

Harmonizing Activities of Regional Food Safety Laboratories Boosts Public Health and Trade in Latin America

The challenge...

Chemical contaminants in foods pose public health risks, curtail trade between countries, and may damage the environment. Latin America has experienced the consequences of contaminants in foods – between July 2010 and 2011 alone, the European Union rejected over 40 consignments of animal food products from the region due to unacceptable residues of veterinary medicines.

To overcome this barrier to trade, the region needed a comprehensive residue control programme. Such a programme would include national laboratories that analyse foodstuffs for contaminants and demonstrate competence to trading partners, as well as assuring food safety for local consumers. Although countries in the region had different levels of technical capacity, all faced the same problem. A regional project was required to harmonize laboratory activities and share experiences/expertise, given the disparities in analytical technical capabilities.

The project...

A regional project involving the official laboratories of the fifteen participating countries was initiated to strengthen national capacities to detect contaminants, and to harmonize regional efforts through the establishment of a residue control network.

Project goals were addressed by enhancing the capabilities of relatively advanced laboratories followed by transfer of knowledge to less technically advanced counterparts, and by conducting tailored training programmes for the less advanced. The project provided expert advice and technical meetings, and facilitated training through fellowships and scientific visits. National counterparts volunteered both infrastructural and human resources for hands-on training. Analytical methods, many involving stable isotopes and used across laboratories for a range of contaminants, were developed or optimized. Furthermore, experiences in good laboratory practices as well as quality management systems were shared through meetings and technical missions, seven of which were fielded by personnel from the project's counterpart institutions.

The impact...

As a result of the project, the analytical and institutional capabilities of the participating laboratories have been enhanced, and a new, interactive and sustainable regional network has been set up. This is streamlining and uniting efforts to identify and control chemical contaminants in the region's food products. The fifteen participating Member States are not only better positioned to test their food exports for harmful chemicals, but also have a platform to benefit from each other's expertise and resources.

With the implementation of quality controls, nine national laboratories have achieved international accreditation, and four more are under consideration. As a result, Latin American food exports that depend on meeting standards set for contaminants, and on national ability to monitor and control food safety using competent laboratories, have increased as export rejections and detentions have lessened.



The rapidly growing aquaculture industry in Latin America and the Caribbean requires functional chemical residue monitoring programs to ensure consumer safety.