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**PANEL: INTERNATIONAL COOPERATION IN FOOD PROTECTION:  
"FROM THE FARM TO THE TABLE"**

## **FOOD SAFETY IN THE INTERNATIONAL LIVESTOCK TRADE**

by

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Agricultural production in the Americas is in the throes of sweeping change. At the threshold of the twenty-first century, the need for a new concept of agricultural and livestock production is in order—one that will not only meet the domestic and international demands of integrated markets, but also the challenges for properly adapting production practices and thus ensuring better living conditions for the inhabitants of our Region.

The Inter-American Institute for Cooperation on Agriculture (IICA) is convinced of the need for placing a higher value on agriculture and viewing it in holistic terms. For this reason, its approach takes into account the multidimensionality and interdependence of the different elements of the system, as well as its interdisciplinary approach in this area. Accordingly, there has been a growing integration of activities in nutrition, health, educational, economics, and trade, and with society as a whole.

This approach requires to move beyond a purely sectoral vision (primary production) to include the idea of adding value to products through agroindustry and the food production chain and, more importantly, to involve other dimensions and disciplines, identifying their relationships.

If we focus on health, for example, we can conclude that it constitutes a fundamental strategic development area. On the one hand, health facilitates greater competitiveness—since health, nutrition, diet, and food quality are determinants of human capital and basic pillars of competitiveness. On the other, health contributes to improved product quality and the generation of foreign exchange.

In fact, health and, likewise, the health of the agricultural and livestock sector provide our countries with greater opportunities for competing in today's international and intraregional agricultural markets.

Over the past 10 years, a number of factors have pointed to the need for the countries to take specific steps to improve food safety. Perhaps the most important are:

- not only is the consumer better informed about food sources today, but this greater awareness has translated into a demand for foods that are free from microbiological, chemical and physical health risks;
- the international food trade has grown significantly. Moreover, food preservation technologies have improved, making it possible to ship food to consumers further away from the production site;

- one of the most important developments in this area involves the current international trade regulations and the organizations responsible for defining them. The creation of the World Trade Organization (WTO) and agreements on the application of sanitary and phytosanitary measures (SPS) and technical barriers to trade (TBT), have established a new world order in the food trade. The primary objective of these agreements is to protect human health and avoid nontariff trade barriers. In this context, signatory countries are encouraged to adopt common standards designed to facilitate domestic and international trade. Closely related to this is the growing importance of international organizations such as *Codex Alimentarius*, which works at the country level to develop applicable food protection and food quality standards for WTO member states;
- there is also greater awareness of cases involving foodborne diseases among the public and the institutions working in public health. Extensive efforts are under way in the field of epidemiology to detect cases, identify their causes, and reduce or eliminate risks;
- as a consequence, greater emphasis is being placed on the need to reduce health risks throughout the agricultural production chain—from production and distribution, primary processing, and sale, up through the final preparation and consumption.

It is clear that food safety is a high priority for the countries of the Americas. Consumers are demanding that their governments guarantee the safety of the products they buy, and that these products be free from microbiological, chemical, and physical risks. Public concern about the problems of microbiological agents such as *Escherichia coli* 0157:H7, *Cyclospora*, *Salmonella*, and *Listeria* has increased. Producers have also suffered from negative publicity and the almost instantaneous market losses resulting from public reaction to reports of such problems. Similar concerns extend to chemical agents, such as insecticides and other agrochemicals, as well as to physical hazards, including those posed by foreign matter (rocks and/or soils) in food.

Adding to health concerns is the growth of the international agricultural and livestock trade, which continues to increase in the majority of the countries of the Region. By way of example, let us consider three groups of important products in the Latin American and Caribbean countries.

*Fruit.* These products are important for the internal productive structure of the Hemisphere, and for worldwide production and exports, a large percentage of which is contributed by the countries of the Americas. In 1997, for example, the Hemisphere

produced 29% of the total world volume of fruit production. In 1996, fruit exports from the Hemisphere accounted for 34% of the world total.

The countries of the Region produce between 50% and 58% of the world's total mango, banana, and papaya exports. Central America contributes 25% and 10% of worldwide pineapple and melon production, respectively. Together, Argentina, Mexico, and Uruguay export 15% of the world's lemons, while the Caribbean region exports 10% of the world's papayas. In general, fruit exports from Latin America and the Caribbean account for 25% of world fruit exports, growing at an average annual rate of 6.4%—a fact that underscores the Region's importance in this regard.

*Vegetables.* Vegetable production in the Hemisphere is very diverse—not only in terms of variety but the quantity produced. Nevertheless, three major products can be identified, and hence, it can be observed that between 1993 and 1997, 46.8% of vegetable production was concentrated in onions, watermelons (if indeed this is classified as a vegetable), and chiefly, tomatoes. In fact, the latter accounted for 32.06% of world production.

Vegetable production and exports in the Americas—although very significant on a worldwide scale—is not as important as fruit production and exports. Accordingly, the Hemisphere accounts for 10.7% of the total world vegetable production and 24% of world fruit exports.

*Meat products.* Concerning meat products, since the 1980s, meat production in the Hemisphere has witnessed a progressive substitution of beef with chicken—a fact also reflected in international trade and, logically, consumption. In contrast, pork production has maintained constant growth.

Almost 90% of total meat production is concentrated in beef, veal, chicken, and pork. Beef production is the most significant. However, there are high growth rates for chicken in nearly all the countries of the Hemisphere, accounting for 8% of total meat production, while exports of this product are growing at an annual rate of 14% in Latin America and the Caribbean. Based on this figure, chicken may soon become the Region's principal meat production activity.

As is the case for fruit and vegetables, meat production and exports in the Americas account for significant percentages of world production (30% of world production and 22.7% of exports).

However, losses (fruit and vegetables) due to poor postharvest management, improper packing and shipping methods, as well as inadequate marketing, have reached

levels of up to 30% of total production for some products, leading to major losses in revenue for these countries.

Another problem concerns the rejection of products for sanitary reasons. The national and international statistics on seizures and the rejection of foodstuffs are significant, accounting for a heavy percentage of the direct losses to the food industry. Of the 4,795 separate food seizures by the U.S. Food and Drug Administration (FDA) in the period from January to June 1997, 32% were due to contamination, 11% to pesticide and/or heavy metal residues, and 11% to microbiological contamination. In other words, more than 50% of the seizures involved potential risks to human health.

The trends mentioned above underscore the importance of establishing policies and practices in each country that will ensure a healthy food supply and stable trade. Traditionally, the ministries of agriculture have worked in the areas of agricultural production and health to improve and protect agriculture and livestock.

With the establishment of the WTO and the implementation of its agreements, the ministries of agriculture have heightened their efforts in the area of food safety. These involve the monitoring of all production factors at the farm level, including quality control of water for irrigation, pesticide use, and any other area that poses a risk for contamination of products before they are processed and passed on to the end-consumer.

This represents a change in the concept of food protection from the standpoint of the different institutional players involved in the process, requiring greater coordination and definition of responsibilities in the various stages of the production, processing, and marketing of agricultural and livestock products. Thus, we note that the Ministries of Agriculture monitor the factors affecting product safety, from the farm up to the primary distributor. The Ministries of Health have been much more active, although their efforts have been directed toward the final links in the agricultural production chain, focusing on the consumer. However, leadership in food safety should be the joint responsibility of both the ministries of agriculture and the public health agencies, from production up to the first distribution point, as they have been for agriculture and livestock production.

Aware of this situation and heeding the mandate from the Inter-American Board of Agriculture (IICA), IICA has proposed a technical cooperation program to support modernization of the national food protection systems in Latin America and the Caribbean in the area for which the agricultural sector is responsible, which constitutes our institutional focus.

This program would center on three major food groups: fruit, vegetables, and meat products. Its purpose would be to work with these industries to ensure food safety

from the farm or commercial grower/producer up to the processing plant, packager, or primary distributor. In case of meat products, the program would target beef, pork, and poultry products.

From this point until processed foodstuffs reach the end-consumer, food safety would be considered the responsibility of the health sector. As a result, the Pan American Health Organization (PAHO), is implementing an important food protection program.

These three groups of products—fruit, vegetables, and meat products—have not been selected by accident. Their importance to international trade, as noted earlier, and the implications of their management for food safety demand greater responsiveness and attention from the public health standpoint.

The IICA program will focus on cooperation with its member states to meet the new trade commitments. The program will collaborate with the ministries of agriculture to strengthen legislative and regulatory instruments as well as inspection and certification services; and with producer organizations and entrepreneurs, helping them to improve sanitary controls and food hygiene throughout the agricultural production chain. This task will require the active participation of all sectors involved.

Accordingly, those being considered for key leadership positions in national food safety systems are:

- ministers and senior managers of the Ministries of Agriculture and Health responsible for decision-making in food safety at the national level;
- directors of national agricultural and public health services at the national and local levels;
- leaders of producer associations at the national and local levels; and
- rural community leaders who support the development of food safety initiatives at the national and local levels.

The following are also involved in national food safety systems:

- public and private sector laboratories, which test for veterinary drug residues, pesticides, microbiological agents, and other agricultural and agroindustrial products;

- professionals in the public and private sector, who conduct inspections and engage in sanitary certification of agricultural and agroindustrial products;
- producers and entrepreneurs, who participate in the implementation of the program to guarantee the safety of their food products;
- research institutes and governmental and private agencies, which conduct research and sanitary inspections for the certification of agricultural and agroindustrial products;
- the official services of other governmental agencies involved in the sanitary control and certification of agricultural products for domestic human consumption and export; and
- Agrochemical and veterinary drug companies.

In order to meet its objectives, the national food safety systems will follow four principal lines of action:

- The first of these is geared toward the review and updating of the legal mechanisms that ensure food safety (laws, regulations, standards), the responsibility for which falls to the agricultural and livestock sector. This line of action entails IICA collaboration with the countries in the analysis, modification, and drafting of proposals for mechanisms to notify the respective parties about new food safety regulations.
- The second is geared toward the modernization of systems and involves structural and operational analysis of the food safety inspection and certification services of laboratories operated by the ministries of agriculture, including proposals for their modernization. To meet these objectives, this line of action provides for situation analysis of current conditions at the country and regional level, support for the implementation of the proposed actions, and mechanisms for liaison with producer organizations and entrepreneurs.
- The third would provide consulting services and training to agricultural enterprises to help them adapt to and utilize food protection and sanitation methodologies. Efforts in this regard would be directed toward the identification of key organizations and associations, forming partnerships with such groups in coordination with the public sector, and the proposal and execution of national training programs.

- The fourth line of action, is to provide the widest possible dissemination of information on the new food safety regulations and standards of the main agricultural importing countries. For this purpose, the Inter-American Agricultural Health Network (XXI AGROSALUD) will be utilized.

Building partnerships between the private and public sectors and other international agencies working in the area of food safety, such as PAHO, will serve as the foundation for implementing the project. In order to strengthen the project at the regional level and help to build partnerships between the private and public sectors, IICA will engage in coordination activities with food safety professionals in its Regional Centers (North, Central, Caribbean, Andean, and Southern). Also, in order to establish program priorities at the national and regional level, steps will be taken to secure financial resources from international cooperation agencies (CIDA, GTZ, IDB, USAID, and World Bank).

In short, although implementation of this project will be a challenge, it is important for the countries of the Hemisphere, focusing as it does on three major categories of food—fruit, vegetables, and meat products.

The IICA strategy will center on agricultural production from the farm or commercial grower/producer up to the primary distributor or seller of the product, thus complementing PAHO activities from that point on to the end-consumer. Efforts in this regard will focus on food safety legislation, training, information dissemination, modernization of inspection/certification services, and laboratories.

We recognize that, if progress is to be made, we cannot work independently in this endeavor but must make every effort to collaborate with other sectors. To succeed, we must modify the traditional paradigms in agriculture and create a full awareness among farmers of their key role in the agricultural production chain.

Working together, we can reduce risks and prevent negligence or carelessness from endangering the lives and health of many people.

Because agricultural and livestock exports represent such an important source of income for the countries of our Region, and since the *modus vivendi* of significant numbers of our Region's workers depends on agricultural and agroindustrial production, protecting our agricultural and livestock exports is a matter of paramount importance. We must therefore work hard to meet the demands of our trading partners to comply with the new food safety regulations for international trade.



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