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## Performance Indicators of International Agrifood Trade in the Hemisphere

Although international trade has become a factor that determines the growth of businesses and the prosperity of nations, insufficient information exists on the portfolio of exports of many developing countries, hindering the work of researchers and decision makers in their efforts to evaluate the groups of products for which given countries have comparative advantages.

In order to make a contribution in this area, IICA's Area of Policies and Trade conducts studies to facilitate a more accurate identification of the portfolio of agrifood export and import products, in terms of their revealed comparative advantages, the dynamism of international demand, and the growth patterns of trading partners. The countries' specialization in activities for which they have comparative advantages, combined with greater trade liberalization, will enable them to improve the general welfare of their inhabitants and foster a more efficient allocation of domestic resources.

This article refers briefly to these studies, with particular emphasis on the following three documents, which can be obtained from the Area of Policies and Trade. 1) Evolution and Performance of Agrifood Trade in the Western Hemisphere ; 2) Direction and Dynamism of Agrifood Trade in the Western Hemisphere (1994-1998); and 3) Trade Openness and Net-Food Importers: the Situation of Countries in the Western Hemisphere.

### Evolution and performance of trade

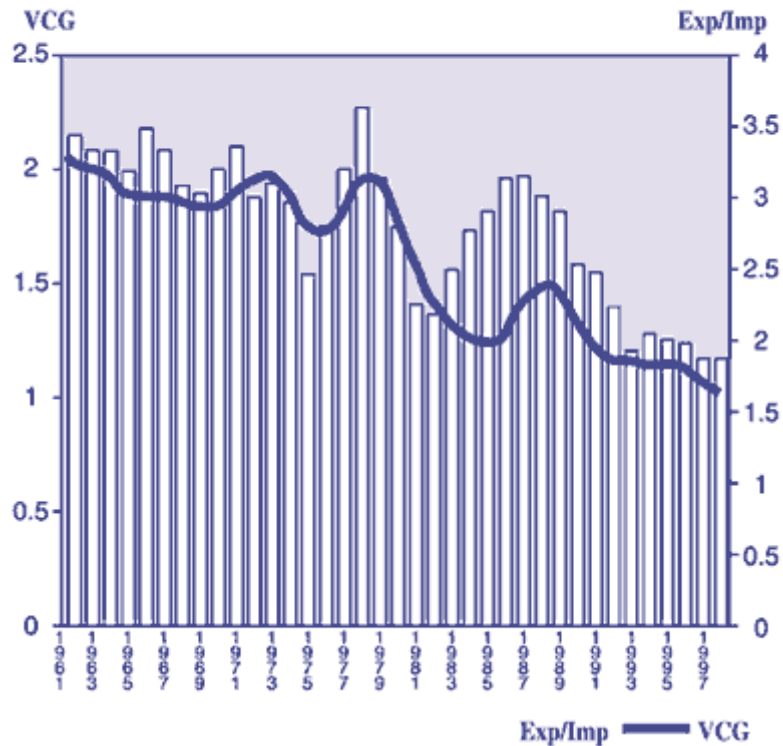
The first document summarizes, by country and by product, the international trends and performance of agrifood trade in the hemisphere in the 1961-1997 period, based primarily on indicators of revealed comparative advantage. It includes other indicators useful for evaluating bilateral agricultural trade opportunities among the countries of the hemisphere, as well as a reference to the portfolio of each country's most important exports and imports, which can provide orientation for investments and for establishing trade negotiating positions.

The main indicator used for evaluating the countries' agricultural trade performance is the revealed comparative advantage (RCA) index, which is calculated on the basis of international trade information. The assumption is that the current trade flow reflects relative costs and differences between countries, including non-market factors. This makes it possible to identify agricultural products that have greater comparative advantages in international trade without having to calculate the opportunity cost of domestic resources or to analyze relative prices. It also shows how domestic resources are allocated for producing goods for the domestic and international markets, the competition that exists for these resources, and the country's capacity to compete on the international agricultural products market.

### Agrifood Trade in Latin America and the Caribbean

For example, a look at the agrifood trade indicators for Latin America and the Caribbean (LAC) shows that said exports total more than US\$55 billion (or about 23% of total merchandise exports), resulting in a positive trade balance (Exp/Imp) of about 2 (Figure 1), although this has been in decline since 1987. The index of global comparative advantage (GCA), which takes into account both international supply and international demand, has been falling steadily throughout the period (Figure 1).

**FIGURA 1**  
**ALC: Balance (Exp/Imp) e índice de ventaja comparativa global del comercio (VCG) de Agricultura y Pesca**



The groups of products with the greatest and growing comparative advantages are: fish, fruits and vegetables, beverages and tobacco and animal fats and vegetable oils. The fall in GCA is due in large part to the performance of the grains and prepared products and dairy products and eggs groups. LAC has revealed comparative advantages in the sugar and honey and meats groups, although this declined in the 1990s.

Hidden in the GCA performance of agrifood products in LAC, one can find the following facts:

- Exports were much more dynamic in the 1990s than in the 1980s, growing from 0.8% annually to 7.49% between those periods. This is explained, in part, by improved efficiency and the scale of agricultural production in LAC, considerable growth in the use of fertilizers/hectare of arable land and the use of tractors, both, per agricultural worker and per hectare of arable land. The percentage of irrigated land grew moderately.
- Nonetheless, imports grew faster than exports, causing a sharp decline in the agrifood trade balance of LAC. Exports represented 3 times imports in 1986, falling to less than 2 times imports in 1993, although there was a slight recovery as of this year.
- Because of the inelasticity of these products and despite the growth in agrifood exports from LAC, its share in total goods exported continues to fall, reaching about 25% in 1998 after representing more than 40% in the 1970s.

## Direction and dynamism of trade

The second document deals with the direction and dynamism of agrifood trade in the Americas. Its two main chapters deal with: a) the trade between selected trading blocs and b) the trade between the countries of the hemisphere and the rest of the world. Each chapter identifies the origin of trade in agrifood products and their principal destinations (imports or exports), as well as the dynamism of international supply and demand of given products or groups of products.

Indicators on the trade flows of the ten most important agrifood products (export and import), defined to a 4-digit level according to SITC, rev.3, are presented for each country and region.

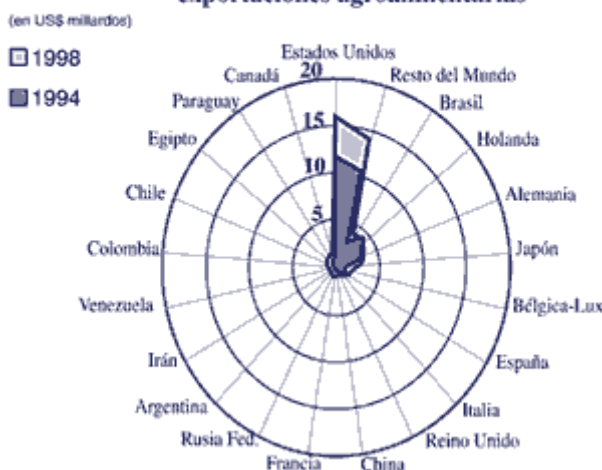
In this publication, the reader can find:

- the most important and dynamic export products (those whose market share is growing);
- the degree of concentration or diversification of the international supply or demand for agricultural products;
- the degree to which exports target growing or shrinking markets; and
- trade performance within and between trading blocs in the hemisphere.

## Destination of Agrifood Exports from LAC

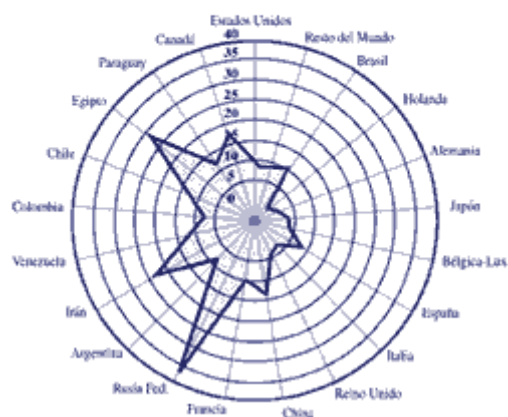
As an example, the following are the most important destinations for agrifood exports from LAC (Figure 2): United States (US\$15.8 billion), Brazil (US\$3.7), Holland (US\$3.6), Germany (US\$3.2) and Japan (US\$3.2). It is worth noting that, between 1994 and 1998, agrifood exports from LAC to the United States grew by more than US\$5 billion. Percentage wise, and in ascending order, the most dynamic export destinations are: Russian Federation (35% average annual growth), Egypt (25%), Iran (20%) and Canada (15%) (Figure 3).

**FIGURA 2**  
ALC<sup>1</sup>: Destinos más importantes de las exportaciones agroalimentarias



<sup>1</sup> El total de exportaciones incluye a 24 países que reportan a la UNCTAD

**FIGURA 3**  
Tasa de crecimiento media anual 1994 - 1998 (en %)



The two publications reported on briefly in this article contain only a summary of a longer list of performance indicators on trade in the hemisphere that IICA's Area of Policies and Trade calculates and updates on an ongoing basis. For more information, please check our web page on Internet: [infoagro.net/comercio](http://infoagro.net/comercio), under the section on indicators.

## References:

- Arias, J. and Chacón, A. Evolution and Performance of Agrifood Trade in the Western Hemisphere. San Jose, C.R.: IICA. Area of Policies and Trade, 2000. 3v. 1078 p.
- Arias, J. and Chacón. Direction and Dynamism of Agrifood Trade in the Hemisphere. San Jose, C.R.: IICA. Area of Policies and Trade, 2000. 462 p. (also in Spanish)
- Arias, J. and Bogantes, R. Trade Openness and Net-Food Importers: the Situation of Countries in the Western Hemisphere. In progress. San Jose, C.R.: IICA. Area of Policies and Trade (forthcoming also in English).

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