Capacity Development in Food Safety and Food Quality

Strengthening Laboratory Services

Food control has evolved over the last decades from a focus on end-product testing to emphasis on prevention of food safety problems through adequate process controls. Nonetheless, testing remains an important component of any system which aims to produce safe food. Carefully planned programmes of sampling and testing provide us with the assurance that hygiene controls applied by food chain operators result in safe food products that comply with national regulations and meet international food safety requirements. Well-functioning laboratory services also assure the availability of reliable food contamination data from surveillance and monitoring programmes that contribute the ability of national authorities to determine food safety priorities and to orient food control programmes to deal with the most pressing problems.

FAO rarely works on laboratory services in isolation, but rather supports the more effective involvement of laboratory services within the overall national system of food control. This involves different levels of intervention: sensitising policy makers on the role of labs and issues linked to their sustainability; supporting national institutions to design, effectively manage and implement food analysis programmes; and ensuring that laboratory staff have the knowledge and skills required to carry out their functions.

This Fact Sheet outlines lessons learned from our laboratory development work, illustrates key features of approaches used and some of the results obtained.

Sustainability of Laboratory Services

Sophisticated analytical equipments that cannot be utilized due to poor maintenance or lack of staff able to use them, is not a rare image in many developing countries' laboratories.

National authorities and concerned ministries often focus just on for the setting up or equipping of laboratories without having planned adequately for running costs or for human resource development. FAO seeks to ensure sustainability of laboratory services by promoting a ***long term*** vision that takes full consideration of analytical needs as well as of existing national capacities and resources.

The specific issues vary from country to country and the specific actions undertaken within projects to promote sustainable lab development also vary, In some cases, FAO has promoted inter-Ministerial agreements on the sharing of laboratory services to improve efficiency of operations; in other cases financial rules, procurement or human resource management policies have had to be addressed. In all cases, promoting sustainability involves building a clearer understanding of both ***the value*** and ***the costs*** of laboratory services.

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Aligning Testing Programmes with Food Safety Priorities

Food control laboratories are only useful insofar as they contribute to a better understanding of the food safety/ quality issues affecting public health and trade and they help solve these problems. However, in many countries the services provided by food control laboratories do not correspond to the needs expressed by key stakeholders. FAO promotes inter-ministerial collaboration and more effective engagement with the private sector to jointly define analytical public health priorities, and to ensure that food producers are provided with the required analytical support to access markets. In some cases, laboratory strengthening has been combined with training in the use of tools such as risk ranking to support sound decision-making on analytical priorities.

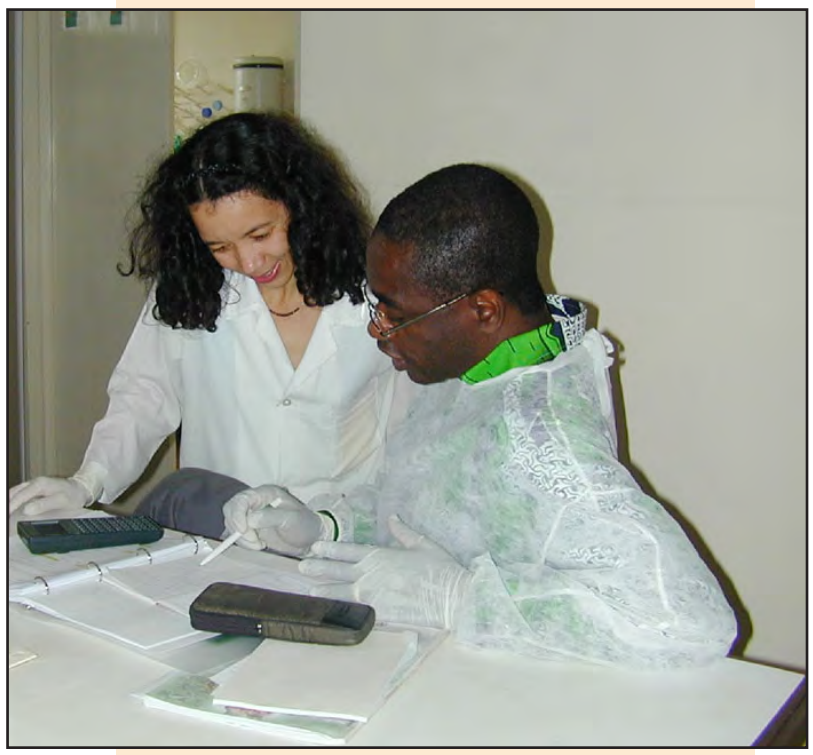
Strengthening laboratory management

Good laboratory management is a key factor in working towards sustainability of lab services. In developing capacities of laboratory services, FAO works with laboratory managers: to improve the efficiency of their work processes and administrative procedures; to establish and monitor programme targets; to plan for laboratory upgrading including human resource development; and, to communicate more effectively with decision-makers who determine annual budgets for the laboratory services.

Effective training

FAO's laboratory projects include significant effort aimed at enabling laboratory staff to correctly carry out their functions. Learning objectives are carefully determined in partnership with the national counterparts and the training approach is tailored to the situation.

Typically training covers the establishment of Laboratory Quality Management programmes compliant with ISO 17025 requirements and/or correct execution of selected analytical procedures. Training involves a mixture of theoretical and hands-on work provided either by highly experienced consultants in-country or by study visits to laboratories abroad. Training events are often designed to encourage networking, for example, with national universities/ research centres or with regional/ international laboratories.



These informal networks have in many cases proven to be of great value in helping laboratory staff meet ongoing challenges and in supporting further staff development. Evaluation of training is routinely carried out after course completion, and following the training, in most cases, we are able to monitor the uptake of newly acquired skills and the implementation of agreed follow up.

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