

LATIN AMERICA AND THE CARIBBEAN Food safety laboratories

What began in 2006 as a network of 49 food safety laboratories in Latin America and the Caribbean has now expanded to include representatives from 19 countries in the region with many more expected in the future. The initial network was made up of analytical laboratories and supported by the Joint FAO/IAEA Division. It focused on addressing contamination problems and determining ways to improve environmental and food safety that had regional applicability as well as health, trade and economic benefits. Now known as Red Analitica de Latino America y el Caribe (RALACA), the network has established a host of regional monitoring mechanisms, working through committees that invite others to join in their work. The Joint Division has identified regional networks as a way to leverage the impact of food safety laboratories. The Division has helped to establish the framework for bringing regional laboratories together to share know-how and resources, and to move forward together in advancing their capacities for monitoring, evaluating and solving food safety problems in their countries or regions.

As the food supply chain globalizes Food laboratories benefit from working in regional networks

As food production and trade have become more globalized, governments face the growing challenge of safeguarding food safety while ensuring there are no barriers to the abundant supply of quality food. Food safety efforts are increasingly pressured by a complicated international production-supply chain. Global food trade has more than tripled since 1990 with exports exceeding US \$1 trillion a year. The market is competitive, drawing on developing and developed economies alike, but trade represents an increasingly large percentage of the GDP of many developing countries.

Multiple players – including producers, marketers, traders, food processors, manufacturers and distributors to retail and restaurant outlets spanning many different countries – are involved in the intricate food chain. This means that, in parallel, food controls (that are at different levels of development) have to transcend international boundaries, and actors must meet the international standards that underpin global trade. The controls are guided by a system of accreditation that laboratories should meet in order to safeguard consumers from the risk of exposure to chemical and natural contaminants associated with agricultural production and produce.

Supporting laboratories to monitor food supply

If not accredited, food safety laboratories seldom inspire national and international confidence among consumers, and cannot prove compliance to standards as required by importers. They end up having to outsource testing services to accredited laboratories beyond their borders, which can be both time consuming and expensive, impacting the national economy. The Joint FAO/IAEA Division assists its Member States in establishing sound laboratories – mainly through institutional capacity building – and supports them in achieving accreditation and setting up national food monitoring systems to enhance trade and meet public health requirements.

The Joint Division provides further support by helping to develop policies for working with those involved in food production and supply. The Division helps forge links among laboratories to build frameworks that enable national laboratories to function efficiently and work together in regional networks.

Linking laboratories at regional level

Regional networks enable laboratories to harmonize analytical standards and control methods among their members who facilitate onward dissemination and sharing of technical information. For example, Red Analitica de Latino America y el Caribe (RALACA), the Latin American and Caribbean network, with support from the Joint Division, has shown the advantage of having laboratory peers networking in a multidisciplinary context.

The Latin American and Caribbean region now has 12 national programmes for monitoring chemical residues in foods, which were developed through RALACA and another Joint Division-supported regional network of 15 laboratories that monitor veterinary drug residues and related contaminants in food and feeds. These programmes ensure food safety and boost exports by using harmonized sampling and analytical methods that meet international standards. Over the past two years, more than 125 analytical methods have been developed and validated or re-validated to support measurement of contaminants in food and environmental samples. The Joint Division also supports the development of standard operating procedures for routine use in food control laboratories, and has trained more than 206 laboratory personnel in the region.





A similar network supported by the Joint Division has been established in Africa and currently includes food safety laboratories in 13 countries. Many of these are participating in proficiency and inter-laboratory studies, as well as sharing expertise and information, such as analytical methods.

The Joint Division also contributes to the development of policies guiding food production and supply which is in line with its work in forging national and regional laboratory networks. Given their benefits, the Joint Division continues to encourage laboratory networks, in order to mirror the globalization of food supply.

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Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA)

United Nations Development Programme

United Nations Industrial Development Organization

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For further information

Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture International Atomic Energy Agency, Wagramer Strasse 5, PO Box 100, 1400 Vienna, Austria www-naweb.iaea.org/nafa