos agrícolas y negociaciones comerciales multilaterales en la Ronda Uruguay del Acuerdo General sobre Aranceles Aduaneros y Comercio (GATT) (LC/R.733, Restricted), Santiago, Chile, 16 January 1989.

On balance, the increase in world prices for these five commodities would benefit between 8 and 11 countries in the region, the exports of which would have grown by between US\$ 886 million and US\$ 2,740 million in 1986, depending on the percentage price increase (in that year, total agricultural exports from Latin America were US\$ 34,800 million). The major beneficiaries would be Cuba, Argentina and Brazil, whereas Uruguay, the Dominican Republic, Paraguay and Guyana would benefit to a lesser extent.

Other countries might suffer losses due to the higher cost of importing certain products. Price increases for sugar would mainly affect Venezuela; for grains, Brazil and Jamaica; for dairy products, Mexico, Venezuela, Brazil and Cuba; and for meat, the small Caribbean countries and Venezuela, albeit moderately. The additional import cost to these countries, which could be substantial for some of them, would be much smaller than the net gain obtained by the net exporting countries (aggregate imports would have increased by between US\$447 and US\$ 732 million in 1986), and quite insignificant compared to the costs to developed countries of supporting their agriculture (about 286 billion U.S. dollars in 1987, according to OECD estimates)<sup>26/</sup>. Account should however be taken of recent changes in the composition of trade of individual countries, particularly as regards food imports.

A more recent study<sup>27/</sup> of the impact of a full removal of subsidies on temperate-zone agricultural commodities in industrialized countries under various assumptions yields increases ranging from 4,000 to over 9,000 million 1986 U.S. dollars in trade balances for all Latin American countries combined. The major beneficiaries of these changes would be Argentina, Brazil and Mexico.

The above estimates refer to the short-term, balance-of-payments impact of an immediate elimination of trade restrictions on the products concerned. A gradual phasing out of restrictions, such as that negotiated in the Uruguay Round of Multilateral Trade Negotiations, is a more realistic prospect. In the longer term, higher prices would provide an incentive to domestic production, thereby mitigating any negative impact on the balance of payments and increasing food security in net food importing countries. Such long-term effects should not, however, obscure the fact that these countries might need transitional assistance to compensate for net losses incurred over the short-term.

## 2. Trade barriers in Latin America and other developing regions

Market access barriers, particularly in the form of tariffs, are generally higher in developing countries than in developed countries. This applies to all sectors, primary commodities as well as manufactures. An examination of tariffs and para-tariffs in 50 developing countries<sup>28/</sup> showed that,

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<sup>26/</sup> OECD, Agricultural Policies, Markets and Trade: Monitoring and Outlook 1989, Paris, 1989.

<sup>27/</sup> Barry Krissoff, John Sullivan and John Wainio, "Opening Agricultural Markets: Implications for Developing Countries", Canadian Journal of Agricultural Economics, Vol. 38 (1990), pages 1-11.

<sup>28/</sup> R. Erzan, H. Kuwahara, S. Marchese and R. Vossenaar, The profile of protection in developing countries, United Nations Conference on Trade and Development, Discussion papers, No. 21. Para-tariffs examined in this study consisted of customs surcharge and surtax, stamp tax, other fiscal charges and tax on foreign exchange transactions.

in 1986, the import-weighted average of all import charges (tariffs and para-tariffs) in these countries was 30 per cent. In Latin America, the level of protection was by far the highest among developing regions: 66 per cent in Central America and 51 per cent in South America (but only 17 per cent in the Caribbean) (table 8). Table 9 shows tariffs applied by some individual Latin American countries.

When major product groups were considered, it was found that manufactures faced the highest levels of tariff and para-tariff protection. But foodstuffs were in second place, with a weighted average total import charge for all the countries covered by the survey of 30 per cent. The average was 21 per cent for agricultural raw materials, 19 per cent for ores and metals and 16 per cent for mineral fuels. For Latin American countries, the corresponding averages were much higher, reaching 64 per cent on foodstuffs in Central America (see table 8).

The frequency of non-tariff measures applied by developing countries is also rather high. In the above study, 40 per cent of products were found to be affected by at least one NTM in all countries in the sample, where each country's average was weighted by its total imports. The most frequent NTMs were quantitative restrictions, which affected 24 per cent of tariff lines. The second NTM in importance was advance import deposit requirements, which affected 21 per cent of products. Foreign exchange authorization by the Central Bank affected 6 per cent of the tariff lines on average. But in certain countries, particularly in Central America, all products were subject to either this constraint or to advance import deposits. Across regions, a pattern similar to that existing in the case of tariffs was found. Caribbean countries were among the regions having relatively liberal trade regimes in this context, whereas South America was one of the most protective regions.

The above findings refer to all imports, but they apply equally to the primary commodity sector, as tariff lines affected by NTMs did not exhibit major differences across sectors. Nevertheless, foodstuffs appeared to be the most affected sector with 48 per cent of all tariff positions covered by at least one NTM (see table 10). These findings contrast sharply with the situation in developed countries. In these countries, as indicated in the preceding section, NTMs are concentrated in agriculture, textiles, mineral fuels and iron and steel.

The wide application of NTMs to commodity imports in Latin American countries is also borne out by the findings of another study on the members of the Latin American Integration Association (LAIA)<sup>29/</sup>. The study found that every major commodity is subject to NTMs in some LAIA country. In 1988, Brazil, Colombia, Peru and Venezuela applied NTMs to most commodities. Next in line were Mexico and Ecuador, with considerable import product coverage of NTMs. Chile was in an intermediate position, and Paraguay, Argentina, Bolivia and Uruguay had only limited recourse to NTMs. In the year covered by the study, non tariff restrictions were particularly important for such products as wheat, maize, powder milk, rice, soja, soja oil, raw and refined sugar, oil products, some iron and steel products, fish, shellfish, butter, coffee, apples, pears and cotton.

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The differences between tariffs and para-tariffs are only institutional; their economic effects are the same. For this reason, they may be added up to give a better picture based on all import charges.

<sup>29/</sup>

Juan Guillermo Valenzuela, Restricciones no arancelarias empleadas por los países de la ALADI, con referencia especial a los productos básicos, July 1988 (mimeo).

It was noted above, however, that many of these countries have undertaken or are in the process of significantly opening up their import trade.

### 3. Conclusions

As indicated above, the impact of trade barriers on commodity exports from Latin American countries is difficult to evaluate. It can only be ascertained on a case-by-case basis, depending on the commodities exported. Trade flows depend on a number of factors (including the ability of individual exporters to successfully overcome trade barriers), the relative importance of which cannot be easily singled out. However, the studies on the potential effects of trade liberalization in agriculture suggest that the impact of trade barriers on trade is very significant. Trade liberalization in the markets of both developed and developing countries would therefore contribute significantly to an expansion in commodity trade, and every opportunity should be taken to support it.

It is important to note in this connection two important implications of the widespread use of non-tariff measures rather than tariffs to control imports of commodities in developed countries.

First, the degree of market transparency is reduced by the use of non-tariff measures instead of tariffs. This particularly discriminates against small exporters. For these exporters to participate fully in the benefits arising from trade liberalization, procedures to increase the transparency of trade regimes need to be established. One such procedure is that envisaged in the Uruguay Round of multilateral trade negotiations seeking to convert all non-tariff measures into equivalent tariffs (the so called "tariffication" proposals) as a first step towards their eventual elimination.

Second, the reduction of tariffs alone would not lead to a significant increase in market access for commodities. Furthermore, if such a reduction is applied to MFN rates, it may lead to a worsening of market access in some cases. This is because Latin American countries enjoy preferential tariff treatment for many commodities under the GSP. Liberalization on an MFN basis implies an erosion of these preferences and hence trade losses.

This is well illustrated by the potential impact of offers of tariff concessions on tropical products made by developed countries during the Uruguay Round until August 1990. According to UNCTAD estimates<sup>30/</sup>, the industrialized countries themselves would be the major beneficiaries of the offers. In the case of Latin American countries, exports to the United States would actually fall (with the major losses experienced by Mexico, Brazil and the Dominican Republic, in that order). These losses would be more than offset by increased exports to other countries, mainly to the EEC. However, improved access to the EEC market would be at the expense of African exporters, which would lose the preferential access that they currently enjoy under the Lomé Convention. Caribbean exporters to the EEC would also sustain trade losses for the same reason.

<sup>30/</sup>

See UNCTAD, Uruguay Round revised offers of tariff concession on tropical products (as at 31 July 1990): the potential trade impact (UNCTAD/MTN/RAF/CB.4, Restricted), August 1990.

UNCTAD estimates of the trade effects of a 50 per cent reduction in MFN tariffs on natural resource-based products yielded similar results<sup>31/</sup>. Developed countries would be the main beneficiaries, while Latin American exports would increase by a modest 0.9 per cent. Exports of forestry products from Latin America would actually fall. Furthermore, the slight increase in Latin American exports of minerals and metals (0.4 per cent) should be set against losses in the exports of these products from Asia and Africa. Only for fishery products would the region's increase in exports be significant (4.6 per cent), whereas African exports of these products would also fall.

The above examples show that, because of the different trade regimes and varying degrees of tariff preferences applied to commodities and countries, a reduction of trade barriers may not benefit all countries. Some countries may lose as a result. A particular case of this general rule is the situation of net food importing countries, which might suffer losses from liberalization in agricultural trade. It reveals the diversity of interests among Latin American commodity exporters.

This situation has important policy implications. Bargaining power would be increased and trade liberalization prospects enhanced if affected countries are able to negotiate collectively as a block, rather than individually. But developing a common stance is hindered by the potentially uneven distribution of benefits from trade liberalization, which results from the diversity of tariff regimes and rates applied by the developed countries: MFN, GSP, ACP preferences, CBI, Andean Trade Initiative, and soon perhaps preferential trade agreements bilaterally concluded by Latin American countries and the United States under the recently launched Enterprise for the Americas Initiative. In this situation, developing collective positions might be easier if the following is taken into account:

First, prospects for economic growth rest more on encouraging investments and exports on the basis of comparative advantages than on static rents based on unilaterally granted preferences. Many analysts have noted the risks for developing countries of preferential systems which make them dependent on the goodwill of certain developed countries.

For example, GSP benefits can be removed at the discretion of the countries granting them. They do not apply to many products of particular interest to Latin American countries nor to non-tariff measures, which are more important obstacles to trade. Although the EEC's Lomé Convention is an improvement over the GSP, product coverage is still limited and market access outside the traditional export products is restricted. There is little or no incentive to move up the product ladder, from raw materials into semi-manufactured and manufactured products. Eligible countries may benefit from quota rents, but the role of dynamic comparative advantages is denied<sup>32/</sup>. The value of the CBI has been considerably increased by the recent decision to indefinitely prolong the duration of the preferences, but as indicated above, important products continue to be excluded. In summary, these disadvantages, which may become more apparent in the

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<sup>31/</sup> See UNCTAD, Natural resource-based products: the potential trade impact of 50 per cent tariff reduction in the Uruguay Round (UNCTAD/MTN/RAF/CB.5), November 1990.

<sup>32/</sup> See Alberto Valdés and Joachim Zietz, "Examination of Proposals for Tariffication and Disciplines on Subsidies and Quantitative Controls Currently under Negotiation", in Nurul Islam and Alberto Valdes (ed.), The GATT, Agriculture, and the Developing Countries, International Food Policy Research Institute, Washington D.C., September 1990, pages 7-8.

longer term, should be considered by decision makers along with the more likely short-term advantages of existing preferences when assessing trade liberalization.

Second, the diversity of interests among Latin American countries could be reconciled by pursuing widespread liberalization affecting a broad range of commodities, particularly emphasizing the removal of non-tariff barriers. Such an approach has made possible wide participation in the Uruguay Round based on the principle of globality. It is also consistent with the position taken by Latin American countries of including all agricultural commodities in negotiations on agriculture (and not just those for which structural surpluses exist) as well as seeking progress in all areas of market access, and with opposition to the use of an aggregate measure of support to assess progress in agricultural liberalization, which would make possible a selective application to some products only, leaving others unaffected.

Finally, preferential treatment and protection may still be justified in two cases: in the transition period towards freer trade, and in the case of small countries in the Caribbean which lack the resources to develop viable alternatives to their present structure of protected exports (for example, some islands dependent on preferential access for bananas in the United Kingdom, now threatened by the establishment of the single EEC market in 1993). In the long term, solutions to the latter problem will need to be found, as trade preferences may well be incompatible with trends towards free trade.

### C. MARKETING AND DISTRIBUTION

Whereas in the 1960s and 1970s, commodity production in Latin America increasingly came under the control of domestically-owned companies, the crucial marketing and distribution sector has to a considerable extent remained in the hands of foreign companies. Fuller participation by Latin American countries in the marketing and distribution of their commodities would have clear advantages. It would allow countries in the region to significantly increase their export earnings because a substantial share of the income obtained from commodity exports is generated in the marketing and distribution stage. It would permit closer contacts with final markets and enable producers to take advantage of valuable information feedbacks from consumers as regards product quality and specifications, presentation and packaging, etc., best suited to consumer tastes. Finally, it would result in an enhanced bargaining position, and thereby contribute to an expansion of market outlets and better prices for producers.

#### 1. The structure of Latin American commodity marketing

Large corporations play a substantial role in international trade in goods. In primary commodities, this role is predominant. International commodity trade takes place largely through the marketing networks of large manufacturing and trading companies, as is described in a previous ECLAC document upon which the following sections are based<sup>33/</sup>.

Table 11 summarizes the marketing channels for commodities. The most important channel for international commodity trade is that represented by a few large transnational trading

<sup>33/</sup>

See ECLAC, Comercialización y estructura de los mercados de productos básicos de América Latina y el Caribe (LC/R.508), Santiago, Chile, 14 July 1986.



companies dealing in a wide range of commodities<sup>34/</sup>. These companies act as intermediaries between producers and consumers.

Also important are manufacturing corporations which are vertically integrated across national borders. The degree of vertical integration has contracted over time, and consequently the extent of intra-firm trade has come down. However, such intra-firm trade appears to be larger, the higher the degree of commodity processing. This is borne out by an examination of United States trade with affiliated or related companies, with evidence to this effect found in the cases of: cocoa beans, cocoa butter, powder and chocolate; live animals, meat and meat preparations; hides and skins, leather and footwear; and wood in the rough, furniture and processed wood. It can be concluded that transnational corporations responsible for intra-firm commodity trade are particularly active in commodity processing activities, where value added is high.

Generally speaking, the strong position of a few large trading and manufacturing companies in commodity markets lends support to claims that commodity markets are far from being fully competitive. Under oligopsonist conditions, the "perfect market" requirements for price determination are not met. In many cases, sales terms and conditions are determined by relative bargaining power. To some extent, this applies even to the apparently competitive operation of auctions (which are a regular feature in the marketing of tea and tobacco and an occasional occurrence in other commodities including minerals).

The substantial resources and better market information of large trading companies allow them to take maximum advantage of commodity exchanges (the main medium for price formation for a large number of commodities), both by using risk management techniques (hedging) and by their better ability to anticipate changes in quotations. In contrast, the participation of Latin American exporters in the operations of the exchanges in futures contracts is very limited. Only some large sugar and cacao traders of Brazil, the Dominican Republic and Ecuador, and copper producers and exporters of Chile, Peru, Mexico and Brazil regularly conduct business in futures<sup>35/</sup>.

The large multicommodity trading companies hold a particularly favorable market position. The geographic and commodity diversification of their operations permits them to reduce the high risks in commodity trade due to price volatility and fluctuations in exchange rates. Their multicommodity nature gives them substantial flexibility in conducting their business; for example, they often trade commodities for manufactures and engage in countertrade and other operations of various modalities. This ability enhances their bargaining position *vis-à-vis* their trading partners.

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<sup>34/</sup> In 1980, these trading companies accounted for around 70-80 per cent of total world commodity trade, according to UNCTAD estimates. Their share may have fallen somewhat in recent years, but probably remains high.

<sup>35/</sup> See also Marcelo Regúnaga, Las bolsas de productos básicos de los países desarrollados y las exportaciones de América Latina y el Caribe, ECLAC (LC/R.899), Santiago, Chile, 31 May 1990. Other ECLAC studies on the subject include: Oscar E. Menjivar, América Latina y los mercados de futuros de productos básicos (LC/R.928), 27 September 1990; Víctor López Huebe, La Bolsa de Café, Azúcar y Cacao y su incidencia en las exportaciones de América Latina y el Caribe (LC/R.901), 13 June 1990; Marcelo Regúnaga, Las bolsas de cereales y su influencia en las exportaciones de América Latina y el Caribe (LC/R.898), 31 May 1990; Jorge Bande and José Luis Mardones, Las bolsas de metales y su incidencia en el desarrollo de la minería de América Latina y el Caribe (LC/R.903), 30 June 1990; ECLAC, Futures markets: their usefulness and limitations for Latin American commodity trade (LC/R.919), 17 September 1990.

## 2. Barriers to greater participation in marketing

The ECLAC secretariat has identified a number of serious barriers to greater participation by Latin American countries in the marketing and distribution of their export commodities. These barriers are the result of the market structure sketched in the preceding section.

One set of barriers is related to the high concentration of the processing and manufacturing industries using commodities as inputs in developed countries. This concentration has been accentuated in recent years as a result of horizontal and vertical mergers. Efforts by small producers to enter into direct contracts with consumers and users run up against the price fixing practices of established companies, economies of scale, and the need for large capital outlays, product differentiation and substantial advertising expenditure. Only the few large exporting companies in Latin America are in a position to successfully meet these requirements.

Barriers associated with the exporters' small size also exist in relation to their participation in commodity exchanges. A major reason why so few producers hedge their futures sales is the fact that the usual size of the futures contract unit is more than the entire output of most individual producers. This is without doubt a characteristic of the agricultural sector and to a large extent also applies to the small and medium firms in the mineral sector. Any significant reduction in the size of the contract unit would probably make the costs of trading in futures too high, as the average costs of these operations decline quite steeply with the volume of transactions<sup>36/</sup>.

Another important barrier is the lack of market transparency. Information on commodity markets is a basic commodity itself. It has a cost and yields a return. Most Latin American exporters and traders are too small to afford full access to such information. This affects their sales strategies and conditions, whatever the sales mechanism used, whether it be direct contracts, auctions or commodity exchanges. Their large foreign competitors hold the advantage.

Lack of control of marketing is also related to the low participation of producing countries in the transport of their commodities. Since freight rates often account for a substantial share of the C.I.F. price (as high as 20 per cent for many commodities), Latin American countries are foregoing a large part of the value added in the transport stage. The region accounts for only 20 per cent of all dry bulk tonnage of developing countries, which in turn have only 15 per cent of the world total. This lack of shipping capacity, combined with sometimes inefficient national shipping companies and lack of port infrastructure and equipment, also leads to delays and limited flexibility to organize and plan deliveries, and to inefficient use of cargo space. The fragmentation of the marketing sector accounts for a weak bargaining position when negotiating freight rates with shipping companies.

## 3. Possible ways to increase Latin American participation in marketing and distribution

In the preceding sections it was shown that a major obstacle to a greater participation of Latin American countries in the marketing and distribution of their commodities is the imbalance in

<sup>36/</sup> ECLAC, Futures markets: their usefulness and limitations for Latin American commodity trade, op. cit., pages 55-56.

international markets between a large number of small exporters from these countries and a small number of big multicommodity traders. This being so, an improvement of the position of Latin American companies could come from a consolidation of their export business. In the present situation of fragmented production and export sectors, such consolidation of business can only be achieved through cooperation among suppliers. Two questions need to be raised in this connection: the forms that cooperation among Latin American companies could take, and the modalities and institutional mechanisms for promoting such cooperation.

(i) Marketing arrangements: There is a wide variety of possible cooperation forms and arrangements, and their respective merits should be assessed on a case by case basis. They include: various kinds of collaborative arrangements among exporters of individual products to share market information, cargo space, brokerage services, or other marketing services; combined purchases of material inputs needed for marketing, such as packaging material; and joint investments in representation and sales offices, joint publicity campaigns, etc., in final consumer markets. Possible arrangements in these areas range from informal consultative mechanisms to joint export ventures<sup>37/</sup>.

Producers' export cooperatives can be an effective instrument in this regard. The banana exporting cooperatives in Colombia and Costa Rica illustrate the effectiveness of this mechanism in raising producers' participation in marketing in an industry traditionally dominated by three large transnational conglomerates. Other examples include the Coffee Exporters' Federation in Colombia. The rich experience with export cooperatives in Latin America (such as those existing for various fruits and vegetables in Brazil, Chile, Guatemala and Honduras; sugar and milk in Uruguay, etc.) could provide a base to expand activities to international marketing.

A step-by-step approach would increase the feasibility of cooperation in marketing, as it would allow exporters to become familiarized with the procedures for conducting business together and their advantages. The wider the cooperation, the greater the potential advantages. Collaboration with exporters from other Latin American countries would be particularly necessary when aggregate exports from producers of a single country do not reach the minimum level required to take advantage of economies of scale in marketing.

Although not feasible nor desirable in all cases, the final stage in a process of increasing cooperation might be the establishment of multi-country commodity trading companies, preferably dealing in several commodities. This is an ambitious objective, and the Latin American record of operation of single commodity, multi-country trading companies is not encouraging. A realistic and thorough assessment of the experience of such companies remains to be made, in order to draw lessons about the conditions for their economic viability and the opportunities for the establishment of new companies in the future.

Exporters' cooperation could also permit increased access by small exporters to commodity exchanges, giving them the possibility of reducing risks through cooperative hedging schemes in those cases where individual exporters' sales are too small to use hedging economically. In addition,

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The need for joint marketing arrangements among small and medium-size mining firms in Latin America is analyzed in: ECLAC, Evolución y requerimientos de inversión en el sector minero metalúrgico de América Latina (LC/R.623), Santiago, Chile, 11 December 1987.

exporters of the same commodity could jointly be represented at the Board and relevant committees of the exchanges and see to it that the best interests of the industry be reflected in contract specification, delivery rules, trading hours and other institutional matters concerning exchange operations. This is particularly necessary in the case of soft commodities, which face standardization problems more than metals do. Subregional economic integration could contribute to removing the obstacles to the establishment of regional commodity exchanges for certain products, such as is now envisaged, particularly for those commodities where subregional and regional demand is important. Such exchanges could help increase intra-regional trade<sup>39/</sup>.

(ii) Promoting cooperation: The present trend in some Latin American countries is away from past forms of government direct involvement in marketing. Despite this, there is a wide recognition that governments have an important role to play as catalyzers of private initiative, promoting contacts in the business sector and creating conditions for cooperation such as that indicated above. This calls on them to provide support (including financial support when economically justified; for example, foreign exchange backing for margin calls to firms engaging in futures operations), services including advice and information, and incentives in the context of domestic policies and regulations.

Governmental support to private business cooperation is needed both at the national and the regional level. At the latter level, it requires cooperation among governments themselves, in order to establish a common legal and institutional framework where individual companies can engage in fruitful contacts.

The legal framework includes matters such as national investment codes and regulations, export regimes, etc., the harmonization of which throughout the region would greatly encourage business cooperation.

Regarding the institutional framework, the business sector can be provided with or helped to establish commodity organizations and schemes that effectively respond to their collaboration choices. Examples in this area include commodity organizations such as the Union of Banana Exporting Countries (UPEB), the Group of Latin American and Caribbean Sugar Exporting Countries (GEPLACEA), and the Latin American Association of Trading Companies.

An important dimension of institutional support is related to market information and the training of personnel in exporting firms and governments in marketing techniques and strategies. Because of the shared interests and economies of scale involved, these are typical areas for intergovernmental cooperation. For this reason, intergovernmental organizations such as UNCTAD have a clear mandate to promote actions in these two areas. Such actions would be considerably enhanced by the provision of financial support from the United Nations Development Programme and other sources of development finance. The large Latin American trading and exporting firms could also help their smaller counterparts, particularly in the field of on-the-job training.

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See report of the Seminar on Commodity Exchanges and their Impact on Commodity Exports from Latin America and the Caribbean, ECLAC, Santiago, Chile, 22-23 November 1990 (forthcoming).

## D. PROCESSING

### 1. The significance of commodity processing for Latin American countries

Promoting the processing of commodities in developing countries before export has been a declared objective of international cooperation on commodities for many years. This reflects a wide recognition of the crucial advantages of such processing in those cases where it is economically sound.

In Latin American as well as in other countries, processing means adding value to export goods, thereby increasing export receipts. Furthermore, as a growing number of countries in the region turn from import-substitution policies based on the production of goods for the domestic market towards export-oriented policies, commodity processing before export takes on an enhanced role. This role has been highlighted by the ECLAC secretariat in its proposals to the Commission's latest session. Commodity processing may perform a catalytic function in the development of systems of production, transport, marketing and financing, ultimately increasing competitiveness in the production of goods and services with a greater technological content and characterized by more rapid demand growth.

Two key components of the linkage of the natural resource sectors with industrial systems, which would benefit from the intensification of processing activities, are the capital goods industry - in particular, the manufacture of specialized equipment and machinery- and engineering services. Both sectors are crucial in the development of the domestic manufacture of more complex goods.

This point is well illustrated by the supply industry for copper mining in Chile, which has generated the capacity to manufacture new equipment -drilling machinery and parts, service machinery and machinery for loading ore, etc.- and other specialized industrial goods, as well as experienced and fully competitive engineering services for projects in this sector<sup>39/</sup>. Likewise, an examination of experiences in various countries of the region shows that those industries which receive inputs from agriculture have played a central role in introducing technical progress in the agricultural sector itself<sup>40/</sup>.

In addition to these general considerations of a strategic nature, commodity processing may have other important advantages depending on the particular commodities involved. For example, it may facilitate transportation, as the processed products are generally less bulky than the unprocessed ones (for example, in the case of metals and many agricultural commodities like cocoa)<sup>41/</sup>; it may facilitate stockpiling, for example as in the case of cocoa powder and butter,

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<sup>39/</sup> See ECLAC, Impacto tecnológico y productivo de la minería del cobre en la industria chilena 1955-1988 (LC/R.811), Santiago, Chile, 20 October 1989.

<sup>40/</sup> See ECLAC, Changing production patterns with social equity, *op. cit.*, pages 126-131.

<sup>41/</sup> There are some exceptions. Transport costs are higher for soluble coffee than for coffee beans, and for refined sugar, which must be carried in bags, than for raw sugar which is transported in bulk form. These higher costs, however, must be set against the higher value of the processed commodity.

offering producing countries the opportunity to withdraw the product from export markets in periods of low prices; and it may help improve the negotiating position of producers, since the markets for processed goods are often more competitive than the markets for the unprocessed ones, where the number of buyers is low compared with the large number of buyers for processed commodities. This is the case for copper and other minerals.

Commodity processing is obviously not economically feasible nor desirable in all cases<sup>42/</sup>. The merits of processing projects must be evaluated on a case-by-case basis. Such an evaluation should take account of externalities associated with commodity processing which are not reflected in market prices. Appropriate incentives and policies need to be adopted to make private returns correspond with social cost-benefit considerations.

## 2. The potential for commodity processing in Latin America

Research undertaken by ECLAC on individual major commodities and countries in Latin America shows the general low level of commodity processing before export and consequent high potential for commodity processing. A major proportion of commodities are exported in raw material form and are processed abroad.

An examination of a representative sample of commodity-based products exported by the region as a whole showed that, in 1984, 64 per cent of all agricultural commodities exported to OECD markets were raw materials. Semiprocessed agricultural commodities accounted for only 16 per cent of the total, and processed agricultural commodities, for 20 per cent. In contrast, most Latin American imports of agricultural commodities were in semiprocessed and processed forms: 31 per cent and 28 per cent respectively. Agricultural raw materials accounted for only 41 per cent of all agricultural imports.

The situation was more accentuated in the case of textiles. Latin American processed exports to OECD countries accounted for only 22 per cent of total Latin American exports in this sector, whereas the corresponding percentage for imports was 58 per cent.

The mineral export sector showed a similar low level of processing: only 22 per cent of all Latin American mineral exports to OECD countries were in the form of processed minerals, whereas the latter accounted for 77 per cent of all Latin American mineral imports from these countries<sup>43/</sup>.

The situation since then has not changed sufficiently to alter the conclusion that a great potential for processing export commodities exists in Latin American countries. Specific processing opportunities were identified by ECLAC for major export commodities including coffee, cocoa, soja,

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<sup>42/</sup> The domestic availability of the raw material, for example, does not necessarily confer comparative advantage in processing. This is particularly the case when the value of the raw material content is low compared to the value of the processed product (for example, tin in many end-uses, and bauxite in aluminium)

<sup>43/</sup> ECLAC, Procesamiento local de los productos básicos latinoamericanos (LC/R.505), Santiago, Chile, 25 de junio de 1986.

sugar, cotton, natural rubber, bauxite, copper, iron ore, and wood. But a number of obstacles were found that prevented this potential from being fully realized.

### 3. Obstacles to commodity processing

One well-known explanation of the low level of commodity processing in Latin American commodity producing countries is the lack of investment funds and, in many cases, the poor macroeconomic environment. Indeed, the sheer financial gap during the 1980s was a decisive constraint on investment, as the region experienced an unprecedented outward transfer of resources. Rising external debt service, declining terms of trade, and in some countries a lack of sufficient incentives to retain domestic capital and attract foreign capital help explain the sharp drop in the region's net investment coefficient from nearly 23 per cent of gross domestic product in 1980 to 16.5 per cent in 1988<sup>44/</sup>.

Yet, it is very likely that more private investment could have been attracted to specific processing projects for export were it not for a number of serious obstacles that stood in the way of the economic viability of the projects. Prominent among them are obstacles arising in the marketing and distribution of the processed commodities, and in their access to the markets.

For a number of commodities, a major obstacle in the field of marketing and distribution is related to the control of this sector of activity by large companies of consuming countries, including transnational corporations. Oligopolistic market structures often act as an effective impediment to the entry of newcomers. This situation prevails in the markets for soluble coffee; for chocolate, where brandnames play an important role and new entrants are faced with the need for expensive and long publicity and promotion campaigns to make inroads in the market; and for minerals such as bauxite, where a large portion of the industry, although less so than in the past, is vertically integrated to the semimanufacturing stage. In the case of minerals, the conditions attached to the provision of finance for new mine projects often hinder smelting and refining being undertaken in the producing country<sup>45/</sup>.

As it was indicated in the section dealing with market access, the tariff structure of developed countries discriminates against processed forms of a number of commodities through tariff escalation. For other products, non-tariff barriers are significant, whether in the form of quotas, voluntary export restraint agreements (VERs) or other restrictions. By far the largest number of VERs are in the commodity processing sector, affecting food products, textiles and clothing, steel products and footwear. In addition, the processing of cotton in producing countries is being discouraged because of the operation of the Multifibre Agreement, which sets import quotas on access to the markets of developed countries.

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<sup>44/</sup> ECLAC, Changing production patterns with social equity, op. cit.

<sup>45/</sup> A recent illustration of this is the world's biggest new copper mine development at La Escondida, in Chile. Around two-thirds of the financing for the mine, which came into production in December 1990, was provided by financial institutions of Japan, Germany and Finland, against the supply of 77 per cent of concentrate output to refineries in these countries (50 per cent to Japan, 20 per cent to Germany and 7 per cent to Finland) on a twelve-year contract.

#### 4. Promoting further processing of commodities in Latin American countries

The promotion of investment in commodity processing for export is an option open to Latin American countries in the context of their industrialization strategies and sectoral priorities. For countries wishing to expand the processing of their natural resources before export, domestic resource allocation policies to this end may be supplemented and made more effective through actions to attract capital to processing projects and to contribute to their economic viability by removing the obstacles mentioned above.

(i) Investment resources: Given the serious limitations of Latin American countries regarding the availability of investment resources, a large portion of the capital needed will have to come from abroad, as has often been the case in the mineral sector.

A large number of Latin American countries have been or are in the process of reviewing their investment codes and regulations in order to facilitate and encourage foreign investment. Issuing clear rules in this area setting down both the rights and obligations for all parties involved, taking into account the various interests of foreign investors and national economies, is considered the best way to promote investment inflows.

Regional and international financial institutions can make an important contribution to the effectiveness of these policies. They could do so, in the first place, by giving due weight to the merits of processing projects in their lending policies. This would no doubt be facilitated if the countries themselves established a coherent medium and long term strategy for economic development and structural transformation, clearly spelling out the role assigned to the processing of the country's natural resources and its linkages with the rest of the economy.

This could prompt a more rational and efficient allocation of investment loan resources, taking account both of individual countries' development strategies and of the situation of the global commodity markets. For example, it might be found that some of the resources used to finance new raw material developments for markets where demand is not likely to keep pace with increases in supplies would be better redirected towards the processing of raw materials currently exported in that form.

Multilateral financial institutions can also play a very important catalytic role in mobilizing external capital for commodity processing projects. These projects typically involve several complex stages, including project identification, pre-feasibility studies and assembling the financing package which may involve several unrelated sources of finance. Financial institutions have the expertise required to organize and manage these stages, even though they may not contribute a large part of the capital themselves. They can provide "seed money" to finance pre-feasibility studies wherever processing opportunities have been detected by governments or potential entrepreneurs, submit such studies to potential investors and providers of finance and help work out the arrangements setting in motion the subsequent stages of the projects.

This could lead to the setting up of joint processing ventures between investors of producing countries and foreign investors -whether regional or extraregional. The association with foreign capital could also take a number of other forms, the suitability of which would depend on the technical and economic characteristics of the projects envisaged. They include setting up companies



with capital from several countries (multinational companies) and establishing partnership links with foreign processors in the countries where the projected output is going to be marketed<sup>46/</sup>. The financial expertise and advice of regional and international financial institutions would also be extremely valuable in these cases to weigh different options and help implement the necessary arrangements.

(ii) Regional cooperation: Export processing projects in commodity producing countries are likely to benefit from easier access to raw material supplies and often lower operating costs than in consuming countries. But their foreign exchange returns, and thereby the projects' overall economic viability, may well depend on the effectiveness of measures to remove obstacles indicated in the sections of this document dealing with marketing and market access.

The suggestion of increasing trade with other Latin American countries made in section A above deserves particular mention. Market outlets could then be found more easily in Latin American countries with fast-growing demand for processed commodities facing barriers in developed countries' markets, such as chocolate, sugar preparations, cotton textiles, iron ore products and wood products. In the context of promoting commodity processing, this notion can be linked to a reinvigoration of economic and industrial cooperation among countries of the region. Processing industries could be set up to supply several countries' combined market, taking advantage of economies of scale in some industrial processes and of the removal of trade barriers among these countries.

This may allow advantage to be taken of existing complementarities in production. Increased processing might then be encouraged in producing countries with underutilized processing capacities. For example, in Brazil the capacity for soya processing substantially exceeds the domestic supply of the raw material, contrary to the situation in Argentina and Paraguay, the other two major Latin American soya producers.

Regional cooperation could also be grounded in the technical complementarity existing between certain commodities in the manufacture of the processed products. Examples of such complementarities are the use of sugar and cocoa in the production of chocolate; of natural and synthetic rubber in the manufacture of many rubber products; of tin and steel in the manufacture of tinplate, and tin and various metals like lead, antimony, silver, etc. in the manufacture of tin alloys; of sulphuric acid (a by-product in the production of copper) and non-metallic minerals in the chemical industry, etc.

Promoting commodity processing through regional cooperation may well require a reassessment of past approaches to industrial integration (such as the experience with industrial programming). The initiative for the establishment of processing arrangements and joint ventures

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See ECLAC, Procesamiento local de los productos básicos latinoamericanos, op. cit., pages 12-13; Exportaciones latinoamericanas de productos básicos: situación y perspectivas, op. cit., pages 134-153. Examples of joint investments of this kind are the investments by Venezuelan aluminum producers in fabricating plants in Europe, and the setting up by Brazil's Companhia Vale do Rio Doce (CVRD), together with Japan's Kawasaki and U.S. firms, of a steel processing plant in California, which is supplied with steel plates from Brazil. Mexican steel processing firms have been negotiating their inclusion in the scheme as suppliers to the plant.

should be left to the business sector<sup>47/</sup>. But intergovernmental cooperation can be instrumental to identify specific investment opportunities. For this purpose, a data bank of investment opportunities could be set up at the regional level in the form of a Promotion Center providing services such as the identification of potential investment partners, project formulation and assessment, updated information on overseas investment and promotion policies, and the organization of investment-oriented business meetings.

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<sup>47/</sup> Asian developing countries, for example, facilitate the participation of the business sector in their instruments for regional cooperation. Recently, in November 1990, ASEAN (Association of South-East Asian Nations) agreed to set common preferential tariffs (with import tariff cuts of up to 90 per cent) for goods manufactured by joint ventures among their member countries, and to liberalize regulations on foreign investments in ASEAN joint ventures. It is interesting to note that ASEAN integration always relied particularly on external markets, as it is now the emerging trend in Latin America. For an assessment of some key issues in the area of industrial cooperation in Latin America and ASEAN, see: United Nations Industrial Development Organization (UNIDO), New forms of industrial co-operation and investment policies in regional arrangements (PPD/R.14), Vienna, 11 March 1988.

### III. LATIN AMERICAN COOPERATION IN COMMODITIES

In the previous sections, possible policy actions were indicated as they arose from the analysis of specific problems. The purpose of this concluding chapter is to bring together and summarize the policy recommendations, emphasizing the practical modalities for their implementation.

The suggestions are specific to commodities. Issues pertaining to macroeconomic management and general economic and financial policies are not touched on, although it is obviously recognized that these matters are essential preconditions to the success of efforts in the commodity area. Nor are domestic commodity policies the main focus of this report. Rather, the major concern is with assessing how cooperation among countries could be used to enhance the effectiveness of domestic efforts aimed at heightening the contribution of commodity exports to development objectives. In order to address this question, the previous chapter tried to identify the external dimensions and complementarities of the various issues.

#### A. OBJECTIVES AND ACTIONS

In the review of issues made in the previous chapter of this report, some actions were identified as important in order to contribute to the strategic objective of enhancing the contribution of the commodity export sector to the economic development of Latin American countries. These actions are aimed at: (i) increasing the productivity of commodity production; (ii) expanding market outlets for commodity exports, including the expansion of intra-regional trade; (iii) increasing the participation of producing countries in marketing and distribution activities; and (iv) raising the value of commodity exports through greater processing before export. They can be summarized and grouped in the following six areas:

1. Joint research and development efforts. Whereas research and development efforts by Latin American firms and governments cannot match those made in developed countries, their efficiency and returns could be greatly enhanced by selectively focussing and pooling them, as indicated in section A of the previous chapter. Cooperation in this area would contribute to the objectives of increasing the productivity of commodity production, expanding market outlets by finding new uses, and facilitating processing to the extent that it is now hampered by the unavailability of adequate technology.

2. Actions to promote trade liberalization. These include: (i) developing a common stance to negotiate the reduction and eventual elimination of trade barriers in developed country markets, (ii) removing barriers to trade in the context of regional integration agreements, and (iii) expanding the Global System of Trade Preferences among Developing Countries. This would contribute to the objective of expanding market outlets for raw and processed commodities, thereby facilitating processing before export.

3. Joint marketing strategy. This broad heading covers actions such as: (i) the sharing of market information on individual commodities; (ii) cooperative training in marketing and assistance in this field from large firms and appropriate organizations for small Latin American firms; and (iii) helping exporters to develop joint marketing arrangements in a variety of forms. Such actions would facilitate greater participation in marketing and distribution and an expansion in market outlets.

4. Regional resource development. Actions under this heading would include: (i) assistance from financial institutions in the design and evaluation of processing projects, in particular joint-venture projects, and (ii) setting up a data bank on opportunities for joint-venture investments in commodity processing. The final goal is to facilitate commodity processing before export.

5. Common legal framework. Governments could consider harmonizing legislation affecting operations by Latin American and other foreign firms, particularly joint-ventures, in marketing and processing, so that these are not handicapped by differing and conflicting laws and regulations in the various countries. This action appears necessary to remove obstacles to cooperation in marketing and processing.

6. Price stability. This would help to discourage commodity substitution adversely affecting Latin American exports. Actions under this heading should be tailored to the particular situation of the commodities concerned. Commodity agreements between producers and consumers may work for certain commodities (as they have done at certain times in the cases of coffee, cocoa and natural rubber, and might in the case of oil). Producer cooperation in supply management may work for others (as in the cases of oil and tin). At any rate, the level of prices at which stability is maintained is crucial to the success of these efforts. This level should not be excessively high, as otherwise substitution will be encouraged rather than the reverse, and should correspond to long-term market trends.

## B. AGENTS FOR COOPERATION

As indicated earlier, the new policy orientations emerging in the region encompass a trend towards the private sector playing a greater role in value-adding activities. While a debate exists on the appropriate scope and nature of governmental involvement, it is recognized that the state has a key catalytic role in facilitating and encouraging private sector activities, particularly in those cases where, because of externalities and market distortions frequent in the commodity area, market forces cannot be relied on to lead to an effective use of resources. Although this is particularly the case in developing countries such as those in Latin America, it is also illustrated by the heavy involvement of governments of developed countries, for example in technological research, both at the domestic and multicountry levels.

The suggestions made in this report are therefore addressed mainly at governments and at multilateral organizations responsible for supporting intergovernmental cooperation. Governments, assisted by multilateral organizations, have a role to play in: (i) identifying specific opportunities for actions of the kind indicated above, regarding particular commodities and countries; (ii) establishing and maintaining contacts with the private business sector in order to examine together the desirability of specific actions; (iii) taking direct actions such as harmonizing legal frameworks, participating in negotiations on trade liberalization and compiling information; and (iv) facilitating action by the private sector through institutional support such as that indicated below.

In these areas, technical assistance of the kind provided by the UNDP and other agencies and donors is very much needed and could yield high returns. In particular, the identification of concrete opportunities for action is an area where selective and carefully focussed research by multilateral organizations can make an important contribution.

### C. IMPLEMENTATION

The effective implementation of the actions indicated earlier may crucially depend on Latin American countries' leverage in international negotiations, as well as on their ability to foster adequate institutional mechanisms through intergovernmental cooperation.

#### 1. General negotiating strategy

As was indicated some time ago in previous ECLAC documents<sup>48/</sup>, past international cooperation between commodity producing and consuming countries has not yielded the expected results nor has it led, in most cases, to a substantial improvement in the performance of the commodity export sector in Latin American and other developing countries. In spite of this, international dialogue and negotiation remain indispensable in the context of a world economy where interdependence among countries and sectors is constantly growing.

The piecemeal approach to commodity negotiations has been, in all probability, largely responsible for the lack of success of past efforts. Although UNCTAD's Integrated Programme for Commodities embodied the notion of globality of interests within the commodity sector in order to overcome the weaknesses of individual commodity approaches, subsequent developments such as the Uruguay Round have proved that a still wider perspective is necessary. This perspective corresponds, at the international negotiating level, to the view, at the national level, of the commodity sector as a component of, and having linkages to, the overall economy. In the same way that effective domestic policies should try to take advantage of these linkages, so an effective negotiating strategy should build on the interdependence existing at the international level. This implies relating problems in the commodity area to problems in other areas, such as debt and finance, manufactured goods trade, services, etc. Other related issues which are increasingly attracting attention are the impact on the environment, health issues and the production and sale of illicit drugs, all of which are highly relevant for Latin American countries as well as the international community.

Linking commodity issues with other matters on the basis of existing interdependencies would allow Latin American countries to strengthen their collective bargaining position, enabling them to negotiate on a more equal footing. This type of linkage has provided the foundation to the Uruguay Round of multilateral trade negotiations and has made universal participation in the Round possible. Such an approach requires identifying and extending negotiations to those elements of interest to the regions' negotiating partners (for example, access to Latin American domestic markets, drug control, etc.) on the basis of reciprocity.

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ECLAC, Elementos para una nueva estrategia de América Latina y el Caribe en la negociación internacional de los productos básicos (LC/R.589), Santiago, Chile, 22 June 1987; Aspectos de una política latinoamericana en el sector de los productos básicos (E/CEPAL/R.335/Rev.1), Santiago, Chile, 27 April 1983.

## 2. Institutional mechanisms

(a) Producers' organizations. These are ideal mechanisms for cooperation in most of the areas indicated above. Such organizations exist in Latin America for bananas (Union of Banana Exporting Countries, UPEB) and sugar (Group of Latin American and Caribbean Sugar-Exporting Countries, GEPLACEA). These groupings are involved in activities covering most of the issues indicated, and have recorded positive results in some of these areas. Whereas full-fledged producers' organizations may not be feasible for all commodities, other kinds of institutional mechanisms for producers' consultation and cooperation may be examined and promoted by governments in collaboration with the private firms concerned, including consultation mechanisms on specific issues.

(b) Integration schemes. As indicated in chapter I of this report, in recent years there has been a reactivation of efforts towards economic integration in Latin America together with a more pragmatic approach to integration. In addition to renewed activity in existing integration schemes, perhaps the most important development in this regard has been the added impulse to the strengthening of ties between Argentina and Brazil, culminating in the agreement at the beginning of July of 1990 to bring forward the date for the formation of a common market between the two countries to 1995 instead of the year 2000. Uruguay, Paraguay and Chile have been invited to join in the planned creation of a Southern Cone free trade zone. At the beginning of October 1990, Mexico and Chile signed an accord to begin negotiations on lowering trade barriers between the two countries, and a similar agreement has been signed between Chile and Venezuela.

In this context, there is a good opportunity to consider broadening the mechanisms for integration to cover some of the actions indicated earlier. This would imply reassessing past instruments for integration adopted in the region (for example, industrial programming), particularly with a view to more effectively incorporating the private sector.

The prospects for trade liberalization arising from current plans for integration are encouraging from the perspective of promoting intra-regional commodity trade. However, the latter objective may be hindered by possible trade diversion effects resulting from any bilateral agreements that may be concluded between Latin American countries and the United States under the "Enterprise for the Americas Initiative"<sup>49/</sup> (although these agreements will contribute to opening up the U.S. market). If these effects are to be avoided, regional integration will need to be carried forth with sufficient speed and determination.

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Under the Initiative, the United States has recently signed "framework" agreements with Colombia, Ecuador, Chile, Costa Rica and Honduras and is discussing similar agreements with several other countries including Venezuela individually and Argentina, Brazil, Uruguay and Paraguay as a group. Framework agreements were signed with Mexico and Bolivia before the launching of the Initiative, and negotiations on a fully-fledged free trade agreement with Mexico are due to commence in 1991.

**STATISTICAL ANNEX**

Table 1

Participation of developing America in world exports  
by major product groups  
(Percentages)

	1955	1960	1970	1980	1988
All food items	20.5	17.5	15.7	14.2	12.0
Agricultural raw materials	8.9	7.0	5.6	4.6	4.0
Ores and metals	14.5	13.3	13.6	10.9	11.6
Fuels	27.5	25.6	15.0	9.5	8.2
Manufactured goods	0.7	0.5	1.0	1.5	1.9

Source: Based on data from: UN, Monthly Bulletin of Statistics; UNCTAD, Handbook of International Trade and Development Statistics.

Table 2

Structure of exports by major product groups  
(Percent of total)

	1955	1960	1970	1980	1988
<u>Developing America</u>	100.0	100.0	100.0	100.0	100.0
All food items	44.5	42.6	40.9	29.1	30.4
Agricultural raw materials	11.4	9.5	5.8	3.1	3.7
Ores and metals	10.8	12.5	17.7	9.5	11.3
Fuels	30.0	31.9	24.7	42.4	19.8
Manufactured goods	3.1	3.4	10.6	14.7	33.8
<u>World</u>	100.0	100.0	100.0	100.0	100.0
All food items	21.8	19.4	14.7	11.1	9.9
Agricultural raw materials	12.9	10.8	5.8	3.7	3.5
Ores an metals	7.5	7.5	7.3	4.7	3.8
Fuels	11.0	9.9	9.3	24.0	9.4
Manufactured goods	45.2	51.3	60.9	54.2	70.0

Source: Based on data from: UN, Monthly Bulletin of Statistics; UNCTAD, Handbook of International Trade and Development Statistics.



Table 3

Major Latin American non-oil export commodities  
(1986-1988 average)

Commodities (SITC No.)	Total L.A. exports (millions US\$)	Share of world (%)	Major Latin Am. exporters <sup>a/</sup>
Coffee (071.1)	6,872.9	56.9	Colombia (17.3%) Brazil (16.4%) Mexico (5.2%) Guatemala (3.5%) El Salvador (3.3%) Costa Rica (2.8%)
Sugar, raw and refined (061.1, 061.2)	5,717.6	56.0 <sup>y/</sup>	Cuba (45.6%) Brazil (3.4%) Dominican Rep.(1.4%)
Fishery commodities <sup>y/</sup>	3,030.4 <sup>y/</sup>	10.9	Chile (2.3%) Mexico (1.8%) Ecuador (1.6%) Peru (1.2%)
Copper, refined and unrefined (682.11, 682.12)	2,517.9	34.7	Chile (28.4%) Peru (5.8%)
Oilcakes (081.3)	2,357.9	35.8	Brazil (20.2%) Argentina (15.1%)
Iron ore (281.5, 281.6)	2,118.6	29.8	Brazil (24.1%) Venezuela (3.4%)
Bananas (057.3)	1,372.8	72.1	Honduras (15.7%) Ecuador (14.5%) Costa Rica (12.2%) Colombia (11.6%)
Aluminium (684.1)	1,314.0	11.3	Brazil (6.4%) Venezuela (3.7%)
Soya beans (222.2)	1,092.7	17.9	Brazil (8.5%) Argentina (7.1%) Paraguay (2.1%)
Fruit juices (058.5)	888.2 <sup>y/</sup>	--	Brazil (\$802.7 mn) Argentina (\$67.3 mn)
Bovine meat (011.1)	837.9	8.6	Brazil (2.8%) Argentina (2.6%) Uruguay (1.4%)

Commodities (SITC No.)	Total L.A. exports (millions US\$)	Share of world (%)	Major Latin Am. exporters <sup>a/</sup>
Tobacco <sup>b/</sup>	619.9	15.5	Brazil (11.2%)
Coarse grains <sup>b/ d/</sup>	605.7 <sup>e/</sup>	5.4	Argentina (5.3%)
Copper ore (287.1)	604.1	25.7	Chile (14.9%) Mexico (7.4%)
Chemical wood pulp (251.7)	582.9 328.5	--	Brazil (\$328.5 mn) Chile (\$254.4 mn)
Silver (681.1)	571.5	--	Mexico (\$356.8 mn) Peru (\$122.6 mn) Chile (\$77.6 mn) Bolivia (\$12.5 mn)
Alumina (287.32, 522.56)	544.4	19.0	Jamaica (8.6%) Suriname (7.4%)
Soyabean oil (423.2)	517.5	35.0	Argentina (18.5%) Brazil (16.3%)
Cotton (263.1)	486.6	7.5	Paraguay (1.8%) Mexico (1.4%) Brazil (1.1%)
Cocoa products <sup>b/</sup>	459.5	23.1	Brazil (16.0%) Ecuador (2.8%)
Cocoa beans (072.1)	449.4	15.2	Brazil (8.6%)
Wheat and wheat flour <sup>b/</sup>	399.0	2.8	Argentina (2.7%)
Extracts of coffee (071.2)	353.0	--	Brazil (\$275.5 mn) Colombia (\$60.6 mn) Ecuador (\$16.9 mn)
Sunflower seed oil (423.6)	307.8	33.1	Argentina (33.1%)
Bauxite (287.31)	294.5	32.6	Jamaica (11.4%) Brazil (10.4%)
Grapes (057.51)	284.9	25.0	Chile (24.6%)
Tomatoes (054.4)	264.5	17.7	Mexico (17.4%)

## NOTES TO TABLE 3:

Source: ECLAC (BADECEL), UNCTAD Commodity Yearbook 1990

- <sup>a/</sup> Figures in brackets indicate percentage shares of world exports or, when these are not available, value of exports in millions of U.S. dollars.
- <sup>b/</sup> As defined in UNCTAD Commodity Yearbook 1990.
- <sup>c/</sup> Mostly shellfish (shrimps), exported mainly by Mexico, Ecuador and Brazil, and fishmeal, exported mainly by Chile and Peru.
- <sup>d/</sup> Includes maize, barley, rye, oats and certain cereals.
- <sup>e/</sup> Mostly maize.
- <sup>f/</sup> On the basis of physical tonnage, Latin American share is 40%, with Cuba accounting for 23% of world exports, Brazil for 8%, and the Dominican Republic and Mexico for 2% each.
- <sup>g/</sup> Mostly orange juice.

-- : Not available

Table 4

Commodity dependence  
(Percentage share in total exports, 1986-1988 average)

Countries	Commodities (excl. fuels)	Fuels	Manufactures	Total exports
Argentina	66.9	1.8	31.3	100.0
Bolivia	47.3	44.7	8.0	100.0
Brazil	45.1	3.1	51.7	100.0
Chile	85.8	0.0	14.2	100.0
Colombia	59.3	24.6	16.1	100.0
Ecuador	54.1	42.4	3.5	100.0
Mexico	20.6	36.2	43.2	100.0
Paraguay	87.4	0.0	12.6	100.0
Peru	64.0	8.7	27.3	100.0
Uruguay	49.5	0.2	50.3	100.0
Venezuela	9.5	87.2	3.4	100.0
Total, LAIA countries	41.7	23.6	34.7	100.0
Costa Rica	71.4	2.1	26.5	100.0
El Salvador	74.2	1.1	24.7	100.0
Guatemala	73.5	1.9	24.6	100.0
Honduras	83.5	0.6	15.9	100.0
Nicaragua	86.6	0.9	12.5	100.0
Total, CACM countries	76.1	1.5	22.4	100.0
Other Latin America	64.3	22.0	13.8	100.0
<b>Latin America</b>	<b>46.2</b>	<b>22.5</b>	<b>31.4</b>	<b>100.0</b>
<b>Africa</b>	<b>33.4</b>	<b>50.5</b>	<b>16.0</b>	<b>100.0</b>
NICs <sup>a/</sup>	7.0	3.2	89.8	100.0
<b>Other Asia</b>	<b>20.2</b>	<b>49.1</b>	<b>30.7</b>	<b>100.0</b>
Asia	13.2	24.9	61.9	100.0

Source: UNCTAD Commodity Yearbook, 1990; World Bank

<sup>a/</sup> Hong Kong, Republic of Korea, Singapore and Taiwan

**Table 5**

**Market dependence**  
**Destination of commodity exports, in percentage, 1986-1988 average**

	Developed countries				Developing countries		Socialist countries	TOTAL
	USA	EEC	Japan	Other	Latin Am.	Other		
Argentina	7.6	36.6	4.7	3.1	14.3	16.8	16.8	100.0
Bolivia 1/	30.1	42.5	0.7	2.9	19.7	0.7	3.5	100.0
Brasil 1/	18.5	38.6	8.8	6.8	5.7	13.3	8.4	100.0
Chile	18.5	38.0	12.7	4.2	13.1	10.4	3.0	100.0
Colombia	27.2	45.0	5.9	10.9	3.4	2.3	5.4	100.0
Ecuador	68.6	14.7	4.3	2.0	6.5	1.7	2.3	100.0
México 1/	78.4	9.4	4.0	1.9	1.9	2.2	2.1	100.0
Paraguay	1.5	30.1	1.0	8.5	51.5	7.3	0	100.0
Perú 1/	24.5	27.7	13.6	2.5	13.5	9.3	8.8	100.0
Uruguay	7.6	30.4	1.8	5.4	30.2	13.2	11.4	100.0
Venezuela	28.9	17.2	34.3	3.9	10.2	5.2	0.3	100.0
<b>Total, LAIA countries</b>	<b>26.5</b>	<b>33.3</b>	<b>8.3</b>	<b>5.2</b>	<b>9.0</b>	<b>10.2</b>	<b>7.5</b>	<b>100.0</b>
Costa Rica	43.4	33.9	0.9	8.0	5.6	4.3	4.0	100.0
El Salvador	49.4	32.8	6.2	3.3	4.9	1.4	2.0	100.0
Guatemala	46.5	20.0	5.3	5.2	9.8	10.4	2.8	100.0
Honduras	50.8	28.2	8.7	2.1	4.0	3.7	2.5	100.0
Nicaragua	8.5	42.9	23.7	4.1	5.6	10.0	5.2	100.0
<b>Total, CACM countries2/</b>	<b>43.7</b>	<b>29.5</b>	<b>6.8</b>	<b>4.8</b>	<b>6.3</b>	<b>5.8</b>	<b>3.1</b>	<b>100.0</b>
Bahamas 2/	62.5	29.1	0.0	6.8	1.1	0.5	0.0	100.0
Barbados 2/	19.1	52.4	0.2	8.9	16.7	2.7	0.0	100.0
Jamaica 3/	27.6	39.2	1.4	22.4	3.2	0.9	5.4	100.0
Panama 2/	69.1	16.8	0.2	3.0	7.8	3.0	0.1	100.0
Dominican Republic 4/	71.7	6.8	0.3	1.5	6.4	6.3	6.9	100.0
Trinidad & Tabago	15.3	40.9	0.6	3.1	32.3	7.8	0.1	100.0
<b>Total Latin America</b>	<b>28.9</b>	<b>32.6</b>	<b>7.9</b>	<b>5.3</b>	<b>8.7</b>	<b>9.6</b>	<b>7.0</b>	<b>100.0</b>

Source: ECLAC, Banco de datos de Comercio Exterior de América Latina y el Caribe (BADECEL).

Notes: 1/ 1985-1987 average

2/ 1983-1985 average

3/ 1987-1988 average

4/ 1981-1983 average

Table 6

Tariffs on selected commodities by degree of processing in major world markets  
(Per cent or ad valorem equivalent)

	USA	EEC			JAPAN	
	MFN	MFN	GSP	ACP	MFN	GSP
<b>Meat</b>						
Fresh, chilled, frozen	6.4	11.6	1.7	0.0	11.8	--
Salted, dried, smoked	9.8	19.5	--	1.0	19.8	--
Prepared, preserved	3.9	18.1	11.5	3.1	19.2	6.4
<b>Fish</b>						
Fresh, chilled, frozen	0.6	13.5	5.2	0.0	6.1	--
Dried, smoked	2.4	12.7	7.5	0.0	11.9	5.0
Prepared, preserved	9.1	17.2	8.4	0.4	13.7	6.8
<b>Molluscs, crustaceans</b>						
Fresh, chilled, frozen	3.7	10.7	4.3	0.0	6.5	6.7
Preparations	5.3	18.0	6.0	0.0	12.4	5.7
<b>Rice</b>						
Unmilled	5.1	12.0	--	2.4	0.0	--
Milled/processed	16.4	--	--	--	16.7	--
<b>Coffee</b>						
Raw	0.0	9.0	6.5	1.3	0.0	--
Roasted, ground	0.0	16.5	12.0	3.3	20.0	--
Extracts, preparations	0.0	18.0	9.0	0.0	24.2	7.5
<b>Cocoa</b>						
Beans	0.0	3.0	--	0.0	0.0	--
Paste	0.0	15.0	11.0	0.0	15.0	7.5
Butter	0.0	12.0	8.0	0.0	2.5	0.0
Powder	0.5	16.0	9.0	0.0	21.5	15.0
Chocolate	1.9	--	--	--	30.0	12.5
<b>Sugar</b>						
Raw	14.5	--	--	--	37.5	--
Processed	4.2	10.0	--	--	28.4	--
Molasses	4.5	--	--	--	28.1	--
<b>Spices</b>						
Unground/unprocessed	0.7	7.5	4.4	0.0	1.2	0.0
Ground Processed	4.7	11.8	4.0	0.0	6.6	0.0
<b>Oilseeds, vegetable oils</b>						
Oilseeds	3.4	0.0	--	--	1.0	--
Vegetable oils	4.3	7.2	7.2	1.0	8.5	8.3
Fatty acids, fatty alcohols	4.4	8.8	4.4	0.9	5.4	0.9
Margarine	0.0	25.0	--	5.0	35.0	--
Soaps	4.1	6.9	0.0	--	6.5	0.0
<b>Tobacco</b>						
Unmanufactured	72.6	24.4	14.8	0.0	0.0	--
Manufactured	11.0	78.8	67.0	0.0	14.3	--
<b>Manioc, roots, tubers</b>						
Fresh, dried	13.5	6.0	--	3.0	11.3	--
Flour	--	--	--	0.0	12.5	--
Meals; starches	0.0	30.0	--	0.0	22.8	--
<b>Bananas</b>						
Fresh, dried	1.7	20.0	0.0	0.0	25.5	6.3
Flour, prepared	5.9	17.0	0.0	0.0	--	--
<b>Tropical fruit</b>						
Fresh, dried	8.7	8.0	2.3	0.0	9.1	4.0
Preserved	--	13.4	3.7	0.9	21.0	8.9
Prepared; fruit juices	46.7	24.0	13.1	4.6	27.5	11.4
<b>Tropical nuts</b>						
Unshelled, crude	5.2	2.2	0.0	0.0	7.9	1.5
Shelled, prepared	7.6	15.0	6.0	0.0	21.0	8.3
<b>Tropical wood</b>						
In the rough	3.4	1.3	--	0.0	0.4	0.0
Simply worked	2.0	3.1	0.0	--	2.6	1.3
Veneers, plywood	4.4	4.0	0.0	0.0	8.4	0.1
Wood articles	6.3	4.9	0.0	--	--	--

	USA	EEC			JAPAN	
	MFN	MFN	GSP	ACP	MFN	GSP
<b>Rubber</b>						
Natural rubber	0.0	0.0	0.0	--	0.0	--
Simple manufactures	4.7	3.7	3.7	0.0	3.5	0.0
Tyres, tubes	3.1	3.6	3.6	--	3.2	0.0
Other articles	5.2	4.8	0.0	--	3.5	0.0
<b>Sisal, henequen</b>						
Raw	0.0	0.0	--	--	0.0	--
Processed	8.0	--	--	--	--	--
Twine, cordage	4.2	12.0	12.0	0.0	6.5	0.0
<b>Aluminium</b>						
Bauxite	0.0	--	--	--	0.0	--
Alumina	0.0	--	--	--	5.4	0.0
Aluminium, unwrought	1.3	--	--	--	3.0	0.0
Aluminium, worked	3.9	7.3	0.0	0.0	7.1	0.0
<b>Copper</b>						
Copper ores and concentrates	0.3	--	--	--	0.0	--
Copper, blister	1.0	--	--	--	7.3	0.0
Copper, refined	--	--	--	--	7.6	0.0
Copper and copper alloys, worked	4.9	5.2	0.0	0.0	6.8	0.0
<b>Iron</b>						
Iron ores and concentrates	0.0	0.0	--	--	0.0	--
Pig iron, cast iron and spiegeleisen in pigs, blocks, lumps and similar forms	0.3	2.7	--	--	3.7	0.0
Iron or steel powders, shot or sponge	0.9	3.0	0.0	0.0	3.7	0.0
Ingot of iron and steel	3.9	3.5	0.0	0.0	5.7	0.0
<b>Lead</b>						
Lead ores and concentrates	6.1	--	--	--	0.0	--
Lead and lead alloys, unwrought	--	--	--	--	--	--
Lead and lead alloys, worked	4.8	5.8	0.0	0.0	7.2	0.0
<b>Phosphate</b>						
Phosphate rock	0.0	0.0	--	--	0.0	--
Phosphoric acids	0.0	11.0	0.0	0.0	4.9	0.0
Superphosphates	0.0	4.8	0.0	0.0	2.9	--
<b>Tin</b>						
Tin ores and concentrates	0.0	--	--	--	0.0	--
Tin and tin alloys, unwrought	--	--	--	--	--	--
Tin and tin alloys, worked	2.5	3.7	0.0	0.0	3.4	0.0
<b>Zinc</b>						
Zinc ores and concentrates	2.6	--	--	--	0.0	--
Zinc and zinc alloys, unwrought	--	--	--	--	--	--
Zinc and zinc alloys, worked	5.5	7.1	0.0	0.0	5.4	0.0
<b>Petrochemicals</b>						
Hydrocarbons	7.0	7.1	0.0	0.0	4.7	0.0
Acrylic, cycl. alcohol	6.7	7.8	0.0	0.0	8.6	0.8
Carboxylic 4	7.9	8.2	0.0	0.0	6.2	0.0
Nitrogen function	10.7	8.1	0.0	0.0	6.2	0.3
Other	11.1	7.5	0.0	0.0	5.6	0.0
Condensation polyc. and polyadel	6.4	7.9	0.0	0.0	6.0	0.0
Polimerization and copol	7.5	11.9	0.0	0.0	7.0	0.0

**Source:** Computations based on GATT Tariff Study, 1986 computer files; in UNCTAD, Market access conditions and other factors and conditions pertinent to the development of viable diversification programmes (TD/B/C.I/AC/G), 12 July 1989; Africa's commodity problems: towards a solution. A report by United Nations Secretary General's Expert Group on Africa's commodity problems, 1990.

**Notes:** -- = Tariff rate not available.  
 MFN = Tariff rate applied under the most-favoured-nation principle.  
 GSP = Tariff rate applied under the Generalized System of Preferences  
 ACP = Tariff rate applied by the EEC to African, Caribbean and Pacific countries under the Lomé Convention.

**Table 7**

Trade coverage of NTMs<sup>a/</sup> applied by developed market-economy countries to Latin American exports in 1988, by groups of products<sup>b/</sup>

Product groups	United States	EEC	Japan	Developed countries
Food	27.4	26.8	31.3	26.8
Oil seeds	48.2	0.0	32.6	9.5
Agricultural raw materials	33.8	4.9	5.9	11.1
Fuels	0.0	29.3	0.4	6.9
Iron and steel	75.4	96.2	0.0	65.0
Leather products	0.0	9.4	1.4	4.8
Textile yarn and fabrics	75.0	96.8	16.8	75.6
Clothes	87.6	39.7	0.0	72.4
Footwear	0.0	100.0	10.4	21.6

Source: UNCTAD data; R. Gonçalves... *op. cit.*, table 2

<sup>a/</sup> Percentage of Latin American exports covered by NTMs (including para-tariff measures, prohibitions, quotas, licenses, control and surveillance systems, and price controls).

<sup>b/</sup> In calculating trade coverage, 1986 trade data were used.

**Table 8**

Average import charges<sup>a/</sup> on product groups, by regions, 1986 (per cent)

Product groups	Developing countries	Central America	South America	Caribbean
Food	30	64	50	19
Agricultural raw materials	21	49	41	4
Mineral fuels	16	58	28	11
Ores and metals	19	49	34	7
Manufactures	32	71	55	20
All imports	30	66	51	17

Source: UNCTAD data; in R. Erzan...*op. cit.*, table 6

<sup>a/</sup> Import-weighted average of import charges (tariffs and paratariffs) of countries in each region



Table 9

Simple tariff averages in selected Latin American  
and Caribbean countries  
(Per cent ad valorem)

Country	Tariffs as of	Primary products	Manufactured products
Argentina	May/89	23.6	30.0
Brazil	May/89	27.6	47.3
Bolivia	Apr/89	17.0	16.5
Chile	Mar/88	20.0	19.8
Colombia	Sep/89	26.3	32.0
Costa Rica	Oct/87	20.4	21.5
Ecuador	Nov/89	37.9	36.8
Guatemala	Oct/87	20.9	20.9
Haiti	Aug/88	14.5	10.4
Mexico	May/89	8.9	11.9
Peru	Sep/87	36.1	54.0
Trinidad and Tobago	Jan/88	11.6	19.3
Uruguay	Feb/88	25.6	28.2
Venezuela	Jun/88	37.3	35.4

Source: UNCTAD data; UNCTAD, Protectionism and Structural Adjustment (TD/B/1240/Add.1), 14 December 1989, Table I.6

**Table 10**

Frequency of NTMs in developing countries, in percentage of tariff positions affected,  
1986 (averages for 50 countries, countries import-weighted)

Product groups	Quantitative restrictions				Advanced import deposit	Central Bank authorization	Minimum price	Single channel for imports	Total
	All	Licence	Quota	Prohibition					
Food	33	24	2	8	21	6	1	6	48
Agricultural raw materials	19	14	1	4	21	6	1	3	37
Mineral fuels	18	17	1	1	19	6	0	14	42
Ores & metals	18	16	1	1	21	6	2	4	38
Iron & steel	20	18	1	1	21	6	2	4	40
Manufactures	23	17	1	6	21	6	2	3	39
All products	24	18	1	6	21	6	2	4	40

Source: UNCTAD computer files, in R. Erzan..., *op. cit.*, table 10.

Table 11

## Commodities grouped by marketing channels

Nearly all trade is conducted by a few industrial country companies	High participation of trading companies, with some manufacturing companies vertically integrated into trading activities	Significant participation of producing and processing TNCs in marketing	State trading organizations, with some participation of trading companies
Grains	Rubber	Bauxite/alumina	Phosphates
Soja oil	Tropical wood	Bananas	Copra oil
Peanut oil	Cocoa	Tobacco	
Cotton	Coffee	Tea	
Copper	Iron ore	Nickel	
Sugar	Sisal		
Wool	Jute		
Meat	Manganese		
Fishmeal	Palm oil		
	Tin		
	Zinc		
	Lead		

Source: ECLAC, Comercialización y estructura..., op. cit., table 10